



United Nations Environment Programme

Terminal Evaluation of the UNEP GEF Medium-Sized Project

**Development of the Methodology and Arrangements for the GEF Transboundary
Waters Assessment Programme (TWAP)**

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Acronyms and Abbreviations

CWGs	Correspondence Working Groups (Project)
DEWA	Division of Early Warning and Assessment (UNEP)
DEPI	Division of Environmental Policy Implementation (UNEP)
DGEF	Division of Division of Global Environment Facility Coordination (UNEP)
DMI WG	Data Management and Indicators Working Group (Project)
FMO	Fund Manager Officer
FSP	Full-sized project
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GEO	Global Environment Outlook
GEOSS	Global Earth Observation System of Systems
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GIWA	Global International Waters Assessment
GOOS	Global Ocean Observing System
ICA	Internal cooperation agreement (UNEP)
IGA WG	Integrated Global Assessment & Demonstration Projects Working Group (Project)
IGRAC	International Groundwater Resources Assessment Centre
ILEC	International Lake Environment Committee
IMAIG	Information Management and Interlinkages Group (Project)
IUCN	International Union for the Conservation of Nature
IW	International Waters
LME	Large Marine Ecosystem
LoA	Letter of Agreement
M&E	Monitoring and evaluation
MTS	Medium Term Strategy (UNEP, 2010-2013)
MSP	Medium-sized project
NGO	Non-Governmental Organisation
NOAA	National Oceanographic and Atmospheric Administration (USA)
OP	Operational Programme (of the GEF)
OVI	Objectively verifiable indicator
PDF	Project development funds (GEF)
PPG	Project Preparation Grant (GEF)
PIF	Project Identification Form (GEF)
PIR	Project Implementation Review
PMU	Project Management Unit
PSC	Project Steering Committee
ROI	Review of outcomes to impact
SIWI	Stockholm International Water Institute
SMART	Specific, measurable, achievable, relevant and time-bound
SSFA	Small Scale Funding Agreement
TWA	Transboundary Waters Assessment
TWAP	Transboundary Waters Assessment Programme
UCC	UNEP Collaborating Centre on Water, now known as UNEP-DHI Centre on Water and Environment
UNEP	United Nations Environment Programme
UNEP-DHI	UNEP-DHI Centre on Water and Environment
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNDP	United Nations Development Programme
UNESCO IHP	UNESCO International Hydrological Programme
UNESCO-IOC	UNESCO Secretariat for the Intergovernmental Oceanographic Commission
UNGA	United Nations General Assembly

Project Identification Table

GEF project ID:	PMIS: 3342	IMIS number:	PMS GFL/5710-2730-4A43 GF/1030-09-01
Focal Area(s):	IW	GEF OP #:	N/A
GEF Strategic Priority/Objective:	IW 1-2, IW 1-4	GEF approval date:	5 January 2009
UNEP approval date:	30 March 2009	First Disbursement:	31 March 2009
Actual start date:	March 2009	Planned duration:	22 months
Intended completion date:	November 2010	Actual completion date:	February 2011
Project Type:	MSP	GEF Allocation:	US\$ 950,000
PDF GEF cost:	US\$ 35,000	PDF co-financing:	US\$ 40,000
Expected MSP Co-financing:	US\$ 1, 218,470	Expected Total Cost:	2,259,700
Mid-term review/eval. (planned date):	Not planned	Terminal Evaluation (actual date):	March 2011
Mid-term review/eval. (actual date):	N/A	No. of revisions:	One*
Date of last Steering Committee meeting:	9-10 February 2011	Date of last Revision:	September 2009
Disbursement as of 28 February 2011:	US\$ 890,097 **	Date of financial closure:	Anticipated March 2011
Date of Completion:	28 February 2010	Actual expenditures reported as of 28 February 2011:	US\$ 938,785 GEF *** US\$ 181,602 Finland****
Total co-financing realized as of 28 February 2011:	US\$ 1,644,401	Actual expenditures entered in IMIS as of 28 February 2011:	US\$ 960,097

* Financial revision only

** Calculated as IMIS expenditure minus un-liquidated obligations to ILEC, UNESCO & DHI

*** After anticipated adjustments

**** As of 31 December 2011

Executive Summary

A. Introduction

1. The medium-sized project (MSP), Development of the Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme (TWAP), was a preparatory project designed to put in place the foundations for a programme of continuous assessment for transboundary aquatic systems: lakes, rivers, aquifers, large marine systems and open ocean. The MSP was explicitly designed to lead to a full-sized project but this outcome is subject to adoption of the methods by the Global Environment Facility (GEF) and to subsequent Council approval and Chief Executive Officer (CEO) endorsement of the Full-Sized Project (FSP).
2. The Implementing Agency of the project was the United Nations Environment Programme (UNEP) through its Division of GEF Coordination (DGEF). The Executing Agency was also UNEP, but through its Division for Early Warning and Assessment (DEWA) in Nairobi. A small project Secretariat was established within DEWA's Scientific Assessment Branch. UNEP contracted lead partners to coordinate development of methods and partnership arrangements for the five international waters systems; namely: the International Hydrological Programme (IHP) of the United Nations Educational, Scientific and Cultural Organization (UNESCO) for transboundary groundwater systems; UNESCO's Intergovernmental Oceanographic Commission (IOC) for Large Marine Eco-systems (LMEs) and Open Oceans; the International Lake Environment Committee (ILEC) for transboundary lake/reservoirs basin systems, and the UNEP-DHI Centre on Water and Environment for transboundary river basins.
3. GEF financing for the project was US\$ 950,000. The Government of Finland provided a cash contribution of 300,000 Euros, equivalent to US\$ 395,256. Financing from other partners exceeded that anticipated in the project proposal, with the reported co-financing and leveraged funding as of 28 February 2011 totalling US\$ 1,644,401.

B. Findings and Conclusions

4. The key questions for this evaluation concern project effectiveness, catalytic effect and sustainability that are addressed in Part II, Sections A and B of this report. The overall rating for this project based on the evaluation findings is **Moderately Satisfactory**.
5. In terms of effectiveness the project was successful in mobilising an executive partnership comprising lead partners, technical partners and individual experts who worked in a coordinated manner towards development of methods, partnerships and arrangements for conducting a transboundary waters assessment for five water systems. The project has laid strong foundations for conducting an assessment in a cost-effective manner based on ongoing programmes and initiatives through well developed partnership arrangements for each type of transboundary water system.
6. However, there are a number of outstanding activities and issues that were not fully addressed during the MSP and this has affected the evaluation ratings on *achievement of activities and outputs* and *attainment of project objectives and results*. Specifically, further work is needed on the approach to prioritisation of individual transboundary water bodies, integration of identified common issues (socio-economic issues and governance) into the individual water systems methods, treatment of inter-linkages and approaches to share data between groups, and harmonisation of descriptions of the Level 2 assessment. There is also a need to reach agreement on a streamlined and cost-effective coordination arrangement which adds value to the assessments and on data and information management, both of which have implications for costing and, ultimately, visibility and sustainability of the assessment process.
7. The Review of outcomes to impact analysis has highlighted the strong catalytic potential of the project and potential transformational role of the assessment programme. However, it is uncertain at this stage whether the level of stakeholder ownership and participation that many TWAP partners argue is necessary for the TWA to contribute to improved policy and management will be realised.
8. In terms of sustainability, the most immediate concern is that of financial sustainability with the onward progress of the TWAP dependant on the partners being able to generate sufficient funding to conduct the baseline assessment. Individual partners involved in the MSP are committed to the next stage of the TWAP including in terms of resource allocation and have identified substantial sources of co-finance as well as an

impressive baseline of resources that would be leveraged in support of this assessment. Council approval and CEO endorsement of the planned FSP may prove to be the acid test for the continuity of the TWAP.

9. Reinforcing the concern about ownership expressed above, a second key aspect of sustainability is that of socio-political sustainability and specifically the question of ownership of the assessment results that project partners have stressed will depend on engagement of a wider set of stakeholders – including policy makers – in the assessment process. There was only limited engagement of stakeholders during the MSP, in part as a result of the reorientation of the project. The question of stakeholder engagement will thus be vital during the planned FSP.
10. Progress on cross-cutting and common issues was substantially affected by the need to revise the project results framework as a result of the decision to drop the concept of an integrated global assessment. This issue had its origins in a significant drift from the GEF Secretariat's (GEFSEC) original vision for the project during project development that came to light only in December 2009, some six months into the technical implementation of the project. A second factor affecting project completion was the extended inception phase which resulted in a loss of flexibility in project timing. These issues are addressed under lessons (Part III B).

C. Lessons

11. The GEFSEC was an important champion for the MSP, providing a vision in terms of the strategic importance of the planned assessment for GEF and ongoing guidance related to the GEF needs, including towards development of the FSP. Participation of the GEFSEC in Steering Committee Meetings was crucial in this context.
12. Specific lessons related to the involvement of GEFSEC in corporate projects, the functioning of working groups with voluntary membership, and the significant engagement of the executing agency unit in the inception phase are presented in Part III of the report.

D. Recommendations

13. The following recommendations are framed in the context of the ongoing process to prepare the TWAP, including development of a Project Identification Form (PIF) and preparation of a full-sized project. Further information on the context for each of these recommendations is provided in Part II of this report.

Stakeholder engagement

14. **Recommendation 1.** Substantial efforts should be made to involve a geographically representative group of practitioners and other stakeholders in the conduct of the baseline and Level 2 assessments, including in providing strategic direction for the presentation and dissemination of results and in development of assessment best practice. This involvement should be at both the individual water systems level and at the project coordination level, for example through the project Steering Committee and/or by establishment of an advisory panel.
15. Implementation of the above recommendation needs to be anticipated in the project design period for the full-sized project (indicatively, by September 2011) with specific activities described and budgeted for in the Project Document. The recommendation is for action by UNEP DEWA as facilitator of the project development process and by the lead partners who are finalising implementation arrangements for each of the water systems.
16. The following three recommendations relate to outstanding issues identified in Part A of this report under effectiveness. Many of these issues were raised but not fully resolved during the second project Steering Committee meeting held in February 2011. Actions with substantial planning or cost implications will need to be completed during the preparation of the project for conducting the assessment. The timing on these recommendations reflects that several have budget implications for the design of the next (project-based) phase of the TWAP.

Harmonisation of approaches to Level 2 Assessment

17. **Recommendation 2.** The Secretariat should provide guidance to the lead partners on modification of their methods to incorporate the advice presented to the Steering Committee and lead partners should make the relevant changes to their methods before these are published and/ or disseminated.

Cross-cutting elements

18. **Recommendation 3.** DEWA as facilitator of the project development process should organise an assessment planning meeting bringing together GEFSEC, the water systems group leaders and relevant technical partners and experts to build consensus around and specify needs for an assessment coordination function, data and information management and cross-cutting issues. The timing for this recommendation is the project design period for the full-sized project (indicatively, by September 2011).

Approach(es) to prioritisation of water bodies for GEF intervention

19. **Recommendation 4.** DEWA as facilitator of the project development process should organise a short meeting (teleconference or dedicated session during an appropriate event such as a project planning meeting) bringing together GEFSEC, the water systems group leaders and the project coordination to identify a common or, at least, harmonised approach to prioritisation of water bodies for GEF intervention. The timing for this recommendation is within the first three months of FSP implementation.

Part I. Evaluation Background

A. Context

20. The Global Environment Facility's (GEF) Technical Advisory Group for strategy development in the International Waters (IW) focal area identified the need for a Transboundary Waters Assessment Programme (TWAP) in early 2007. The GEF Council recognised this need in its approved GEF 4 Strategy for International Waters, which noted "A GEF Transboundary Waters Assessment Program is planned to support monitoring of trends globally in transboundary water systems on a five-year scale".
21. The medium-sized project, *Development of the Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme (TWAP)*, was designed as a direct response to this need and was intended to design the methods and catalyse the partnership and other arrangements to implement the Assessment. The primary client for the project was the GEF Secretariat and Council, in support of its International Waters Strategy and portfolio of work.

B. The Project

Rationale

22. The project rationale is well-defined in the Project Identification Form (PIF) and Project Document as follows: Transboundary water systems of the world on which the socioeconomic development and well-being of a significant part of the world's population depend continue to be degraded by multiple and complex human-induced stresses. Among the constraints to effective management of transboundary waters is the lack of a systematic and scientifically-robust method for assessing the changing conditions of five different types of transboundary water systems resulting from human and natural causes, which would allow the policy makers, GEF and other international organisations to set science-based priorities for financial resource allocation. Such a method would also facilitate identification and assessment of positive changes in the environmental and resources situations in the transboundary water systems resulting from interventions by national authorities and international/regional communities.
23. If the GEF is to properly cope with the complex, often human induced degradation processes affecting transboundary water bodies, set priorities for GEF funding allocation with its modest finance, and document the results and impact of its investments in relation to the changing state of these transboundary systems globally, a periodic global transboundary waters assessment programme needs to be established.
24. With fragmentation in the various agencies' responsibilities and mandates, and because the GEF is currently not able to address the changing state of transboundary water systems, such a programme would be valuable globally. However, there is no catalyst to begin the complex work of bringing partners together to collaborate and share information toward such a global assessment.

Objectives

25. The **global environmental objective** of the project stated in the Project Document (Section 3.2, page 12) was 'to develop the methodologies for conducting a global assessment of transboundary groundwater, lakes/reservoirs, and river basins, Large Marine Ecosystems, and open ocean areas for GEF purposes and to catalyse a partnership and arrangements for conducting such a global assessment.'
26. The **long-term goal** stated in the Project Document (Appendix 3 - Results Framework) was 'to promote real investment in management and development of transboundary water systems through strong stakeholder engagement'. The Project Document also cites the **ultimate goal** of the project, 'to establish a programme for continuous assessment of major transboundary aquatic systems and to provide a platform for the international community to evaluate and monitor the impacts of interventions in international waters'.
27. The original **Project Objectives** as stated in the results framework were:
 - 1) To develop a feasible methodology for assessment of the world's transboundary water systems; and

- 2) To develop a proposal for Integrated Global Assessment (IGA) of the world's major transboundary water systems and for Demonstration Projects (DPs).

Components

28. The project had two components corresponding to the general objective described in the Project Identification Form (PIF) and Project Document and to the global environment objective stated in the results framework. Component 1 was '*Development of transboundary waters assessment methodologies for the GEF IW global assessment*' and Component 2 was '*Development of a partnership among agencies and organizations to conduct the GEF transboundary waters assessment programme*'.
29. The expected outcomes of these components were, respectively:
 - 1) GEF adopts the assessment methodologies for its Transboundary Waters Assessment Programme that can help support Results-based Management in the International Waters Focal Area; and
 - 2) The partnership among agencies and organizations is established and institutional arrangements finalized to conduct the GEF Transboundary Waters Assessment Programme.

Intervention Areas and Target Groups

30. The intervention area of this project can be broadly described as global international waters.
31. The Project Document describes the target groups of the TWAP in terms of those that will use the results of the assessment expected to be carried out on the basis of the methods developed and through the partnership arrangements put in place by the MSP.
32. The target groups are thus the GEF (Secretariat and Council) who would use the results for 'setting priorities for its resource allocation base, utilizing understanding of baseline environmental and water resource conditions and tracking the longer term results of its intervention'; UNEP and other UN organizations 'who would use the results to contribute to the global assessments carried out by each organization (e.g., Global Environment Outlook of UNEP; UN-wide World Water Development Report coordinated by UNESCO)'; regional organisations who may use the assessment results 'as a baseline, and for tracking improvements in environmental and water resource situations against the baseline'; and national governments who can use the results 'to establish national programmatic priorities between transboundary and domestic water issues'.

Milestones in Design

33. The MSP project was designed in response to the corporate need for a Transboundary Waters Assessment Programme identified by GEF's Technical Advisory Group for strategy development in the International Waters (IW) focal area in early 2007. The GEF Council reflected this need in its approved GEF 4 Strategy for International Waters adopted in September 2007, which states, '*A GEF Transboundary Waters Assessment Program is planned to support monitoring of trends globally in transboundary water systems on a five-year scale*'. The TWAP was presented as an indicator related to the strategic objective, '*to catalyze transboundary action addressing water concerns.*'
34. The project entered into the GEF pipeline in December 2006. The PIF was submitted in December 2007 by the UNEP Division of Global Environment Coordination and approved on 20 December 2007. A project preparation grant was awarded on the same day covering the six month period to June 2008 and intended to contribute to the costs of preparation of background documentation and organisation of a partners' meeting. The Project was approved by the Project Review Committee on 8 July 2008.
35. Two project preparation meetings were organised by UNEP together with its partners, the first in September 2007 prior to submission of the approved PIF and the second in March 2008 during the project preparation phase.

36. The TWAP medium-sized project (MSP) was endorsed by the GEF CEO on 5 January 2009. The GEF letter of commitment was sent on 12 March 2009 and the UNEP approval was concluded on 30 March 2009 with the signing of an internal cooperation agreement between DGEF and DEWA.

Implementation and Completion

37. The project inception meeting was held from 30 June to 2 July 2009 and the Project Manager started work in Nairobi in mid-July 2009 having participated in that meeting. According to the Project Document, the project was intended to be implemented over a 22 month period from February 2009 to November 2010. The project revision document of October 2010 refers to a project duration of 21 months from March 2009 to November 2010. Indicative workplans for each of the water systems working groups presented as part of the Project Document spanned 18 months. These were updated for the project inception meeting in June 2009 that was taken as the technical starting point for the project.
38. The second project Steering Committee was organised from 9-10 February 2011 and provided an opportunity for participants to define actions required for formal completion of the project as well as steps to be taken towards implementation of the TWAP. Financial closure of the project is to occur after the final payments to the lead partners on the basis of completion of contracted tasks and with publication of the project methods by UNEP DEWA.
39. This evaluation takes account of information available on the status and completion of the project of project as of 28 February 2011.

Implementation Arrangements and Main Partners

40. The Implementing Agency of the project was UNEP through its Division for GEF Coordination (DGEF). The Executing Agency was UNEP, through its Division for Early Warning and Assessment (DEWA) in Nairobi. A small project coordination unit referred to as the project Secretariat was established within the UNEP DEWA Scientific Assessment Branch.
41. Execution partners listed in the Project Document were: the International Hydrological Programme of the United Nations Educational, Scientific and Cultural Organisation (UNESCO IHP), Intergovernmental Oceanographic Commission of UNESCO (UNESCO-IOC), United Nations Development Programme (UNDP), World Bank, UNEP Collaborating Centre on Water (UCC, more recently known as the UNEP-DHI Centre on Water and Environment), Stockholm International Water Institute (SIWI), International Lake Environment Committee (ILEC), University of Kalmar, and others 'to be identified'.
42. The Project Document further identified lead partners to prepare the assessment method and partnership arrangements for each of five transboundary water systems.
43. in line with the Project Document, the lead partners contracted by UNEP to coordinate development of methods and partnership arrangements for the five international waters systems were UNESCO for transboundary groundwater systems (IHP), LMEs and Open Ocean (IOC); ILEC for transboundary lake/reservoirs basin systems and DHI, on behalf of UNEP-DHI Centre on Water and Environment, for transboundary river basins¹.
44. These lead partners established five individual water systems working groups and engaged a number of technical partners and experts, including the Stockholm International Water Institute (SIWI) and the International Union for the Conservation of Nature (IUCN) that received sub-consultancy agreements from the DHI Centre on Water and Environment.
45. The main financial partners were the Global Environment Facility (GEF) and the Government of Finland.

Financing

¹ Referred to in this report as Groundwater, LMEs, Open Ocean, Lakes and Rivers. The recent Steering Committee meeting preferred the term 'transboundary aquifers' to groundwater but this report reflects the term used during the course of the MSP.

46. The Project Document identified GEF financing for the project of US\$ 950,000, with pledged co-financing totalling US\$ 1,159,700 or 51.35% of the total cost. The co-finance total was amended in October 2009 to US\$ 1,212,470 through a project revision that corrected a double-counting error in the anticipated co-financing from UNESCO-IHP and the International Groundwater Resources Assessment Centre (IGRAC).
47. The Government of Finland provided a cash contribution of 300,000 Euros, equivalent to US\$ 395,256 on 28 April 2009 when the income was registered.
48. Financing from other partners also exceeded that anticipated in the project proposal, with the reported co-financing and leveraged funding as of 28 February 2011 totalling US\$ 1,644,401. Further details are provided in Section C5.
49. The total cost of the project, assuming expenditure of the balance on Government of Finland funding by July 2011, will be US\$ 2,594,401.

Modifications to Design before or during Implementation

50. The project results frameworks was substantially revised after the GEF Secretariat provided guidance on its expectations of the project and intended meaning of the 'integrated global assessment' through a series of teleconferences organized during the December 2009 meeting of the working group on Integrated Global Assessment and Demonstration Projects (IGA WG). The advice is reflected in the joint recommendations of the IGA WG and the Data Management and Indicators Working Group (DMI WG) whose first meeting was held immediately after the IGA WG meeting. The key recommendation was to do away with the idea and objective of preparing for an "integrated global assessment" of the world's major transboundary water systems. Table 1 below (next page) summarizes the revised outputs and activities per component as agreed by the First Steering Committee meeting.
51. The IGA/DMI WG recommendations were agreed by the Steering Committee at its first meeting in April 2010. The IGA and DMI groups be merged to form a single working group, subsequently called the Information Management and Interlinkages Group (IMAIG). The Steering Committee also noted the need to revise the project Logical Framework (results framework) to reflect its decisions. The results framework was subsequently revised by the project Secretariat, with a reduced set of outputs and activities as shown in Table 1. Outcomes and components were unchanged but there remained just one project objective:
 - 1) To develop feasible methodologies for each of the five individual water systems (five methodologies): Transboundary Groundwaters, Lakes, Rivers, Large Marine Ecosystems and Open Ocean.
52. There was one formal revision to the Project Document addressing the scheduling of expenditure and amount of co-financing to be provided by UNESCO-IHP and IGRAC (See Section C5).

Table 1. Revised Outputs and Activities for TWAP MSP

Component	Outputs	Activities
I. Assessment Methodology	Output 1: Project inception meeting involving major potential partners and experts (adoption of the set of Project Progress Indicators (PPI)).	Activity 1.1: Convene the project inception meeting involving the project team, major potential partners and experts.
	Output 2: Establishment of 5 Working Groups (WGs) at the Water Systems level for 5 transboundary water systems	Activity 1.2: Establish five WGs of experts Activity 1.3: Convene meetings of the 5 WGs of experts for water systems Activity 1.4: Implement approved work plans for MSP and 5 WGs
	Output 3: Establishment of an Information Management and Indicators Working Group (IMAIG)	Activity 1.5 Establishment of an Information Management and Indicators Working Group (IMAIG) Activity 1.6: Convene meeting of the IMAIG WG.
	Output 4: Methodologies of five	Activity 1.7: Define scope, framework, and terminology

	major water systems, including assessment units/boundaries; priority issues; linkages among water systems; key indicators; institutional framework; partnerships, roles/responsibilities; and harmonization the framework among water systems.	of the assessment methodology. Activity 1.8: Define assessment units (shared water systems and their respective boundaries). Activity 1.10: Prepare draft methodology document, circulate for review and revise Activity 1.11: Develop a suite of indicators for individual water systems with interlinkages among them Activity 1.12: Adapt and finalise the five methodologies. Activity 1.13: Disseminate the methodology document through website and other means
	Output 5: Inventory of major regional and international agencies, available data, and existing networks that could potentially contribute to the assessment process	Activity 1.9: Prepare Inventory and review of major regional and international agencies, available data, sources, ongoing programmes, existing networks and available methodologies that could potentially contribute to the assessment process
II. Development of Partnerships	Output 6: Partnership identified including identification of partners with data, modelling capability etc.	Activity 2.1 Establish partnership for the implementation of the work plans of the five WGs
	Output 7: Information dissemination and exchange mechanism	Activity 2.2 Develop the project website and disseminate documents through website and other means.

Source: Based on Annex 3 to Report of First Steering Committee meeting

C. The Evaluation

Purposes

53. The purposes of this terminal evaluation are (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge-sharing through results and lessons learned among UNEP, the GEF and their partners.

Criteria and Key Questions

54. Key questions for the evaluation identified in the evaluation terms of reference (Annex 1) are:
- A. To what extent did the project manage to develop scientifically credible, operationally and financially feasible methods for conducting assessments of the state and trends of major concern in transboundary water systems (groundwater, lakes and reservoirs, river basins, large marine ecosystems, and open ocean areas)?
 - B. To what extent did the project manage to put in place a sustainable, collaborative partnership of ongoing assessment programmes, managed by several competent institutions, to conduct periodic coordinated and harmonized assessments of the five transboundary water systems at the global level?
 - C. In how far do the project outcomes provide building blocks for the preparation and execution of a periodic, global, comprehensive assessment of transboundary water systems, to assist UNEP and the GEF with designing and conducting interventions to reverse the degradation of these complex water systems, setting priorities for UNEP and GEF resource allocations, and documenting the results of their investments and efforts in relation to the changing state of these systems globally?
55. The Terms of Reference of this evaluation presented in Annex 1 include a specific list of review criteria used for this evaluation that are reflected in the structure of this report.
56. The principal analytical tool used in this evaluation is the Review of Outcomes to Impacts (ROtI) tool which is presented in Part II A of the evaluation report and is used to inform analyses on impact, sustainability and

stakeholder engagement. Information used in the wider evaluation is evidence-based and efforts have been made to triangulate information and opinions from interviews.

57. The evaluation includes a review of the five transboundary water assessment methods developed by the project presented in Annex 8. This review is based on the draft method documents as they were at the time of the second Steering Committee meeting held in February 2011 in Nairobi.
58. All through the evaluation process, efforts were made to interact with the UNEP/DGEF Task Manager, the project Secretariat at UNEP/DEWA and the main project implementation partners. The draft TORs of the evaluation were discussed at length, key partners were interviewed, preliminary findings of the evaluation were presented and discussed at the second Steering Committee meeting in February 2011, and the draft report was circulated twice for comments from key project partners. The evaluation team's response to comments received on the draft report is annexed to this report (Annex 9). The recommendations of this evaluation will be summarized in a Recommendations Implementation Plan and the UNEP Task Manager will complete and update this plan on a six-monthly basis with any progress made in implementing the evaluation recommendations.

Timeframe, data collection and limitations of the evaluation

59. The evaluation took place between 3 January and 14 March 2011. The list of persons interviewed during the course of evaluation is provided in Annex 2 and the itinerary and evaluation timeline is provided in Annex 3.
60. The findings of the evaluation were based on the following:
 - A desk review of project documents, including but not limited to the following. (See also Annex 4, List of references):
 - a. The Project Document and monitoring and evaluation reports, including progress and financial reports to UNEP, GEF Annual Project Implementation Review (PIR) report of July 2010, and relevant correspondence;
 - b. Reports of the inception meeting and two Steering Committee meetings;
 - c. The methodologies produced by the five working groups;
 - d. Other project-related material produced by the project staff and partners, including reports of technical meetings and outputs of the 'correspondence working groups' established by the project;
 - e. Relevant material published on the project web-site: <http://twap.iwlearn.org/>
 - Observation of the Second Steering Committee meeting of 9-10 February 2011 where preliminary findings of the evaluation were presented;
 - Interviews with project management, including the Project Manager and other staff of the Project Secretariat and host unit in DEWA;
 - Interviews with the UNEP/DGEF Project Task Manager and Fund Officer;
 - Interviews with executive partners (lead partners and technical partners); and
 - Personal and telephone interviews with other stakeholders involved in the project, including the financial partners. An overview of stakeholders met during the evaluation is presented in Annex 2.
61. In terms of constraints, it should be noted that the evaluation was organized during an extremely busy period for the project Secretariat and partners. The Secretariat and partners were engaged in organizing the second project Steering Committee meeting, finalizing the products of this medium-sized project (MSP) for publication and preparing the project identification form (PIF) for the anticipated full-sized project (FSP). The efforts made by the Secretariat and project partners to accommodate the needs of this evaluation during this demanding period are greatly appreciated. The time allowed for this evaluation was insufficient to allow for an in-depth comparison of this project to other corporate projects. Efforts to benchmark the project based on opinions of interviewees familiar with a range of GEF projects met with limited success.

Part II. Project Performance and Impact

62. Part II of the evaluation is organised in four sections representing the four main categories of evaluation criteria, namely attainment of objectives and planned results, sustainability and catalytic role, processes affecting attainment of project results, and complementarities with the UNEP Medium Term Strategy (MTS) and Programme of Work (PoW).

A. Attainment of Objectives and Planned Results

Achievement of Outputs and Activities

63. The technical implementation of the TWAP MSP started in June 2009 with the organisation and convening of the Project Inception Meeting that brought together participants from UNEP DEWA as the executing agency, UNEP DGEF, the GEF Secretariat (GEFSEC), the lead partners and other project partners. The meeting provided an opportunity to review and finalise the workplans for each of the five water systems working groups as well as review the terms of reference of the two cross-cutting working groups on Integrated Global Assessment and Demonstration Projects (IGA WG) and Data Management and Indicators (DMI WG). The inception meeting approved a list of indicators for measuring the progress of the project, which included specific timing for activities to be completed in 2009.
64. Legal agreements with each of the lead partners were concluded in October and November 2009. The lead partners formally established their respective working groups, and sub-agreements were issued where appropriate. Indicative workplans for each of the water systems working groups had been included in the Project Document and revised versions were included in the legal agreements signed with each of the lead partners. The first meetings of the working groups were convened between December 2009 and March 2010.
65. Meetings of the IGA WG and DMI WG whose membership comprised representatives of the water systems working groups were organized in December 2009. The guidance provided by GEFSEC to participants in the IGA WG meeting led to a substantially revised understanding of the nature of the planned 'integrated' assessment and a specific recommendation that the IGA and DMI groups be merged to form a single working group, subsequently called the Information Management and Interlinkages Group (IMAIG).
66. Following the first meeting of the Steering Committee in April 2010 and the formal abandonment of the concept of an 'integrated global assessment' (see paragraph 50), a revised results framework was prepared by the Secretariat. Objective 2 was abandoned and project outputs and activities were revised as presented in Table 1 above.
67. In addition to removing reference to the development of a proposal for an integrated assessment, other significant changes to the scope of the project made in the revision of the results framework at output level include: removal of references to i) demonstration projects (that were intended to look at system interlinkages in a field setting), ii) stakeholder validation of the methodologies, iii) strategy and recommendations for operational use, including a learning strategy, iv) strategy for assessment of capacity building needs, and v) awareness and buy-in for the assessment process. Capacity building was explicitly deferred to the FSP while working groups were asked to look at their own validation processes.
68. The revised results framework presented a straightforward approach to describing the project activities and outputs as a series of sequential steps towards the project objective. All activities listed were necessary and useful. Several of the outputs in the framework simply describe accomplishment of key activities (for example Output 2 describing *Establishment of five Working Groups at the Water Systems level*). Output 5² – an inventory of major agencies, data and networks – provides a bridge between components 1 and 2. The July 2010 Project Implementation Review (PIR) included one additional activity, to Prepare IMAIG TOR under Output 3.
69. Based on the revised results framework, a summary of the achievement of the project outputs is provided in Annex 5. The comments in Annex 5 include reference to the indicators provided in the revised results framework. A rating is included for each of the outputs and indicators; however it should be noted that the

² Output 5 is sometimes shown under Component 2

balance of ratings is at best indicative of the overall rating in view of the cumulative nature or varying importance of outputs.

70. Key Outputs 4 and 6 that correspond to the project's global environment objective are discussed in more detailed under *effectiveness* below:
- Achievement of Output 4, *methodologies for five major water systems*, is rated as moderately satisfactory in view of weaknesses at activity level, notably related to interlinkages and finalisation of the methodologies (Activities 11 & 12).
 - Achievement of Output 6, identification of partnerships, is rated as moderately satisfactory because further work will be required to turn this into a functional partnership for delivery of (at least) the baseline assessment.
71. A substantial volume of work was undertaken during the MSP, including through mobilisation of expertise in delivery of the project activities and outputs. However, the overall rating on delivery of activities and outputs is **moderately satisfactory** in view of the ratings on key outputs 4 and 6. This rating corresponds to criterion F in the evaluations ratings table.

Relevance

72. The central premise of the project, that among the constraints to effective management of transboundary waters is the lack of a systematic and scientifically-robust method for assessing the changing conditions of five different types of transboundary water systems resulting from human and natural causes, highlights the relevance of the project to the improved management of global international waters. The project as implemented has remained relevant in the context of the global environmental issues and the objective and strategies were consistent.
73. The role of UNEP was justified in the Project Document on the basis that *UNEP has the responsibility and comparative advantage for undertaking assessment in the GEF and globally through its various programmes including the Global Environment Outlook (GEO)*. DEWA's mandate at the time the project was approved was to keep under review the state of the global environment and its mission was to provide the world community with improved access to meaningful environmental data and information, and to help increase the capacity of governments to use environmental information for decision-making and action planning for sustainable human development. The project has essentially remained true to this mandate though some partners have expressed reservations about the extent to which the assessment will increase the capacity of governments to use environmental information for decision-making. Further details on the projects contribution to UNEP's Medium Term Strategy and Programme of Work are provided in Part II Section D.
74. The Project was designed in response to a need identified by the GEF Council and its intended global environmental objective described necessary steps towards meeting that need. The project as delivered has remained consistent with this objective.
75. In view of the global nature of this objective, the project was identified as contributing to both strategic long-term objectives identified in the GEF 4 International Waters Focal Area Strategic Programming (to foster international, multi-state cooperation on priority transboundary water concerns; to catalyze transboundary action addressing water concerns) and to all four strategic programmes. This broad relevance is validated by the project's central premise. The ROtI analysis presented below highlights the catalytic role of the project and potential transformational role of the future assessment programme.
76. The overall rating on relevance is **satisfactory**.

Effectiveness

77. The evaluation of effectiveness is based on the global environment objective of the project, *to develop the methodologies for conducting a global assessment of transboundary groundwater, lakes/reservoirs, and river basins, Large Marine Ecosystems, and open ocean areas for GEF purposes and to catalyze a partnership and arrangements for conducting such a global assessment*. The single objective in the revised results framework

provides only limited reference (in the word feasible) to the development of partnership and arrangements for conducting the global assessment, which was one of the two project components.

78. Eighty percent of the GEF project financing and over half of the in-kind co-financing was allocated to the lead partners for the work of the five water systems working groups and for their participation in the MSP-level coordination activities and cross-cutting working groups. The following paragraphs highlight some strengths and weaknesses in relation to achievement of this objective.

Methodologies

79. Annex 8 presents separate assessments for each of the five methods developed under the project. The five working groups under the guidance of the lead partners have produced well-developed methods based on in-depth consultations involving a range of different organisations, experts and consultative processes. The identification of partners and working group processes to develop the methods are described in detail in sections C1: Preparation and Readiness, C2: Implementation Approach, and C3: Stakeholder Participation. Scientific discussions held in the groups were rigorous and the groups have struck a balance between scientific robustness and practicality in the development of methods, with a view to their intended use. The methods have been written up in a clear manner and are largely structured according to the outline and themes prepared by the *Publications and Communications* correspondence working group.
80. The five-system approach of the TWAP allowed each group to adapt their method to take account of the extent to which the relevant water system assessment community is organised or fragmented and the extent to which it is possible to build on existing indicators and global data sets. Similarly, the approach has been sufficiently flexible to accommodate different ways of defining geographical units as the basis of assessment.
81. The resulting methods were built on existing programmes to the extent possible. However, there is some reliance on one-off assessments (for example, the recent UNEP global assessment of mercury), on data that has very uneven geographical coverage, and, importantly in terms of cost implications, on active compilation of data and information through regional networks and/or continued expert input and interpretation. The more fundamental needs to improve data collection at source and adapt data collection to management needs were beyond the scope of this project.
82. Scoring systems and/or decision processes intended for prioritisation of water bodies for GEF investment have been developed for four of the five systems, excluding Open Ocean that did not define geographic units. The GEFSEC provided some general guidance on prioritisation, namely that this should be based not only on the severity of issues facing a particular water body but also on the potential to make a difference through management interventions. However, while some groups have adopted other group's approaches to rating or ranking, there does not appear to have been any discussion at the MSP level as to how the methods will be used to prioritise GEF interventions. It is not obvious, at this stage, that the individual group approaches proposed will be clear, transparent and acceptable to stakeholders.
83. Common and cross-cutting elements linking the five water systems methods were discussed from the design stage of the project onwards, including at the IGA and DMI WG meetings and later at the IMAIG meeting.
 - All groups took five identified common elements (quantity of water, nutrients and eutrophication, climate change, productivity, and mercury contamination) into consideration to the extent appropriate (for example mercury is not currently an issue for groundwater), later agreeing to reduce the list to two elements; nutrients and mercury.
 - A correspondence working group was established at the IMAIG meeting to look at socio-economic issues and governance as cross-cutting or common approaches but the findings of the group are only reflected to a limited degree in the methods, in part due to their late timing when the work of the individual groups was already well-advanced and , in part, due to lack of conviction as to their applicability (e.g. in view of the level of aggregation).
 - Each of the methods identifies key interlinkages or connectivity with other groups, such as input-output fluxes of nutrients. However, data requirements from other groups and how these needs would be met in practice are not explicitly addressed.
84. The abandonment of the IGA has left a legacy of dissatisfaction and disappointment amongst some technical partners regarding the extent to which the methods are able to address linkages between the different transboundary water systems (or indeed, all water systems and catchments) in order to identify the causes of observed changes in international water bodies. The partners have different views and expectations as to how

much could realistically be achieved at the level of a global assessment, some concerned that key drivers of change in downstream systems are being overlooked, others taking a more pragmatic perspective that it is not possible for this assessment to fully address upstream-downstream linkages since these extend beyond the international waters bodies intended to be addressed by the TWAP.

85. A second issue that has generated strong views amongst the lead and technical partners is the nature of the 'Level 2' assessments intended to complement the Level 1 or baseline assessment in the next phase of the TWAP. Several partners had anticipated that Level 2 assessments would provide the opportunity to work directly with regional and country partners and that this, in turn, would increase the acceptability of results (See Section B: Socio-political Sustainability). The water systems methods thus describe different approaches to Level 2 and even interim level assessments that are each intended to increase the robustness and ownership of the results. However the guidance provided to the participants at the second Steering Committee meeting was that Level 2 assessments should essentially be a desk-based study designed to test the methods and develop best assessment practice for use at the water body level.

Partnership and Arrangements

86. Partnership arrangements for implementation of a baseline assessment are well developed at the level of five individual water systems with all five methods including a description of their approaches. These have been summarised in the working draft of the overview chapter for the planned methods publication. The groups agreed at the February 2011 Steering Committee meeting to modify their presentations and to use consistent terminology for the different types of partners (those actively involved as experts, data providers, and so on) and this work is underway.
87. The Secretariat developed a status report entitled '*Current status in establishment of partnerships and institutional arrangements*' for the second Steering Committee meeting. The paper includes a list of individual water systems partners as well as partners shared by one or more groups. It was agreed at the first Steering Committee Meeting that the Secretariat would approach those partners in the Assessment whose inputs would be required for more than one group while the working group leaders would approach those partners specific to their own groups. This work has only been partially accomplished but is expected to be completed during the development of the FSP. Many, but not yet all, expert partners, have expressed their commitment to the assessment including through in-kind contributions.
88. Certain key partners (e.g. FAO) proved difficult to engage in some working groups owing to their other commitments and this can be expected to remain problematic during the assessment phase where the number of partners is likely to be larger than it was for the MSP. At a practical level, while organisations expressed their interest and, in principle, support for the TWAP, some were not able to cover transaction costs (such as participation in meetings) required for them to play an active role in the MSP.
89. The overall coordination or institutional arrangements for conducting the assessment have not yet been fully defined or agreed upon though there is a general assumption that the work will be conducted by the existing lead agencies under the guidance of UNEP DEWA. Given the anticipated resource constraints, there is an evident trade-off in the level of investment in leadership and service provision at the coordination level and the amount of funding available for conducting and coordinating the individual water systems assessments.
90. While each of the groups has proposed its own arrangements for data and information management there is as yet no consensus on the nature of overall coordination despite the establishment of a correspondence working group to move this forward. The Rivers group identified that this will need, at the very least, to address use of common datasets and liaison with common data partners, presentation and dissemination of results, and development of a portal to facilitate access for users, decision makers and other stakeholders. The lack of progress in the correspondence working group on data management reflects over-commitment of the parties involved but also a somewhat proprietary attitude of certain partners as regards the results of the assessment. This is counter-productive in view of the intended high profile of the outputs.
91. The overall rating on effectiveness is **moderately satisfactory** considering the substantive nature of some of the outstanding activities and issues. The FSP development phase is an opportunity to resolve many if not all of these issues building on the accomplishments of the MSP.

Efficiency

92. The Project Document identified a number of sources of cost-effectiveness that would occur during the design and implementation of the assessment, first of which was that assembling a partnership among existing programmes is more cost-effective than starting from scratch and collecting information independently. Specifically the project sought to i) build on the foundation established by the global international waters assessment (GIWA) project and on ongoing assessment processes, ii) capture data from existing related initiatives and programmes by focusing the assessment process on data and information management, iii) develop a method widely applicable at national, regional and global levels, as well as in ongoing and planned activities and programmes, and iv) generate effective coordination at regional and global level to help avoid duplication of effort.
93. Factors i) & ii) helped define the approach of the project as a whole and of the individual working groups. Amongst the many foundational elements worth mentioning are:
- The design of the project took account of identified procedural and technical shortcomings in the GIWA project and, in particular, the desirability of separating the design and implementation phases of the assessment and of having methods tailored to each of the five water systems. The project manager recruited for the TWAP MSP had direct experience in the GIWA process that was presented at the inception meeting.
 - The groups worked on substantial methodological foundations, including earlier work by UNESCO IHP to develop an indicators approach paper for application of the GEF Resources Allocation Framework (RAF) to Transboundary Aquifers; the five-module approach developed by the National Oceanic and Atmospheric Administration (NOAA) LME programme, and the Integrated Lake Basin Management (ILBM) framework developed by ILEC through a recent GEF-MSP project. At the same time, most groups remained open to incorporating new approaches such as the recently published approach for mapping the cumulative impact of human activities on the oceans.
 - The LME and Open Ocean working groups reflected lessons from the *Assessment of Assessments* that was completed in 2009 by UNEP DEWA and UNESCO IOC as a first step in the UN General Assembly (UNGA) Regular process for global reporting and assessment of the state of oceans³.
94. The organisation of joint meetings of the LME and Open Ocean working groups and of the Rivers and Lakes working groups was a direct source of cost savings in view of the overlap in identified experts.
95. Cost-effectiveness was further facilitated by joint work among the groups with relevant approaches introduced by one group taken up by others (such as the adoption of a common conceptual framework by the LMEs and Open Ocean groups). At the MSP level, the IMAIG group identified governance and socio-economic issues that could be worked on in a cross-cutting manner, building on studies that had been commissioned by the LME group and established a correspondence working group to advance this work.
96. It has not been possible to carry out a direct comparison in terms of *cost and time over results ratios* with other similar projects. However some partners have argued that the investment in the TWAP preparation will only be justified if the assessment programme is established in such a way as to ensure repeat assessments and rollout of the assessments at the individual water body level. This reflects cost-effectiveness drivers iii) and iv) mentioned in Paragraph 92.
97. The level of funding in the MSP meant there was very limited scope to support participation of technical partners or invited Steering Committee members. Some partners or potential partners were not able to mobilise the unrestricted funding that would have allowed them to participate as fully as they would have liked in the project.
98. Cost-effectiveness was an important consideration in the design of the planned baseline assessment and any future assessments that will build on a substantial foundation of exiting data and know-how.

Timeliness of Execution

³ This is an international initiative to improve the understanding of the oceans and to develop a global mechanism for delivering science-based information to decision makers and the public.

99. The project had an extended administrative inception phase with the last of the financial advances to partners made only in March 2010. (See section C5, *Other Administrative Processes*). While this initially appeared to have had only a limited impact on the timing of the project given the ongoing engagement of the partners in the TWAP process (as evident in the participation in the inception meeting, IGA and DMI meetings and associated preparation work), the flexibility in timing that would have been desirable to accommodate the revision of the results framework was reduced. The first meetings of the working groups took place some six months later than anticipated in the original Project Document but all five working groups had produced advanced drafts of their methods by November 2010.
100. The closure of the MSP was managed in the context of parallel activities to prepare the project identification form (PIF) for the full-sized project, a task that was factored into the work plan approved by the first Steering Committee meeting. The IMAIG meeting further extended the partners' work programmes to April 2011 to allow for publication of the methods. This informal extension has been facilitated by the ongoing employment of the project manager to July 2011, the extended duration for cofinance from the Finland, and the ongoing validity of legal agreements between UNEP and partners. There were thus minimal repercussions.
101. The second project Steering Committee meeting held in February 2011 provided important guidance for finalisation of implementation arrangements for the baseline (Level 1) and Level 2 assessments to be carried out in the full-sized project. It was agreed that this should be reflected in each of the water system methods. This has practical implications for financial closure of the project since the final payments to the project partners are contingent on receipt of final methods.
102. The February 2011 Steering Committee meeting also provided an opportunity to take stock of other unfinished activities from the MSP that will need to be addressed prior to the launch of the assessment, notably on a range of technical and operational cross-cutting issues (See *effectiveness* above). Failure to conclude these issues can in part be traced to the six-month hiatus in addressing 'integration' following the recommendation to merge the IGA and DMI working groups, that needed to be approved by the Steering Committee. As well as resulting in loss of time and momentum this interruption resulted in the work of the individual working groups moving ahead before cross-cutting issues were fully resolved and could be addressed in method development.
103. The overall rating on efficiency is **satisfactory**, reflecting strong efforts and potential for cost-effectiveness but some weaknesses in terms of timeliness, though with limited financial repercussions.

Review of Outcomes towards Impact

104. The following paragraphs examine progress made towards project impacts using a Review of Outcomes towards Impact (ROtI) analysis. The MSP was intended to put in place the necessary foundation (method, partnerships and arrangements) for conducting a baseline Transboundary Waters Assessment (TWA) that would be conducted as a follow-up to the project. In view of the preparatory nature of the project, the ROtI analysis is based on an extended theory of change leading from preparation for the assessment during the MSP, through the actual assessment during the FSP, to eventual environmental impacts.
105. The central premise of the MSP set out in the Project Document is that '*among the constraints to effective management of transboundary waters is the lack of a systematic and scientifically-robust methodology for assessing the changing conditions of five different types of transboundary water systems resulting from human and natural causes.*' Figure 1 in Annex 6 illustrates a causal chain towards environmental impacts based on this premise.
106. The global environmental objective of the MSP is essentially a description of the desired outcomes of the MSP and provides limited guidance on the intended impacts of the project. Given that the MSP was intended to contribute to all four International Waters strategic programmes identified in the IW focal area strategy and strategic programming for GEF-4, the intended environmental impact is stated in general terms as an improvement in the condition of global transboundary waters systems ensuring sustained benefits for users.
107. The first major assumption in this results chain is that the TWAP will proceed on the basis of a GEF full-sized project (FSP) as a result of the foundations laid during the MSP. The FSP is intended to generate a baseline assessment, a validation of the results of that assessment, and the definition of best practice assessment (according to the draft PIF presented to the second Steering Committee meeting). As well as

enabling the GEF to set science-based priorities for financial resource allocation, these outcomes are intended to establish a sustainable process (or programme) for periodic assessment at the global level, leading to an enhanced understanding of transboundary concerns and an ability to track the effects of management interventions, and ultimately to improved policy concerning and better management of transboundary water systems.

108. Assumptions related to the TWAP being conducted through an FSP are the continued commitment of a suitably qualified set of core partners and the approval of funding. The partnership established in the MSP together with the motivation of the individual partners is serving as an important driver for the project. (See also Section B: Sustainability).
109. As illustrated by the multiple paths in the causal chain in Figure 1 in Annex 6, the intermediate outcomes in the results framework do not all need to be accomplished in order for there to be an impact on the environmental status of transboundary water systems. For example the baseline assessment is expected to improve financial resource allocation in a context of limited resource availability and thus increase effectiveness of GEF's portfolio of IW interventions. The baseline assessment is also expected to draw attention to the range of concerns facing transboundary waters systems and catalyse policy responses and investment at the national, regional and international level, regardless of the adoption at transboundary water body level of best assessment practices or the existence of a sustainable process for periodic assessments.
110. However the extent to which the assessment can contribute to increased understanding of transboundary concerns, and thus contribute to appropriate policy development and management interventions will be strongly increased by periodic repetition of the assessments and the application of best assessment practice at the individual water body level (individual groundwater basins, LMEs etc). Related assumptions include sufficient stakeholder engagement, technical capacity and willingness to collaborate in the TWAP. (See also section B: Socio-political Sustainability and C3: Stakeholder Participation).
111. Figure 2 in Annex 6 shows the results of the Review of Outcomes to Impact (ROtI). The overall likelihood of impact achievement is rated on a six-point scale as **moderately likely** (AC). This rating is based on the following observations:
 - The MSP outcomes were designed from the outset to feed into a continuing process with specific allocation of roles and responsibilities as an intrinsic part of Outcome 2. (Rating A)
 - Measures designed to move toward intermediate states are evident in the ongoing momentum towards implementation of the TWA. At this stage it is highly likely that a baseline assessment will take place with achievement of at least the limited results described in Paragraph 109. However, it is uncertain, at this stage, whether the level of stakeholder ownership and participation – that many TWAP partners argue is necessary for the TWA to contribute to improved policy and management – will be realised. Activities planned in the MSP to enhance stakeholder ownership and participation, which may have influenced this outcome, were scaled back. (Rating C).
 - There was no intention to realise impacts during the MSP. (The + rating is not applicable).
112. The overall rating on Section A: Attainment of planned results is **moderately satisfactory**. However it is anticipated that many of the outstanding issues raised under *effectiveness* above will be ironed out during the finalisation of the PIF and preparation of the FSP.

B. Sustainability and catalytic role

B1. Sustainability

113. The TWAP MSP was designed and implemented as a preparatory activity towards the implementation of a Transboundary Waters Assessment and ultimately towards establishment of a sustained process of assessments. The initiative was conceived as a two-stage process based on lessons learned from the 1999 – 2005 Global International Waters Assessment. The immediate assumptions for the continuation of the

initiative are the continued commitment of a suitably qualified set of core partners and the availability of funding.

114. The following paragraphs also look at sustainability factors that will affect further progress towards achieving impacts as described in the ROI analysis above. External factors are primarily considered under socio-political sustainability in view of the importance of ownership of the assessment results, while internal factors related to the assessment process are considered under institutional sustainability.

Financial Resources

115. The outcomes of the TWAP depend on continued financial support from the GEF or other sources to conduct the assessments for which the methods were designed and partnerships developed in the MSP phase. The MSP was explicitly designed to lead to an FSP but this outcome is subject to adoption of the methods by the GEF, and to Council approval and CEO endorsement of the FSP. This may prove to be the acid test for the continuity of the TWAP.
116. Each of the water systems working groups presented a revised cost estimate and summary of available co-financing to the second Steering Committee meeting for conducting the assessment at two levels, the baseline assessment (Level 1) and various understandings of testing, ground-truthing or rolling out the assessments at water body level (Level 2). It was evident at that meeting that further work would be required both at the level of individual water systems and at the coordination level (addressing project management, data management and other cross-cutting elements) in order to arrive at a feasible cost estimate for a GEF-supported FSP. It was noted that the groups had already made efforts to scale back and identify a minimum set of indicators and that saving costs by reducing the number of indicators would be a false economy. The cost of the first assessment, including co-financing, is expected to exceed US\$ 20 million.
117. The commitment of the existing group of partners – lead partners, funding partners, and the extended group of technical partners – is evident in their intention to provide in-kind and cash co-finance for the next phase. Phase 2 of the TWAP will also leverage the substantial ongoing investments in assessment activities that are currently being undertaken, though from the perspective of international waters, in a fragmented manner, by the project partners and wider set of identified data partners.
118. Identified co-financing includes support from the EU's Seventh Framework Research Programme (FP7) for the Global Earth Observation System of Systems (GEOSS) interoperability for Weather, Ocean, and Water (GEOWOW) project. The Government of Finland envisages further financial support for a larger amount than that provided for the MSP.
119. The prospects for financial sustainability, in terms of support for the critical phase 2 of the project, can thus be considered **moderately likely** with the principal risk related to the decision of the GEF to finance the FSP.
120. Looking ahead to eventual impact of the project, continued funding at various levels will clearly be important if the assessment is to be repeated and rolled out at regional, national or water body level. However, institutional and political factors are considered of greater importance than funding at this stage in that they will establish the conditions needed for funding eligibility and for conducting cost-effective assessments.

Socio-political Sustainability

121. Onward progress towards impact will be dependent on the results of the assessment being made accessible to decision makers and being seen as credible and sufficiently compelling to influence policy and investments with respect to international water at global, regional and national levels, and, where management frameworks exist, at water body levels.
122. At the global level, TWAP has political legitimacy in that it responds to the mandates of UNEP, UNESCO and the GEF that are derived from their constituencies. As well as contributing to the approved strategies of the partners, the TWAP will also contribute to specific intergovernmental processes such as the *Regular Process under the United Nations for global reporting and assessment of the state of the marine environment*

that was called for at the World Summit on Sustainable Development (WSSD) and endorsed by the UN General Assembly in 2002. Results are also expected to be incorporated into a suite of other high-profile assessments such as the UNEP's Global Environment Outlook and the UN World Water Development Report. These processes provide avenues for assessment results to be incorporated into management and/or development policies and activities of governments.

123. However, the issue of ownership by regional and national stakeholders was raised by several lead partners, technical partners, and at the joint rivers and lakes stakeholder consultation organised in Bangkok where participants expressed concern about the validity of a weighting process 'conducted from Washington or from external agency perspectives' and stressed the need for transparency and the importance of regional grounding.
124. The question of ownership is thus significant both in terms of acceptability of the prioritisation exercise to be carried out during the Level 1 assessment and also for the likelihood of the assessment methods being mainstreamed in data collection practices and results-based management at the regional level. Several interviewees stressed the importance of engaging local scientists and managers in the assessment process in order to generate results that are seen as credible by decision makers in their respective regions. However, others argued that having the assessment based on global data sets that allow for objective and reproducible comparisons between regions is equally if not more powerful. These views will need to be reconciled during the development of the FSP.
125. At a practical level, two lead partners – UNESCO IHP and ILEC – have their own constituencies at the regional level (regional IHP bodies; regional membership of ILEC) but the extent to which it will be possible to engage these bodies in Level 2 assessments remains unclear. No specific community of practitioners was identified by the Rivers group but the need to engage with users was highlighted by the group during project design. The Regional Seas community provides a good avenue for engaging regional practitioners and governments despite resistance in some areas or to some aspects of the LME approach. The issue is of lesser concern for the Open Ocean group that deals mainly with waters beyond national jurisdiction (apart from Polar Regions where relevant regional bodies can be identified).
126. The issue of ownership represents a significant risk to the eventual impact of this project, but the opportunity to address this risk in the design phase of the full-sized project means this dimension is rated as **moderately likely**.

Institutional Framework

127. As seen in Part A, above, the definition of the partnership for conducting a baseline assessment is well advanced in terms of identifying who needs to be involved, and arrangements for operation of the assessment are expected to be finalised during the development of the PIF. The identified partners at the water systems levels have the capacity to contribute to the project as envisaged.
128. Arrangements for overall coordination of the assessment, including data management, need further definition since partners do not yet share a common vision on the relative importance and profiles of the overall TWAP versus the profile of the individual water systems component. The issue is somewhat political but mainly reflects the question of allocation of limited resources in the FSP phase with concerns that investing in a large central coordination function would divert resources from the core assessment work.
129. The ultimate goal of the project described in the Project Document was to establish a continuous assessment process for periodic transboundary water assessments. This expectation was echoed by partners in their discussion on sustainability at the first Steering Committee meeting where partners agreed the recommended time interval between assessments (five years) and considered the number of assessments required to define trends (variable according to issue).
130. For the above to occur in a cost-efficient manner will require that the assessment process be mainstreamed into the regular business of the partner organisations, including amongst existing and new data partners and amongst partners coordinating assessments at the water systems level and overall TWAP level. Mainstreaming can be expected to be a gradual process over several iterations of the assessment. This issue is addressed further under B2: Catalytic Role and Replication.

131. The rating on this dimension of sustainability is rated as **moderately likely** reflecting the need to build consensus around institutional arrangements, including data management, for the full-sized project.

Environmental Sustainability

132. In the long term, and as illustrated by the ROtI analysis, the TWAP is expected to lead to prioritisation of investments and an improved ability to track the impacts of investments in international waters by GEF and other partners and ultimately to more effective management of international waters. The rationale for the TWAP remains valid in the context of improving or declining environmental conditions.

133. The rating on this dimension of sustainability is rated **likely**.

B2. Catalytic Role and Replication

Catalytic Role

134. The intended catalytic role of the TWAP, and its contribution to the GEF4 IW Strategic objective to catalyze transboundary action addressing water concerns, was reflected in the project rationale, namely that the results of a robust, science based assessment of the status of international waters will convince policy makers and investors to undertake the necessary actions to address the multiple and complex human induced stresses that are degrading transboundary water systems. The extended results chain towards this outcome is described in the ROtI analysis.
135. At this stage, the incentives put in place to catalyze behavioural change are at the level of the assessment partnership which has been largely defined. The MSP has established a foundation for future collaboration amongst the technical partners within each group, amongst the lead partners, and between the lead partners and UNEP. This built on existing relationships but also forged new relationships in a context where appreciation of the respective partners' roles was, at times, affected by inter-institutional politics.
136. In terms of institutional changes, the project has enabled partner organizations to consider how best they may be able to increase their assessment capabilities and value of ongoing assessment work over the short term, with implementation of a first assessment, and over the longer term through influencing the way in which they collect, compile and/or present data to users. The interest of UNESCO IOC in expanding the thematic scope of the global ocean observing system (GOOS) is a good example of how the project has influenced and has the potential to influence the practices of partner organizations towards eventual mainstreaming of the assessment.
137. The MSP has not yet contributed to external policy changes but the transboundary waters assessment during the FSP is expected to do so, as described in the ROtI analysis and project rationale.
138. The project has not yet contributed directly to sustained follow-on financing (catalytic financing) from Government or other donors though it has already established an important commitment in terms of in-kind support and some direct funding for a first assessment.
139. The GEFSEC has been an important champion for the MSP, both as client and also in providing a vision in terms of the strategic importance of the planned assessment for GEF and other organizations. The project has also created opportunities for individual experts to influence the development of the methods and bring in new and emerging ideas on issues such as cumulative impacts and governance.

Replication

140. The criteria of replicability and scaling up are not strictly applicable to this project, which addresses assessment of international waters at the global level. However, in the same way that this project has built on lessons from the GIWA project, lessons from the process of this project and from the application of the TWAP may be applicable in other contexts where global assessments are being considered.

141. The ongoing commitment of the partners means that it is highly likely, assuming funding is forthcoming, that at least the baseline TWAP will go ahead based on the methods developed during the MSP. Several partners argued that existing and anticipated investments in the TWAP will only be justified if a sustainable programme of assessment of major transboundary aquatic systems is established and provides a platform for the international community to evaluate and monitor the impacts of interventions in international waters, as envisaged in the ultimate goal of the MSP.
142. Contributions to future assessments are likely to be taken up gradually at the level of countries, regions or transboundary water bodies. One realistic scenario presented for this is the gradual adoption of best assessment practice at the regional level, including in future GEF transboundary diagnostic analyses and strategic action programmes. Replication in other regions will thus become an important factor leading to an increasingly robust and policy relevant assessment process.
143. The rating on catalytic role and replication is **satisfactory** in view of the strong catalytic potential of the project and the foundations that have been laid in the MSP.

C. Processes affecting attainment of project results

C1. Preparation and Readiness

144. The MSP was designed over a fifteen-month period with planning meetings in September 2007 and March 2008 allowing for thorough preparation including agreement on roles and development of partnership arrangements. Lessons and experience from the GIWA project and the ongoing *Assessment of Assessments* (towards the *Regular Process*) were incorporated into the design.
145. The capabilities of the executing agency and lead partners were considered primarily in terms of their technical competencies. Each of the agencies had relevant experience in project execution and coordination. The roles and responsibilities of lead partners were clearly defined (apart from contradictory statements concerning the roles of UNECCO IOC and NOAA in the leadership of the LME working group) and the project proposal included a plan of operation and a skeleton method for each group.
146. The in-kind support of the lead partners was greater than anticipated; a good indication that counterpart resources were assured at the design stage. The composition and level of engagement of the group of secondary partners changed during implementation, reflecting availability, changes in institutional priority and changes in project direction. New partners were able to bring in substantial in-kind support. However, some technical partners reported that they had not been able to identify sufficient unrestricted resources (time and operational costs) to contribute to the project as fully as they would have liked and were concerned that this may continue to affect their involvement in the next phase.
147. The project objective as set out in the project identification form (PIF) – corresponding to the global environment objective in the Project Document – was straightforward, practicable and feasible within the proposed project timeframe of two years. However, the project objectives detailed in the Project Document proved impracticable. Objective 2 was dropped in response to the IGA and DMI Working Groups' recommendations concerning the nature of an integrated assessment and the related decisions at the first Steering Committee meeting.
148. With hindsight it is clear that some planned outputs were also impracticable within the available time and resources of the project. Specifically, the Steering Committee called for deferment of capacity building strategies to the FSP and called on the Secretariat to investigate new sources of funding for convening a stakeholder workshop (redefined as a partner forum) that had been proposed in the original work plan. The Steering Committee also adopted GEFSEC's suggestion to defer demonstration projects to the FSP.
149. The confusion over the nature of an integrated assessment has its roots in a drift from the client's (GEFSEC's) vision for the TWAP during the elaboration of the Project Document. The differences in intent and understanding were obscured by the potential for different interpretations of the term 'integrated'. Nevertheless, opportunities were missed to identify differences and clarify misunderstandings during the March 2008 planning meeting which GEFSEC did not attend, during review of the Project Document and at the inception meeting. This proved to be the principal factor that affected quality-at-entry of the project

design but could not have been anticipated by UNEP or other participants in the March 2008 planning meeting at the time the project was submitted.

150. The timeframe for the MSP was reduced from the two years anticipated in the PIF to twenty two months; a reduction that was accepted only with some reluctance by the executing agency. While the amount of time anticipated for project implementation was sufficient based on the overall work plan and the individual water systems work plans attached to the Project Document, the project proved slow to get started and this further reduced the time available for implementation of project activities and to accommodate contingencies.
151. The pre-identification of LMEs as a unit of assessment was considered a constraint by some technical partners, notably in terms of dealing with linkages to Open Ocean, but was accepted because this was in line with the prevailing GEF international waters policy.
152. The rating on preparation and readiness is **moderately satisfactory**. This reflects the vision drift that occurred during project development that had repercussions on the overall performance of the project.

C2. Implementation Approach and Adaptive Management

Implementation Approach

153. The Project Document included a short but clear section on implementation arrangements, identifying the implementing agency, executing agency and executing partners. It described provisional membership of the project steering group whose terms of reference were appended to the proposal. It included a decision making flowchart and organigram. The expected outcome of these arrangements was *'effective project implementation, management and achievement of all project objectives within the project timeframe; facilitation of information dissemination and exchange'*.
154. These arrangements have been largely implemented as anticipated though there were some changes in the composition of the executive partners and project Steering Committee membership. For example the World Bank was invited to take part in the Steering Committee but declined since they were not directly involved in the project, while UNDP contributed only to the first Steering Committee meeting. The University of Kalmar pulled out of the project.
155. The Project Document contained contradictory information on the role of the US National Oceanographic and Atmospheric Administration (NOAA) variously identifying it as LME working group lead, co-lead with UNESCO-IOC, and member of a group led by UNESCO. NOAA was also described as the project lead in the October 2009 project brochure despite UNESCO-IOC's role having been confirmed at the project inception meeting.
156. In terms of execution arrangements, the Project Document envisaged establishment of five Working Groups of experts at the water systems level for five transboundary water systems (groundwater, lakes/reservoirs basins, shared river basins, LMEs and open ocean areas) that would be responsible for the development of the assessment methods. Plans of operation for each of the groups were appended to the Project Document.
157. The five separate working groups were established as envisaged under the leadership of a lead partner, with overall responsibility for development of methods and partnership arrangements for the individual international waters systems.
158. The lead partners' roles were formalised through legal agreements with UNEP which allocated the bulk of the GEF funding – eighty percent – to the work of these groups. The performance of these working groups is reflected in Section A as well as in the technical paper in Annex 8. Each of the lead partners appointed a coordinator who was actively involved in the project and three of them appointed a dedicated manager – in two cases a suitably qualified consultant – to handle the day-to-day liaison with working group members, to prepare technical meetings and to compile the methods.
159. Two further cross-cutting working groups were established as envisaged in the Project Document, to look at interlinkages amongst the five water system groups and develop the integrated global assessment and demonstration projects proposals (IGA WG) and to look at data management and indicators (DMI WG). Each group had five core members, one from each of the five water systems WGs that covered participation costs.

Terms of references for IGA and DMI WGs were presented to the Inception Meeting. The groups held their first meetings in December 2009 and substantive discussions built on information gathered in a questionnaire to the groups that was managed by a consultant hired through the Secretariat.

160. As noted above, the IGA and DMI groups were subsequently disbanded based on their own recommendation and, with the approval of the Steering Committee, merged to form the Information Management and Indicators Working Group (IMAIG). The IMAIG met in June 2010. This was a task-oriented meeting that advanced but did not always reach agreement or conclusion on a wide range of cross-cutting issues including inter-linkages, commonalities, coordination of outputs, terminology, and data management.
161. The IMAIG established three correspondence working groups (CWGs) to continue work on Governance/Socio-Economic issues; Data and Information Management; and Publication and Communication. Each group developed their own terms of references and continued their work by email and teleconferencing.
162. The implementation arrangements at the level of the individual water bodies were largely satisfactory. The working group approach was effective, adaptable (in terms of structure, flexible membership and so on), and cost-effective. The groups worked at different speeds, reflecting very different contexts in terms of the state of knowledge of the different water systems and level of fragmentation of the scientific community. This proved challenging in terms of the overall cohesion of the project – notably when it came to integrating cross-cutting themes. There was some tendency for groups to become isolated, notably in the case of the Lakes that was not always party to guidance provided through informal communications with GEFSEC and did not benefit from the regular informal exchanges amongst the groups hosted by UNESCO.
163. At the MSP level the implementation arrangements proved less satisfactory despite efforts to develop clear terms of reference for the groups (IGA, DMI, IMAIG and correspondence working groups) working on common and cross-cutting issues. This can be largely traced to the reorientation of the project as has been discussed elsewhere in the report.
164. Based on the experience of the waters systems working groups, cross-cutting working groups, and correspondence working groups, other factors that enhanced the success of the working group approach include clarity surrounding the tasks of the group; the availability of a dedicated manager and the opportunity for face-to-face meetings that served to build common understanding around more complex technical issues and provided impetus for inter-sessional work. Groups worked less well where there was a lack of clarity or consensus around the work they were expected to deliver and where group members or facilitators had taken on an additional role to their regular workloads on a voluntary basis but lacked the time to fully engage with other group members.

Project Management

165. The Project Document envisaged the establishment of a small project coordination unit headed by UNEP DEWA with one full time staff member funded by the project and another part time UNEP staff member. It included terms of reference for the project manager to be recruited by the project.
166. A qualified project manager with relevant experience in the Global International Waters Assessment project was recruited in mid-2009, reporting to the head of the Ecosystems Section in DEWA. The team was completed by a part-time UNEP Programme Officer who had been involved in the project development phase of the TWAP. DEWA provided secretarial assistance and the support of a fund management officer (FMO). A consultant provided support for specific tasks including development of a questionnaire in preparation of the IGA and DMI WG meetings and support to the communications and publications CWG.
167. Major activities of the Secretariat included preparation, organisation and reporting of major events in the MSP work programme and a wide range of follow up actions (inception meeting, IGA/DMI working groups, Steering group meetings, IMAIG meetings), contracting and administration, preparation of terms of reference and work plans, and providing technical support. It provided guidance to the WGs through extensive advisory

and information documents for meetings. (See also sections C5: Financial Planning and Management and Section C7: Monitoring and Evaluation).

168. The Secretariat responded in a timely and efficient manner to the changes requested as a result of the December 2009 IGA/DMI WG meetings with thorough preparation of the Steering Committee meeting and subsequent IMAIG meeting where the implications of these changes for work planning needed to be translated into clear direction for the working groups.
169. The groups were asked to revise their work plans based on guidance from the Secretariat prepared in January 2010 and all provided new work plans in time for the April 2010 Steering Committee Meeting. Each of the groups prepared a progress report in the period March – June 2010, based on a template provided by the Secretariat. It has not been possible for this evaluation to look in detail at implementation of the activities anticipated in each of the five working group work plans.
170. The impact of the substantial changes in the results framework was significant in terms of undermining the confidence of the partners and of the Secretariat itself, in their understanding of the project. The Project Manager reported that she could no longer refer to the Project Document for guidance while partners reported that the Secretariat was not always able to provide clear technical direction and vision to the groups.
171. Communication channels were revised at the first Steering Committee meeting to take into account the role of the newly created IMAIG WG. The participants agreed on an approach to avoid duplication in approaches to potential partners in the future assessment. Nevertheless, internal communications proved challenging during the course of the MSP and were a source of frustration to the Secretariat and partners alike. Several of the project partners referred to opportunistic communications between the working group members and the GEFSEC that allowed individual groups to gain clarity on key issues but sometimes left the Secretariat and other groups out of the loop. In another case a working group member (NOAA) took up contacts with potential partners relating to arrangements for the FSP without regard to the protocol agreed by the Steering Committee and without obtaining the agreement of the working group coordinator and other members.
172. The draft terminal report has reflected this tension under 'lessons learned', stating that the direction of GEFSEC presented a situation where UNEP primarily acted as a coordinator rather than a leader, unlike its role in most projects for which it has implementing/executing responsibilities.
173. The capacity of the Secretariat was significantly curtailed from December 2010 as a result of the reduced working hours of the Project Manager based on medical advice (that was unrelated to the working environment). The DEWA team made efforts to compensate for this shortfall but was at time stretched in view of their other commitments.
174. The rating on implementation approach and management is **moderately satisfactory** and partly reflects circumstances that were beyond the control of UNEP.

C3. Stakeholder Participation and Public Awareness

Project Partners

175. The lead partners in the project were identified during the development of the PIF and their roles were consolidated during the development of the Project Document including through two preparatory meetings. The Project Document included a preliminary identification of technical partners and each partner was expected to establish a core group comprising around five technical partners.
176. The three groups managed by UNESCO involved a wide range of experts from agencies (including potential data partners), programmes and research bodies. The Open Ocean and LME groups shared some common experts. The Rivers group comprised members of UNEP-DHI Centre on Water and Environment, SIWI and

IUCN who were all involved with the project on a contractual basis. The Lakes core group comprised researchers closely associated with ILEC but several consultative meetings were organised.

177. One weakness in the working group approach already mentioned above was the expectation of voluntary contributions that some organisations are not well-structured to accommodate even if they would like to. There was thus an element of self-selection in some groups since, in general, funds were not available at working group levels to support travel or staff time of technical partners. Some potential partners such as IUCN (approached on Red List species) and FAO (approached on fisheries) were not able to participate directly in all groups to which they were invited due to non-availability of suitable experts. Project funding from the Government of Finland was used to facilitate participation of scientists from developing countries.

Engagement of water users' communities and their institutions

178. The original Project Document envisaged engagement of water users' communities in several ways, including through demonstration projects and a validation exercise. Work related to both engagement of the user community during the project and design of strategies for their future engagement was substantially scaled back as a result of the modification of the results framework as described in Paragraph 68. In view of the concerns about ownership, the decision to drop systematic activities related to stakeholder validation of the methods (that some groups argued was unnecessary) and to awareness-building and buy-in for the assessment process is regrettable. The rationale for the latter change in the results framework is unclear.
179. Several of the groups had specified how they would interact with user groups and the Rivers and Lakes groups specifically engaged IUCN to support dialogues at the basin level. Scaling back of these activities is reflected in the reduced in-kind contribution of IUCN who organised just one consultative meeting (on the Mekong Basin) instead of the two originally planned. The emphasis of participants at that meeting on the need to generate stakeholder buy-in and ownership of methods and results is ironical in this context.
180. Each of the groups undertook a wide range of consultative and validation exercises through presentations or side events at relevant international meetings, workshops and conferences. While time available for in depth discussion was often limited, these events served to at least alert the wider community of scientists, practitioners and potential users to the existence of the TWAP and invited follow-up with existing partners. A limited 'peer-review' process based on review by individual experts was also undertaken.
181. At the MSP level TWAP was presented at the fifth biennial International Waters conference in October 2009, and a brochure was produced for distribution at that event. Efforts were also made to build links to relevant ongoing initiatives such as the IW: Science project that set out to analyse and derive lessons related to the actual and potential use of science in the IW portfolio.
182. A discussion on the planned 'stakeholder forum' at the first Steering Committee meeting concluded with a request to the Secretariat to investigate the possibility of securing funding and participation in a partnership forum to be held toward the end of the project period, as a first step in securing partner participation in the FSP. As of February 2011 there were no plans to organise this meeting.

Public awareness activities

183. The MSP did not specifically set out to raise public awareness either about the project itself or about the issues that it had set out to address. Communication activities undertaken by the Secretariat and project partners targeted informed audiences as described above.
184. A public website was established on the IW: Learn Website, <http://twap.iwlearn.org/>. While it does include basic information about the project it was primarily designed to serve as a working platform for the project partners and the content is largely structured around the preparation of specific meetings or activities such as the peer review. Information related to the activities of any one water systems group was scattered making the site less accessible to the wider public. Online forums were established for each of the transboundary water systems but not used since telephone, Skype and email contact was seen as more convenient (though with the disadvantage that discussions and decisions were not recorded or made available to other groups or interested parties). The site includes one monthly update on the project dated September 2010. More information on the

TWAP is available on several lead and technical partners' websites including those of UNESCO, UNEP-DHI Centre on Water and Environment, and IGRAC.

185. The methods produced during the first phase of the TWAP are expected to have limited circulation and to be primarily of interest to the project partners and other technical audiences. Participants in the second Steering Committee meeting proposed that greater emphasis should be placed on publication and launch of the baseline assessment which is intended to generate awareness of international waters issues and concerns.
186. The overall rating on stakeholder engagement during the MSP can be considered **moderately satisfactory**, though recognising that the limited engagement with stakeholders was partly a consequence of the deliberate reorientation of the project that de-emphasised this aspect. Issues related to future stakeholder engagement and to ownership and understanding of the approach to and results of the assessment have been addressed elsewhere in this report.

C4. Country Ownership and Driven-ness

187. The TWAP MSP did not involve any Governments. However, the question of country ownership and driven-ness was addressed in the Project Document which includes an extended section on consistency with national priorities and plans that sets out how the project would help countries to meet their obligations under international agreements and frameworks and contribute to achievement of the WSSD Plan of Action.
188. Country ownership can also be expressed in terms of the role of the TWAP in helping to deliver GEF, UNEP and partner organisations' mandates and strategies that are sanctioned by their own constituencies (e.g. UNEP Governing Council). The relevance of the project is discussed in Part II A of this evaluation while contribution to UNEP's Medium Term Strategy (MTS) 2010-2013 and related Programme of Work (PoW) in Part II D.
189. Questions about the client were raised at the first Steering Committee meeting where it was noted that while GEF was the immediate-term client for the assessment, in the longer term the clients were the countries who would use the protocols developed not only for international waters project applications but also for conducting national waters assessments and developing national projects as well as transboundary projects.
190. As illustrated in the ROTI analysis, there are different scenarios for how governments are expected to use the results of the assessments and to contribute to future assessments. One expectation is that the results of the baseline assessment will alert decision makers, including governments, about the environmental and socio/economic status and trends of the world's international waters and catalyse responses in terms of investment and improved policy.
191. Other scenarios that would reinforce this vision include a more bottom-up process of engaging scientists and policy makers at the level of individual water bodies. Several partners argued that the level of ownership required for the TWAP to influence policy processes will only be achieved if the TWAP is implemented through a more participatory approach. (See also, Sustainability).
192. The original project proposal included development of a learning strategy for end-users in transboundary water management institutions under component 1 and a strategy for assessment of capacity building needs under component 2. Capacity building was discussed at the first Steering Committee where it was noted that '*capacity building should be deferred to the full-sized project phase of the TWAP*', a decision that can be seen as justified in view of the desk-based nature of the baseline assessment. Outputs on capacity building and learning strategy were deleted in the subsequent revision of the results framework. The LME, Lakes and Open Ocean methods anticipate an analysis of capacity building needs as part of the baseline assessment while the Rivers method suggests there will be opportunities for at least informal capacity building during the assessment.
193. The rating on country ownership and driven-ness is **satisfactory**, based on the contribution of the project to the approved strategies and mandates of the partner organisations. The issue of ownership is also considered in the sustainability rating.

C5. Financial Planning and Management

Application of Standards

194. The TWAP project was relatively simple in terms of financial planning and accounting with straightforward subcontracting. Eighty percent of the GEF funding was to be disbursed to the lead partners on the basis of funding agreements totalling US\$ 760,000 (see *Other administrative processes*, below).
195. There was one formal *project revision* in October 2009, the main purpose of which was to bring forward US\$ 460,500 of expenditures from 2010 into 2009 to reflect the timing of project expenditures. This was a requirement in view of the substantial financial commitments to be made in the first year of the project. The revision also recorded reductions in co-finance from IGRAC and UNESCO-IHP, reducing the total co-financing from US\$ 1,159,700 down to US\$ 1,068,470 (See below).
196. There were four *budget revisions* recording the rescheduling of payments to lead partners as described in the project revision and minor reallocations between budget lines on the GEF and Government of Finland co-financing.
197. There has been rather limited financial reporting on the project. Updated expenditure reports on the GEF funding were prepared for the Steering Committee meetings in April 2010 and February 2011. Expenditure in 2009 amounted to US\$ 900,825 including un-liquidated obligations to the lead partners. The report prepared for the February 2011 Steering Committee meeting indicated expenditure up to 31 December 2010 on the GEF funding of US\$ 960,152 including un-liquidated obligations and with some adjustments pending (that would reallocate expenditures to the Government of Finland co-finance) – this is a disbursement rate of about 97 percent of the total GEF contribution.
198. UNESCO's financial report to UNEP of 31 December 2009 indicated that it received a first payment of US\$ 225,000 in December 2009. UNEP-DHI Centre on Water and Environment's financial report of 31 March indicates that it received a first payment of US\$ 90,000 in February 2010. The PIR of July 2010 recorded actual disbursements / expenditures entered in IMIS as of 30 June 2010 of US\$ 457,306.
199. A consolidated budget showing expenditure of GEF and Government of Finland Funding up to 31 December 2010 was prepared for this evaluation. Expenditure of the GEF budget of US\$ 959,344 includes un-liquidated obligations representing the final contractual payments due to the lead partners (US\$ 45,000 to UNESCO, US\$ 20,000 to UNEP-DHI Centre on Water and Environment and US\$ 5,000 to ILEC). Expenditure on the Government of Finland funding was US\$ 181,602.
200. The Project Document provides a breakdown of expenditure of GEF funding for the two technical components of the project, with US\$ 633,500 (67%) allocated for Component 1; US\$ 221,500 (23%) for Component 2, and US\$ 95,000 (10%) for project management. This breakdown is very similar to that shown in the PIF Supplementary Table that also presents the anticipated allocation of co-finance between the two components, with US\$ 710,000 (71%) allocated to Component 1, US\$ 170,000 (17%) allocated to Component 2, and US\$ 120,000 allocated to project management (12%).
201. The breakdown of budget by component was specified in the Letter of Agreement (LoA) with UNESCO but was not addressed in the Small-scale Funding Agreements (SSFAs) signed between UNEP and the other executing partners or in the funding agreement between UNEP and the Government of Finland. Since the co-financing information provided by partners does not provide a breakdown of cofinancing by component, actual allocation by technical component can only be estimated.
202. Table 7.1 in Annex 7 provides a breakdown of expenditure of the GEF grant by budget line component as of 28 February 2010. There is no overall variance on the subcontracts to partners that represented 80% of the estimated cost at design, though a minor adjustment was made in the amounts contracted to ILEC and UNEP-DHI Centre on Water and Environment reflecting IUCN's support to both groups⁴. The Secretariat reported that the overspend on the personnel component (16% component on staff time and 41% travel on technical assistance to working groups) will be reallocated to the Government of Finland funding. The funds reallocated for printing (brochure) for the IW Waters conference and funds allocated for consultants support on the data and information management system remained unused.
203. No audit was planned or implemented for this project.

⁴ The overall expenditure on each water systems working group was as envisaged in the project document.

Other Administrative Processes

204. In terms of administrative processes, the project took the best part of a year to get off the ground from the time it was approved by the GEF until the time agreements were finalised with partners and they were in receipt of funds. The reasons for this are a set of essentially unrelated delays, in some cases reflecting ongoing changes in internal procedures. For example, while the project was approved on 5 January 2005 the GEF letter of endorsement was sent only on 12 March 2009. Administrative questions related to the nature of agreements to be concluded with UNESCO needed to be resolved leading to a minor delay since the advice given to the Secretariat from within UNEP was repeatedly revised. A financial revision was required to enable UNEP to sign the legal agreements with partners.
205. The funding agreement with Finland was signed in March 2009 for a duration of two years. The project manager was recruited from Finland in mid-July 2009 on a two-year fixed-term contract. The selected candidate had had the opportunity to participate in the June 2009 project inception meeting.
206. The SSFAs with ILEC and DHI were signed on 2 September 2009 and 11 November 2009 respectively. An LoA was signed with UNESCO on 15 October 2009. All agreements were valid for 18 months, respectively to 2 March 2011, 11 May 2011 and 15 April 2011.
207. The continuity of support from the Ecosystems Section of DEWA from the project design phase onwards, as well as the commitment of partners helped ensure that momentum was not lost in the extended inception period.

Co-financing

208. Table 7.2 in Annex 7 provides a summary of the co-financing that materialised during the course of the project based on information received up to 28 February 2011. Co-financing information was compiled by the Secretariat using information provided by the lead partners concerning their own and their partners' cash and in-kind financing.
209. The principal co-financer was the Government of Finland which signed a donor agreement with UNEP in March 2009 for a sum of 300,000 Euro. This sum was received by UNEP in April 2009 and registered with a value of US\$ 395,256, more than twice the amount anticipated in the Project Document.
210. The formal project revision of October 2009 was made at the request of UNESCO and recorded a reduction of US\$ 91,230 in anticipated co-finance from UNESCO IHP and IGRAC, correcting a double-counting error in the Project Document. Table 2 below summarises co-financing and leveraged funding against two benchmarks: the original Project Document (column 1) and the corrected record of anticipated co-finance included in the project revision (column 2 totalling US\$ 1,218,470).

Table 2. Summary of Co-finance and Leveraged Funding

Co-financing :	Anticipated in Project Document	Anticipated in budget revision (Oct 2009)	Reported (28 Feb 2011)
<i>Cash</i>			
Finland	150,000	150,000	395,256
UNESCO-IOC	0	0	39,000
<i>In-kind</i>			
IUCN	100,000	100,000	45,000
IGRAC	91,230	42,840	76,545
ETH-Zurich	24,040	24,040	24,000
UNESCO-IHP	92,840	50,000	60,000
UNESCO-IOC	140,000	140,000	108,000
UNEP-DHI Centre on Water and Environment	73,000	73,000	82,000

SIWI	40,000	40,000	40,000
BMZ/BGR	50,000	50,000	50,000
ILEC	92,000	92,000	102,000
GESAMP	33,300	33,300	No information
GRID-Arendal	85,290	85,290	115,800
Univ. of Kalmar	100,000	100,000	0
Univ. of Western Cape	38,000	38,000	38,000
DEWA	200,000	200,000	350,000
DEPI	0	0	60,800
NOAA	0	0	No information
UNEP-WCMC	0	0	30,000
LOICZ	0	0	8,000
IGBP	0	0	20,000
Total	1,309,700	1,218,470	1,644,401

Leveraged Resources

211. The co-financing summary in Annex 7 and Table 2 above show leveraged resources of two types: in-kind support reported by five partners who had not committed resources at the time the Project Document was finalised (totalling US\$ 118,800), and additional financial and in-kind support from the individual partners who had committed resources to the project (totalling 495,471 US\$, of which US\$ 284,256 was reported as cash).
212. The total leveraged funding based on the revised (corrected) budget was thus US\$ 614,271, an important indication of the commitment of the project partners to the TWAP.
213. Taking account of the anticipated co-financing (US\$ 183,340) that was either not received or has not yet been reported, the net leveraged resources as of 28 February 2011 were US\$ 425,931. This calculated figure can be considered conservative since the significant inputs of several partners – and particularly of individual experts including participants in working groups and peer reviewers – have not been taken into account.
214. The total cost of the project, assuming expenditure of the combined balance of GEF and Government of Finland funding by July 2011, would be US\$ 2,594,401. GEF funding represented 38% of this total.
215. The rating on financial planning and management is **moderately satisfactory**.

C6. UNEP Supervision and Backstopping

216. An Internal cooperation agreement (ICA) dated 30 March 2009 was signed between the UNEP DEWA and UNEP DGEF covering the period from signature to 30 November 2010 and defining the terms and obligations of DGEF as funding division and of DEWA as executing division.
217. Three successive Task Managers within UNEP/DGEF provided for oversight and accountability during and throughout the life of the project. The DGEF Task Managers took an active interest in the project and maintained an objective perspective on project progress and outputs. The DGEF Task Managers participated in all major TWAP meetings including the project inception meeting, the IMAIG meeting and both Steering Committee meetings, even when this required long-distance travelling.
218. Although anticipated in the Project Document and ICA, no specific supervision plan was developed since this was not a standard requirement at the time the project started. Instead Task Managers based their supervision on the project results framework, costed M&E plan and project workplans. The day-to-day involvement of the Task Manager is documented in trip reports that record action points, and in emails and memos.
219. The current Task Manager undertook a desk review of the status of the project when she assumed responsibility for the project. One project implementation report (PIR) was completed during the life of the

project covering the twelve-month period and also cumulative progress to July 2010. The Task Manager worked with the Secretariat to ensure their inputs were clear and in the appropriate format. The PIR included a detailed analysis of risk and an accurate assessment of progress towards accomplishment of project activities and outputs.

220. Financial records for the GEF and Finland were maintained by a Fund Management Officer (FMO) in DEWA. Oversight on the GEF funds administration was supported by the FMO in DGEF who has maintained a clear record of administrative milestones.
221. The direct participation of the GEFSEC Senior Advisor for International Waters in Steering Committee meetings provided clarity on the expectations of the GEFSEC for this corporate project, both as the envisaged client and as a champion for the outcomes of the MSP.
222. The rating on UNEP supervision and backstopping is **satisfactory**.

C7. Monitoring and Evaluation.

M&E Design

223. The project Logical Framework or results framework included objectively verifiable indicators (OVIs) and means of verification for the project objectives and outputs but not for the outcomes. The revised results framework adopted a similar approach with appropriate revisions to the indicators and means of verification. Indicators at outcome level, with implicit means of verification, were provided in the July 2010 Project Implementation Review (PIR).
224. The indicators were specific, measurable (in that they describe specified deliverables or conclusion of activities), relevant and mostly time-bound. They were attainable based on the project work plan attached as Appendix 4 to the Project Document. The means of verification comprised almost entirely of documentation to be produced during the course of the project. Given the nature of this project, this was appropriate.
225. The revised results framework has been used for reporting on achievement of outputs and activities in Section 1A of this evaluation and in Annex 5.
226. There was only limited reference to the baseline in the Project Document, with one brief paragraph noting the absence of a global programme focussing on transboundary water assessment and of a regular monitoring and assessment programme for transboundary water systems (with the exception of a limited number of transboundary water bodies). The baseline was slightly expanded in the July 2010 PIR, which provides a baseline description at the level of the revised project objective and for each of the two outcomes.
227. Project activity 13, to prepare and inventory and review of major regional and international agencies, available data, sources, ongoing programmes, existing networks and available methods that could potentially contribute to the assessment process, provided an opportunity to elaborate and update the baseline. Similarly the descriptions and annexes of selected indicators for each of the methods provide a detailed description of each data source including the institutions(s) holding and/or analysing that data and the nature of data (or indicators) held.
228. Arrangements for monitoring and evaluation were described in main text of the Project Document as well as in the 'Costed Monitoring and Evaluation (M&E) Plan and Reporting Requirements' attached as Appendix 5 to the Project Document, which was based on the standard template for GEF projects.
229. The M&E plan included an indicative work plan which identified responsible parties for each of the M&E activities, namely: inception meeting, inception report, measurement of means of verification, measurement of indicators set in the logical framework, annual progress report (APR) and PIR, Steering Committee meetings, periodic status reports, technical reports, final external evaluation, terminal report, lessons learned and audit.
230. M&E requirements were presented to all partners at the project inception meeting that also adopted a list of 'project progress indicators' based on the milestones implicit in the results framework. The timeframe for a number of progress indicators, such as organisation of working groups, was extended as compared to the

indicators in the original results framework. The list of progress indicators was superseded by a modified work plan prepared for the first Steering Committee meeting.

231. The project terminal evaluation was anticipated in the Project Document which states that the generic terms of reference for a terminal evaluation included in the document as appendix 6 would be adapted as appropriate. Partners were specifically required to collaborate in the terminal evaluation in the SSFAs. The timing of the terminal evaluation was discussed at the July 2010 IMAIG meeting and it was agreed the evaluation should ideally be completed by the time the PIF for the full-sized project was submitted. The Secretariat followed up accordingly.
232. The rating on M&E design and arrangements is **satisfactory**.

Budgeting and funding for M&E activities

233. The M&E plan attached to the Project Document includes a costed activity list with an indicative budget of US\$ 122,000 'excluding project team staff time and UNEP staff and travel cost'. Major budget items were the inception meeting and terminal evaluation, each with a budget allocation of US\$ 40,000. Other budgeted items included project Steering Committee meetings that were under-costed at US\$ 5,000 and similar lump sums for 'measurement of means of verification', 'measurement of indicators set in the Logical Framework', 'periodic status reports', and 'lessons learned'. US\$ 15,000 were allocated for technical reports.
234. The estimated M&E cost corresponds to 12.8% of the GEF budget, and 7.8% of the total project costs, which was more than adequate for a project of this nature.
235. The costed items were partially reflected in the GEF Budget attached as Annex 1 to the Project Document that allocated US\$ 9,000 for Steering Committee meetings (line 3301) and US\$ 40,000 (line 5501) for the Terminal Evaluation. There is no apparent allocation for 'measurement of means of verification' or 'measurement of indicators set in the Logical Framework' but neither does this seem necessary in view of the nature of the measures. Other reporting costs as well as time and travel costs of project partners and travel of the project team are hidden in other budget lines including subcontracts to lead partners, travel on technical assistance and links to the IW:Learn learning exchange platform. The budget for Government of Finland co-financing included US\$ 55,000 for reporting and publications.
236. The rating on budgeting and funding for M&E is **satisfactory**.

M&E Implementation

237. Two half-yearly reports were completed for the period January to July 2009 and July to December 2009, detailing progress to date by activity. Progress tracking was largely accomplished through the meetings of the Steering Committee and IMAIG. The Secretariat also produced a number of inter-divisional briefing notes during the course of the project.
238. The Secretariat produced a detailed progress report for the first Steering Committee meeting including 180 pages of annexes summarising the background of the project, results of key meetings, and guidance documents produced by the Secretariat. In contrast, the progress report produced for the second Steering Committee meeting was rather perfunctory and incomplete though detailed documentation was produced related to each of the agenda items.
239. Each of the lead partners prepared a written progress report in time for the July 2010 IMAIG meeting, corresponding to the contractual requirements in the SSFAs (though not the LoA) to produce a progress report six months after signature of the agreement. These reports were used by the Secretariat to prepare a status report on the method development for the IMAIG meeting. Lead partners also prepared verbal updates for the IGA meeting in December 2009 and for each of the Steering Committee meetings.
240. One PIR report was produced in July 2010 as described in Section C6. The PIR includes information on expenditure to date and progress reporting based on the revised results framework using a percentage scale. While commentary on progress is limited, the ratings – largely satisfactory (S) on outcome 1 and moderately satisfactory (MS) on outcome 2 – truthfully reflect the progress and prospects of the project at that time. One

follow up action related to the MS rating was identified to be undertaken by DEWA in October 2009, namely to present detailed documentation about the nature of the likely partnership in support of the 5 systems assessment methods to the Task Manager by end of October 2010 for review and discussion. In practice work on definition of the partnership proceeded through individual working groups and the Secretariat provided a consolidated information document of current status of partnerships for the February 2011 Steering Committee meeting.

241. A number of internal risks were identified and discussed in the PIR. Four internal risks and the overall risk were rated as medium, with the overall commentary that '*critical attention needs to be given to (1) partnership – (2) peer review and QA/QC of methodologies as to allow robust assessments during the follow-up phase*'.
242. Internal risks identified as of medium concern were the *level of engagement of the project governance structure*, with the first Steering Committee meeting having taken place only some ten months into the project implementation; *internal communications*, with reference to erratic and haphazard communications between the GEFSEC and project partners; *stakeholder involvement*, with stakeholder consultation described as not having been funded in the Project Document yet seen as desirable in support of the future implementation phase; and *political influences* with a concern expressed that the methods may suit GEF purposes only. It was further noted that remedial action had already been taken with respect to internal communications with a communications protocol having been presented to the Steering Committee. These very relevant issues are reflected also in this evaluation report.
243. The risk of *methodologies and arrangement not clearly showing benefits to intergovernmental organisations* was also identified in the Project Document as a political risk and rated low. Other risks identified in the Project Document were operational risks related to the development of the methods (that methods do not build on ongoing work, that participating institutions insist on using their own methods) and are addressed in Annex 8. The two remaining risks in the Project Document referred expressly to IWRM (integrated water resources management) and are not directly applicable to this project.
244. An early draft of the project Final Report, which is due within two months of project completion, was made available to the evaluator. The report is brief but includes a reflective section on lessons and extensive annexes.
245. As of 28 February 2011, reported expenditure on the Steering Committee meetings, reporting costs and terminal evaluation totalled US\$ 58,477 with reporting costs (printing) covered by the funds received from Finland. It is not possible to identify total expenditure on M&E in view of the hidden costs in other budget lines as described in Paragraph 216 above.
246. There is no evidence of training having been provided to meet the M&E requirements of the project. This may have been considered unnecessary in view of the relatively straightforward nature of progress-tracking that was anticipated and indeed appropriate for the project.
247. The rating on M&E implementation based on the original M&E plan is moderately unsatisfactory in view of the limited systematic reporting in the later stages of the project. However, the efforts by the Secretariat to develop summary reports of the work being undertaken by each of the working groups for the Steering Committee meetings and IMAIG meeting was used to improve project performance. M&E implementation is, therefore, rated as **moderately satisfactory**.

D. Complementarities with the UNEP Medium Term Strategy & Programme of Work

Linkage to UNEP's Expected Accomplishments and POW 2010-2011

248. The TWAP MSP was formulated prior to the completion of the UNEP Medium Term Strategy (MTS) 2010-2013 and related Programme of Work (PoW) for the period 2010-2011. Nevertheless, there are complementarities with the expected accomplishments outlined in the Strategy. Specifically, application of the TWAP is expected:
 - a. To provide the GEF as well as other multilateral and bilateral donors and, potentially, regional bodies with a scientific basis to realign their programmes and financing to address degradation of priority

- international waters bodies. This corresponds in general terms to UNEP's expected accomplishment C under its cross-cutting thematic priority on *ecosystem services*;
- b. To provide national and international stakeholders with access to sound science and policy advice for decision-making. This corresponds to UNEP's expected accomplishment D under its cross-cutting thematic priority on *environmental governance*. It is a direct contribution to related Output D1 in UNEP's PoW that anticipates that ten '*global, regional, sub-regional and thematic environmental assessments, outlooks, indicator reports and alerts are produced, communicated and used by decision makers and relevant stakeholders in decision-making in national and international policy processes*'. However, this outcome is dependent on assessment results being viewed as credible, on results being communicated to decision makers and other stakeholders, and on assessments being repeated in order to support results-based management.
249. The application of the TWAP will clearly contribute to UNEP's implementation strategy of '*keeping the environment under review through scientifically credible monitoring and reporting*', which is identified in the MTS as a foundation on which to build delivery of UNEP's cross-cutting thematic priorities.
250. UNEP's PoW highlights the importance of science and DEWA's role in contributing the science and assessment components to all sub-programmes. It further notes DEWA's role as the vital link to other scientific bodies and the scientific community at large and expresses a desire to demonstrate how DEWA's outputs are used by UNEP and its stakeholders in designing programmatic interventions. As a global assessment that engages a range of scientific partners and is intended to serve as a basis for prioritising funding allocations, the TWAP exemplifies this key role for DEWA.

Alignment with the Bali Strategic Plan (BSP)

251. The original TWAP MSP output related to a strategy for assessment of capacity building needs was dropped in the revision of the results framework reflecting the reorientation of the project. Nevertheless, in the longer term the implementation of assessments and dissemination of methods may contribute in general terms to the Bali Strategic Plan for Technology Support and Capacity-building adopted in December 2004, including cross-cutting issues (vii) *Development of national research, monitoring and assessment capacity, including training in assessment and early warning*; and (viii) *Support to national and regional institutions in data collection, analysis and monitoring of environmental trends*.
252. UNEP's PoW provides guidance on assessments in the context of the Bali Plan of Action, explicitly stating with respect to expected accomplishment D under *environmental governance*, that '*UNEP efforts to keep the state of the environment under review will emphasize the global level but will also feature thematic, regional and sub-regional assessments where countries intend to integrate assessment findings into policy, taking into account gender-differentiated results*'.

South-South Cooperation

253. The project did not explicitly set out to promote South-South cooperation which was not referred to either in the PIF or Project Document. Nevertheless, there has been some scope for South-South cooperation through the process of method development, notably through the work of the Transboundary Lake Basins Group which engaged stakeholders through international events such as the World Lake Conference held in Wuhan, China, in November 2009 and at the joint stakeholder consultation organised by IUCN in Bangkok in April 2010 on behalf of the Rivers and Lakes groups, which brought together participants from Southeast and South Asia.
254. The Government of Finland expressed a specific interest in supporting involvement of developing country experts in the TWAP MSP and support was provided for participation of scientists from developing countries in the water systems and correspondence working groups.

Part III. Conclusions and Recommendations

E. Conclusions

255. The medium-sized project “Development of the Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme (TWAP)”, was a preparatory project designed to put in place the foundations for a programme of continuous assessment of transboundary aquatic systems. The MSP was explicitly designed to lead to a full-sized project but this outcome is subject to adoption of the methods by the GEF and to subsequent Council approval of the PIF and CEO endorsement of the FSP (Paragraph 115).
256. The key questions for this evaluation (Paragraph 54) concern the project effectiveness, catalytic effect and sustainability that are addressed in Part II, Sections A and B of this report.
257. In terms of effectiveness, the project was successful in mobilising an executive partnership comprising lead partners, technical partners and individual experts who worked in a coordinated manner towards development of methods, partnerships and arrangements for conducting a transboundary waters assessment (Paragraph 79 onwards).
258. The project has laid strong foundations for conducting an assessment in a cost-effective manner based on ongoing programmes and initiatives through well-developed partnership arrangements at the water basin level. However, there are a number of outstanding activities and issues that were not fully addressed during the MSP and this has somewhat affected the evaluation ratings on *achievement of activities and outputs*, and *attainment of project objectives and results*.
259. Specifically, further work is needed on the approach to prioritisation of individual transboundary water bodies (Paragraph 82), integration of identified common issues (socio-economic issues and governance) into the individual water systems methods (Paragraph 83), treatment of inter-linkages and approaches to sharing data between groups (Paragraph 84), and harmonisation of descriptions of the Level 2 assessment (Paragraph 85). There is also a need to reach agreement on a streamlined and cost-effective coordination arrangement which would add value to the assessment (Paragraph 89) and on data and information management (Paragraph 90), both of which have implications for costs and ultimately visibility and sustainability of the assessment process. These issues are taken up under *Recommendations*, below.
260. The Review of Outcomes towards Impact analysis (Part II A) has highlighted the strong catalytic potential of the project and potential transformational role of the assessment programme. However, it is uncertain at this stage whether the level of stakeholder ownership and participation will be realised, that many TWAP partners argue is necessary for the TWA to contribute to improved policy and management (Paragraph 111).
261. In terms of sustainability, the most immediate concern is that of financial sustainability with the onward progress of the TWAP dependant on the partners being able to generate sufficient funding to conduct the baseline assessment. Individual partners involved in the MSP are committed to the next stage of the TWAP, including in terms of resources allocation, and have identified substantial sources of co-finance as well as an impressive baseline of resources that would be leveraged in support of this assessment (Paragraphs 117-118). Council approval and CEO endorsement of the planned FSP may prove to be the acid test for the continuity of the TWAP (Paragraph 115).
262. Reinforcing the concern about ownership expressed above, a second key aspect of sustainability is that of socio-political sustainability and specifically the question of ownership of the assessment results that project partners have stressed will depend on engagement of a wider set of stakeholders – including policy makers – in the assessment process (Paragraphs 123-124). There was only limited engagement of stakeholders during the MSP (Section C3), in part as a result of the reorientation of the project (Paragraph 178), and the question of stakeholder engagement will thus be vital during the planned FSP (See *Recommendations* below).
263. Progress on cross-cutting and common issues was substantially affected by the need to revise the project results framework as a result of the decision to drop the concept of an “integrated global assessment” of the world’s major transboundary water systems (Paragraph 50). This issue had its origins in a significant drift from the GEFSEC’s original vision for the project during project development that came to light only in December 2009, some six months into the technical implementation of the project (Paragraphs 149). A second factor affecting project completion was the extended inception phase which resulted in a loss of flexibility in project timing (Paragraph 99). These issues are taken up under *Lessons* below.

264. An additional theme addressed under *Lessons* is the project approach and, in particular, the use of working groups with voluntary membership. The working group approach was flexible and effective at the water systems level (Paragraph 80, 164) though individual engagement was restricted by available resources (Paragraph 177). However, the approach worked less well on cross-cutting issues as a result of less well-defined mandates and/or absence of dedicated personnel (Paragraph 164).
265. The overall rating for this project based on the evaluation findings is **Moderately Satisfactory**. The ratings in Table 3 reflect consideration of the full set of issues affecting or characterising project performance and impact that are discussed in Part II of the report. The summary comments highlight aspects of the assessment that best illustrate the rationale for the rating given.

F. Lessons Learned

266. The TWAP MSP was a learning experience for all of the partners and the experience gained during implementation will be carried forward into the conduct of the assessment. The evaluation has provided an opportunity to reflect on lessons of wider relevance. The following paragraphs outline three sets of interrelated lessons from the implementation of this project that may have applicability in other contexts.

Involvement of GEFSEC in Corporate Projects

267. The GEFSEC was an important champion for the MSP, providing a vision in terms of the strategic importance of the planned assessment for GEF and ongoing guidance related to the GEF needs, including towards development of the FSP (Paragraphs 139, 221). Participation of the GEFSEC in Steering Committee Meetings was crucial in this context.
268. In contrast, the absence of GEFSEC from the PPG planning meeting in 2008 and limited participation in the inception meeting resulted in a significant drift during project development from the original vision for the project and meant that opportunities to resolve different perspectives on the nature of the integrated assessment at the outset of the project were missed (Paragraph 149). The at-times limited availability of GEFSEC to respond to questions of clarification following the reorientation of the project was a source of frustration for the Secretariat and partners.
269. A lesson of relevance for all GEF projects that are designed directly to respond to internal strategic or 'corporate' needs identified by the GEF Council, is to ensure the necessary resources for GEFSEC participation at all stages in the project development as well as in strategic meetings such as, but not limited to, the project inception meeting and Steering Committee meetings. This is a relatively low-cost approach which would help avert any need for (potentially costly) reorientation of projects where the client needs are very specific.

Table 3. Summary of Ratings based on Performance Criteria described in Part II of the Report

Criterion	Summary Assessment	Rating
A. Attainment of project objectives and results	<i>The overall rating is based on the effectiveness rating⁵. However it should be noted there are opportunities to resolve the issues raised as arrangements to conduct the assessment are finalized during project preparation.</i>	MS
1. Effectiveness	There are a number of outstanding tasks to be resolved notably related to in cross-cutting issues including data management. These issues are addressed under recommendations.	MS
2. Relevance	The project was designed and implemented in response to a need identified by the GEF Council and has remained relevant to the GEF long term objective to catalyse transboundary action addressing water concerns.	S
3. Efficiency	The project approaches were cost-effective. There were some weaknesses in terms of timeliness, though with limited financial repercussions.	S
B. Sustainability of project outcomes (See B1)	<i>The overall rating on this criterion is based on the weakest rating for sub-criteria</i>	ML
1. Financial	The preparatory nature of this project means benefits will only be realised if the Assessment itself is conducted. Partners are committed to the TWAP and substantial co-finance for conducting the assessment has been identified.	ML
2. Socio-political	The issue of ownership represents a significant risk to the eventual impact of this project and limited foundations were laid in the MSP. However there is an opportunity to address this risk in the design phase of the full-sized project.	ML
3. Institutional framework	There is a need to build consensus around institutional arrangements, including data management, during preparation of the full-sized project.	ML
4. Environmental	The rationale for the TWAP remains valid in the context of improving or declining environmental conditions.	L
C. Catalytic role (See B2)	The project has strong catalytic potential, building on the foundations that have been laid in the MSP.	S
D. Stakeholders involvement (See C3)	Stakeholder involvement, in part since activities and outputs which would have entailed stakeholder involvement were abandoned during revision of the results framework. The issue of ownership is addressed under sustainability.	MS
E. Country ownership / drivenness (See C4)	The rating on country ownership and drivenness is satisfactory, based on the contribution of the project to the approved strategies and mandates of the partner organizations. The issue of ownership of assessment results is considered in the sustainability rating.	S
F. Achievement of outputs and activities	A substantial volume of work was undertaken during the MSP including through	MS

⁵ The overall rating in this category cannot exceed the ratings given in the ratings provided for either relevance or effectiveness

Criterion	Summary Assessment	Rating
(See A)	mobilisation of expertise in delivery of the project activities and outputs. The overall rating reflects the ratings on key outputs 4 and 6 which were not completed.	
G. Preparation and readiness (See C1)	Although the project was thoroughly prepared, there was a substantial drift in project vision during development of the Project Document that has had repercussions on the overall performance of the project.	MS
H. Implementation approach (See C2)	The working group approach water was effective for the water systems working groups but worked less well some of for correspondence working groups. Substantial changes to the project results framework contributed to the loss of cohesion in the latter part of the project with partners reporting that the Secretariat was not able to provide the level of technical direction and vision the that they expected.	MS
I. Financial planning and management (See C5)	There has been only limited financial reporting on this project by UNEP and the lead partners. The extended administrative inception period led to significant delays in disbursement of funds to lead partners.	MS
J. Monitoring and Evaluation (See C7)	<i>The overall rating on this criterion is based on rating for M&E Implementation</i>	MS
1. M&E Design	The project proposal included a costed M&E plan with roles and responsibilities assigned to the different actors. The objectively verifiable indicators in the results framework were specific, measureable, relevant and mostly timebound.	S
2. M&E Plan Implementation	M&E implementation based on the original the M&E plan was moderately unsatisfactory in view of the limited systematic reporting particularly in the later stages of the project. The Secretariat developed summary reports for the Steering Committee and IMAIG that were used to improve project performance.	MS
3. Budgeting and funding for M&E activities	The costing M&E plan corresponded to 12.8% of the project budget that was or than sufficient for a project of this kind. Major items were reflected in the project budget.	S
K. UNEP Supervision and backstopping (See C6)	UNEP DGEF played an appropriate role related to supervision and technical backstopping of the Secretariat and wider project activities.	S

General Ratings

HS = Highly Satisfactory
S = Satisfactory
MS = Moderately Satisfactory
MU = Moderately Unsatisfactory
U = Unsatisfactory
HU = Moderately Unsatisfactory

Ratings for sustainability sub-criteria.

L = Highly Likely: There are no risks affecting this dimension of sustainability
ML = Moderately Likely: There are moderate risks that affect this dimension of sustainability
MU = Moderately Unlikely: There are significant risks that affect this dimension of sustainability
U = Unlikely: There are severe risks that affect this dimension of sustainability

Working Groups

270. The following lessons are of general applicability for any projects considering a working group approach, including the planned full-sized project for conducting the TWAP assessment, and address the advantages of working groups, the need to ensure cohesion, and practical issues to ensure the smooth functioning of working groups.
271. The working group approach adopted by the project proved highly suitable as a vehicle for involving a wide range of technical partners and individual experts on a needs basis to address a complex technical task, and for adapting to the specificities of each water system. However, there was some tendency for groups to become isolated and to work at different paces, threatening the overall cohesion of the project (Paragraph 162).
272. Approaches that would serve to reduce fragmentation include: strong and sustained technical leadership throughout the life of the project, and periodic progress meetings through scheduled teleconferences. In the TWAP preparation project scheduling an additional technical meeting (such as the IMAIG) to pull together the work of the correspondence working groups and tackle other outstanding cross-cutting issues prior to the finalisation of methods would have been helpful.
273. At a practical level, factors that enhanced the success of the working group approach included: clarity surrounding the tasks of the group; the availability of a dedicated manager for each working group and the opportunity for face-to-face meetings that served to build common understanding around more complex technical issues and provided impetus for inter-sessional work at a distance. Groups worked less well where there was a lack of clarity or consensus around the work they were expected to deliver, where group members or facilitators were involved on a fully voluntary basis and where funds were lacking for travel to face-to-face meetings. (Paragraph 164).
274. A small allowance for time and/or travel costs would enable experts and even Steering Committee members to justify the time spent on a given project and, thus, demonstrate accountability within their own organisations. This lesson is of general relevance and of particular interest where participation of identified parties is of strategic importance.

Inception Period

275. The MSP had an extended administrative inception phase with some 10 months between GEF approval of the project and signing of the last small-scale funding agreement (Paragraph 204 onwards); a very significant period in the lifetime of a 22 month project. In this instance, the project benefitted from the ongoing engagement of staff in the Ecosystems Branch in DEWA who had been involved in project design and who were assigned to the coordination unit (Secretariat) on a part-time basis, and from the commitment of partners who engaged in the project activities in advance of receipt of funding (Paragraph 207). Nevertheless, there were repercussions in terms of allowing sufficient time to accommodate contingencies; in this case contributing to the loss of synchronicity in the work of thematic and cross-cutting working groups.
276. There were several largely unrelated reasons for the delays experienced in this period with those related to ongoing changes in administrative procedures at the time the project was launched unlikely to recur. The requirement for a project revision (Paragraph 195) did hold up finalisation of agreements with partners, and one straightforward lesson for any project anticipating subcontracting is to ensure the scheduling of income and expenditure takes account not only of physical cash flows but of financial commitments to partners made in a given year.
277. Projects should not have to rely on ongoing engagement of the host unit and of partners since these conditions may not always be realised. A generic if rather obvious lesson for project planning, especially of medium-sized and other short-term projects, is to build in sufficient time for an administrative inception phase in the project work plan that allows for possible delays in subcontracting and recruitment at the start of the project, and for a closure period that allows for completion of outputs such as publications by the project secretariat.

G. Recommendations

278. The following recommendations are framed in the context of the ongoing process to prepare the TWAP, including development of a project identification form and preparation of the full-sized project.

Stakeholder Engagement

279. Several project partners have emphasised the importance of engaging regional partners in the TWAP in order to both strengthen the assessments and to increase their credibility and ownership in national and regional policy processes (e.g. Paragraphs 123-124). However, the vision for the assessment articulated at the second Steering Committee meeting has emphasised the use of global data sets which, it is argued, present advantages in terms repeatability and objectivity, and has suggested that the Level 2 Assessments should be desk based (Paragraph 85).

280. The need for stakeholder participation in assessment processes is highlighted in the best practices chapter of the *Assessment of Assessments*, including in the context of the science-policy relationship. UNEP's own guidance related to the Bali Plan of Action suggests that assessments that are intended to influence policy may require a targeted (thematic, country or regional) approach (Paragraph 252).

281. **Recommendation 1.** Substantial efforts should be made to involve a geographically representative group of practitioners and other stakeholders in the conduct of the baseline and Level 2 assessments, including in providing strategic direction for the presentation and dissemination of results and in development of assessment best practice. This involvement should be at both the individual water systems level and at the project coordination level, for example through the project Steering Committee and/or by establishment of an advisory panel.

282. Implementation of this recommendation needs to be anticipated in the project design period for the full-sized project (indicatively, by September 2011) with specific activities described and budgeted for in the Project Document. The recommendation is for action by UNEP DEWA as facilitator of the project development process and by the lead partners who are finalising implementation arrangements for each of the water systems.

Methods, Partnership and Arrangements for conducting the Assessment

283. The following set of recommendations relates to outstanding issues identified in Part A of this report under effectiveness (Paragraph 77 onwards). Many of these issues were raised but not fully resolved during the second Steering Committee meeting. Actions with substantial planning or cost implications will need to be completed during the preparation of the project for conducting the assessment. The timing on these recommendations reflects that several have budget implications for the design of the next (project-based) phase of the TWAP.

Harmonisation of approaches to Level 2 Assessment

284. The project methods present a diverse range of approaches to the Level 2 Assessment (Paragraph 85) none of which entirely corresponds to guidance provided by GEFSEC in the Steering Committee meeting. There are two options to resolve this issue: i) each of the groups modifies and updates its method to reflect the definition of the Level 2 assessment presented at the Steering Committee meeting; or ii) an alternative term is identified for the desk-based study designed to test the methods and develop best assessment practice, and this is recognised in each of the methods as a distinct preparatory step for a field-based Level 2 assessment.

285. **Recommendation 2.** The Secretariat should provide guidance to the lead partners on modification of their methods to incorporate the advice presented to the Steering Committee and lead partners should make the relevant changes to their methods by the end of March 2011 to allow for changes to be captured in the published methods.

Cross-cutting elements

286. The following cross-cutting and coordination functions need to be agreed and specified during preparation of the assessment project in order to ensure adequate budgetary provisions:

- A streamlined and cost-effective coordination arrangement for conducting the baseline assessment, ensuring visibility of the results, and contributing to building a sustainable assessment process (Paragraph 89);
- A system for data and information management addressing use of common datasets, appropriate knowledge management tools, presentation and dissemination of assessment results, and a portal to facilitate access of stakeholders to results and original data and indicator sets that are in the public domain (Paragraph 90); and
- A process for integration of common issues (socio-economic and governance) into the individual water system methods and assessments (Paragraph 83).

287. **Recommendation 3.** DEWA, as facilitator of the project development process, should organise an assessment planning meeting bringing together GEFSEC, the water systems group leaders and relevant technical partners and experts to build consensus around and specify needs for an assessment coordination function, data and information management and cross-cutting issues. The timing for this recommendation is the project design period for the full-sized project (indicatively, by September 2011).

Approach(es) to prioritisation of water bodies for GEF intervention

288. The approach to prioritisation is highly political and requires further discussion to ensure that it will meet the needs of the GEF Council and can be presented to project stakeholders in a clear, convincing and transparent manner with a similar rationale for each of the water systems (Paragraph 82).

289. **Recommendation 4.** DEWA, as facilitator of the project development process, should organise a short meeting (teleconference or dedicated session during an appropriate event such as a project planning meeting) bringing together GEFSEC, the water systems group leaders and the project coordination to identify a common or at least harmonised approach to prioritisation. The timing for this recommendation is within the first three months of FSP implementation.

Annex 1. The Evaluation Terms of Reference

Note: The Project Background and Overview section and Annexes of the TORs have been omitted for brevity of this Annex. Key questions raised in the Evaluation are summarized in Section C of the main report.

A. Objective and Scope of the Evaluation

In line with the UNEP Evaluation Policy⁶, the UNEP Evaluation Manual⁷ and the Guidelines for GEF Agencies in Conducting Terminal Evaluations⁸, the terminal evaluation of the Project “Development of the Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme (TWAP)” is undertaken at the end of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the project’s intended outcomes, which may be expanded by the consultants as deemed appropriate:

- To what extent did the project manage to develop scientifically credible, operationally and financially feasible methods for conducting assessments of the state and trends of major concern in transboundary water systems (groundwater, lakes and reservoirs, river basins, Large Marine Ecosystems, and open ocean areas)? Do these methods effectively take into account human- and climate-induced changes and inter-linkages between water systems? In how far are these methods based on existing monitoring systems, databases and ongoing assessment activities? To what extent are the methods coordinated and harmonized among the five water systems? Were adequate inter-linkages developed between the assessment methods for the five water systems?
- To what extent did the project manage to put in place a sustainable, collaborative partnership of ongoing assessment programmes, managed by several competent institutions, to conduct periodic coordinated and harmonized assessments of the five transboundary water systems at the global level? Have the capacity building needs of partner institutions been adequately assessed?
- In how far do the project outcomes provide building blocks for the preparation and execution of a periodic, global, comprehensive assessment of transboundary water systems, to assist UNEP and the GEF with designing and conducting interventions to reverse the degradation of these complex water systems, setting priorities for UNEP and GEF resource allocations, and documenting the results of their investments and efforts in relation to the changing state of these systems globally? How, in the end, with the support of which impact drivers and under which assumptions, are project outcomes likely to contribute to increased investment in sustainable management and development of transboundary water systems, through stronger stakeholder engagement?

B. Overall Approach and Methods

The terminal evaluation of the Project “Development of the Methodology and Arrangements for the GEF TWAP” will be conducted under the overall responsibility of the UNEP Evaluation Office. It will be an in-depth evaluation using a participatory approach whereby the UNEP/DGEF Task Manager, key representatives of the executing agencies and other relevant staff are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

The findings of the evaluation will be based on the following:

- A **desk review** of project documents⁹ including, but not limited to:

⁶ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

⁷ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

⁸ http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

⁹ Documents to be provided by DGEF are listed in Annex 5.

- Relevant background documentation, *inter alia* UNEP and GEF policies, strategies and programmes pertaining to international/transboundary waters;
 - Project monitoring reports (such as progress and financial reports from partner executing agencies (chiefly UNESCO/IOC, UNESCO/IHP, ILEC and DHI) to UNEP, Steering Committee meeting minutes, and annual Project Implementation Review reports to GEF) and relevant correspondence;
 - The method documents for five types of transboundary water systems, as well as the comments on method documents from reviewers;
 - The global assessment partnership outline document, including the inventory of agencies, sources and expert networks;
 - Other materials produced by the project staff or partners (Legal instruments binding lead partner agencies to UNEP; TORs of the working groups; working group meeting minutes etc.);
 - Relevant material published on web-sites maintained by GEF or UNEP, the TWAP website in particular (<http://twap.iwlearn.org/>).
- **Interviews**¹⁰ with:
- Project management located in UNEP/DEWA, Nairobi;
 - Project supervision and technical support: the UNEP/DGEF Task Manager and Fund Management Officer;
 - Lead execution partners (UNESCO/IOC, UNSECO/IHP, ILEC and DHI) and other relevant partners, including peer reviewers of the assessment methods;
 - GEF Secretariat, in particular GEF's Technical Advisory Group for strategy development in the International Waters (IW) Focal Area;
 - The lead consultant shall determine whether to seek additional information and opinions from representatives of donor agencies (e.g. Finland) and other organisations.

C. Key Evaluation principles

Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned¹¹. Analysis leading to evaluative judgements should always be clearly spelled out.

The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in four categories: (1) Attainment of objectives and planned results, which comprises the assessment of outputs achieved, relevance, effectiveness and efficiency and the review of outcomes towards impacts; (2) Sustainability and catalytic role, which focuses on financial, socio-political, institutional and ecological factors conditioning sustainability of project outcomes, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices; (3) Processes affecting attainment of project results, which covers project preparation and readiness, implementation approach and adaptive management, stakeholder participation and public awareness, country ownership/driven-ness, project finance, UNEP supervision and backstopping, and project monitoring and evaluation systems; and (4) Complementarity with the UNEP Medium Term Strategy 2010-2013 and Programme of Work 2010-2011, which describes linkages to UNEP's Expected Accomplishments, project contributions in line with the Bali Strategic Plan, and South-South Cooperation. The lead consultant can add other evaluation criteria as deemed appropriate.

Ratings. All evaluation criteria will be rated, either on a six-point or a four-point scale. However, complementarity of the project with the UNEP Medium Term Strategy and Programme of Work is not rated. Annex 2 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

In attempting to attribute any outcomes and impacts to the project, the evaluator should consider the difference between **what has happened with** and **what would have happened without** the project. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the

¹⁰ Face-to-face or through any other appropriate means of communication

¹¹ Individuals should not be mentioned by name if anonymity needs to be preserved.

actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluator, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

As this is a terminal evaluation, particular attention should be given to learning from the experience. Therefore, **the “why?” question** should be at front of the consultant’s mind all through the evaluation exercise. This means that the consultant needs to go beyond the assessment of “what” the project performance was, and make a serious effort to provide a deeper understanding of “why” the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultant to explain “why things happened” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere assessment of “where things stand” today.

D. Evaluation criteria

Attainment of Objectives and Planned Results

The evaluation should assess the relevance of the project’s objectives and the extent to which these were effectively and efficiently achieved or are expected to be achieved.

- *Achievement of Outputs and Activities*: Assess, for each component, the project’s success in producing each of the programmed outputs as presented in Table 2, both in quantity and quality, as well as their usefulness and timeliness. Briefly explain why the project was successful or less successful in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section 3 (which covers the processes affecting attainment of project objectives).
- *Relevance*: Assess, in retrospect, whether the project’s objectives and implementation strategies were consistent with: i) Global environmental issues and needs related to the use and management of international waters; ii) the UNEP mandate, policies and strategies at the time of design and implementation; and iii) the GEF International Waters focal area, strategic priorities and the relevant operational program(s).
- *Effectiveness*: Appreciate to what extent the project has achieved its objectives, i.e. 1) developed realistic, comprehensive, science-based and harmonized methods for conducting inter-linked global assessments of transboundary groundwater bodies, lakes and reservoirs, river basins, LMEs and Open Ocean – Annex 2 provides guidance on how to assess the quality of the methods developed ; and 2) catalysed a partnership for conducting such global assessments in a well coordinated way and on a regular basis. Briefly explain what factors affected the project’s success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section 3.
- *Efficiency*: Assess the cost-effectiveness and timeliness of project execution. Describe any cost- or time-saving measures put in place in attempting to bring the project to a successful conclusion within the programmed time and budget. Analyse how delays may have affected project execution, costs and effectiveness. Wherever possible, compare the cost and time over results ratios of the project with that of other similar projects. Give special attention to efforts by the project teams to make use of pre-existing methods, data sources and assessment programmes.
- *Review of Outcomes to Impacts (ROtI)*: Appreciate progress made towards impacts, taking into account achieved outcomes, assumptions and impact drivers, using the method presented in the GEF Evaluation Office’s ROtI Practitioner’s Handbook¹² which is summarized in Annex 6 of these TORs. The main question would be **in how far the project has to date contributed, and is likely in the future to further contribute to investments in participatory management and development of transboundary water systems?** This analysis will take into consideration: (i) the outcomes (methods and partnerships developed) and intermediary states (regular, inter-linked global assessments for the five types of transboundary water systems, improved UNEP and GEF strategies and interventions etc.) the project has contributed or will contribute to achieve; (ii) the extent to which the necessary impact drivers are present and assumptions surrounding the project are proved valid (such as the resources in place to act upon the

¹² http://www.thegef.org/gef/sites/thegef.org/files/documents/Impact_Eval_Review_of_Outcomes_to_Impacts-RotI_handbook.pdf

findings and recommendations of the global assessments); and (iii) the current capacity and motivation of stakeholders to follow through what is needed to achieve the intended impacts.

Sustainability and catalytic role

Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts after the external (i.e. GEF and UNEP) project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be outcomes or outputs of the project, e.g. stronger institutional partnerships or a regularly update website used for effective information exchange. Other factors will include contextual circumstances or developments that are not outcomes of the project but that may condition sustainability of outcomes. The evaluation should ascertain to what extent follow-up work has been initiated and how project outcomes will be sustained and enhanced over time. E.g. the evaluation will have to ascertain that the methods and partnerships developed under the project are going to be put to good use after the project ends. Application of the ROI method will assist in the evaluation of sustainability.

Four aspects of sustainability will be addressed:

- *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project outcomes and progress towards impacts? Is the level of ownership by the main local and regional stakeholders sufficient to allow for the project outcomes to be sustained? Are there sufficient public and stakeholder awareness, interest and incentives in support of the long term objectives of the project? In how far have the assessment methods been incorporated in management and/or development policies and activities of governments?
- *Financial resources.* To what extent are the outcomes and eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial and economic resources¹³ will be or will become available once the external assistance to the project ends? Are there any financial risks that may jeopardize sustenance of project outcomes and onward progress towards impact? An obvious item to be verified is the likelihood of GEF approval of the expected full-sized project to execute the global TWAP.
- *Institutional framework.* To what extent is the sustenance of the outcomes and onward progress towards impacts dependent on issues relating to institutional frameworks and governance? Are there any institutional achievements, legal frameworks, policies and governance structures and processes in place that will contribute to sustaining project benefits? Does the partnership of institutions and programmes expected to conduct the assessments have the necessary know-how to apply the methods developed by the project? Are the required systems for accountability and transparency in place?
- *Environmental sustainability.* Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are project outputs and outcomes likely to affect the environment, which, in turn, might affect sustainability of project benefits?

Catalytic Role and Replication. The catalytic role of UNEP and the GEF is embodied in their approach of supporting the creation of an enabling environment, investing in activities which are innovative and showing how new approaches and market changes can work. UNEP and the GEF aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

- provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour. In this case, the behavioural changes would be related to methods used for transboundary water assessments and partnerships/collaboration between agencies for conducting these assessments at a regional or global level;

¹³ Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

- contributed to *institutional changes*. An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-promoted methods and collaborative partnerships;
- contributed to *policy changes* (on paper and in implementation of policy);
- contributed to sustained follow-on financing (*catalytic financing*) from Government or other donors;
- created opportunities for particular individuals or institutions (“*champions*”) to catalyze change (without which the project would not have achieved all of its results).

Replication, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons? In this particular case, the evaluation will assess how the project has made sure that methods and partnerships developed are going to be put to good use in the subsequent TWAP.

Processes affecting attainment of project results

Preparation and Readiness. Were the project’s objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the Project Document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? Were lessons learned and recommendations from Steering Committee meetings adequately integrated in the project approach? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.?

Implementation Approach and Adaptive Management. This includes an analysis of approaches used by the project, its management framework, the project’s adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

- Ascertain to what extent the project implementation mechanisms outlined in the Project Document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?
- Assess the role and performance of the various working groups and committees established and the project execution arrangements at all levels;
- Evaluate the effectiveness and efficiency of project management and how well the management was able to adapt to changes during the life of the project;
- Assess the extent to which the project responded to Steering Committee and UNEP supervision recommendations;
- Identify administrative, operational and/or technical problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems.

Stakeholder¹⁴ Participation and Public Awareness. This consists of three related and often overlapping processes: (1) information dissemination, (2) consultation, and (3) “stakeholder” participation. The evaluation will specifically assess:

¹⁴ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

- the approach(es) used to identify and engage project partners. What were the strengths and weaknesses of these approaches with respect to the project's objectives? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and institutions during the course of implementation of the project?
- how the methods developed by the project engage water users' communities and their institutions in the transboundary water assessments, and how this is likely to promote their ownership of the assessment findings and the eventual management and development decisions regarding the water bodies;
- the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted.

The ROI analysis should assist the consultants in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to objectives to impact.

Country Ownership and Driven-ness. This criterion usually assesses the performance of Governments in the project. In this case, the project did not involve any Government. It is relevant to assess, however:

- How Governments will be asked to assume responsibility and provide support to the transboundary water assessments under the developed methods;
- To what extent the effectiveness of the methods developed will depend on political and institutional frameworks (this would be largely addressed under the sustainability criterion);
- How Government capacities are expected to be built to assume the necessary responsibilities and provide their essential contributions in the transboundary water assessments.

Financial Planning and Management. Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

- Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;
- Appreciate other administrative processes such as recruitment of staff, procurement of goods and services, preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;
- Present to what extent co-financing has materialized as expected at project approval (see Table 1). The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).
- Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

UNEP Supervision and Backstopping. The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/ substantive issues in which UNEP has a major contribution to make. The evaluator should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

- The adequacy of project supervision plans, inputs and processes;

- The emphasis given to outcome monitoring (results-based project management);
- The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);
- The quality of documentation of project supervision activities; and
- Financial, administrative and other fiduciary aspects of project implementation supervision.

Monitoring and Evaluation. The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the Project Document. The evaluation will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

- *M&E Design.* Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, method, etc.), SMART indicators (see Annex 4) and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:
 - Quality of the project LOGICAL FRAMEWORK as a planning and monitoring instrument;
 - SMART-ness of indicators: Are there specific indicators in the logical framework for each of the project objectives and outcomes? Are the indicators measurable, attainable (realistic) and relevant to the objectives and outcomes? Are the indicators time-bound?
 - Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the method for the baseline data collection explicit and reliable?
 - Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?
 - Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
 - Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.
- *M&E Plan Implementation.* The evaluation will verify that:
 - the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
 - annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;
 - the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs;
 - projects had an M&E system in place with proper training, instruments and resources for parties responsible for M&E.

Complementarities with the UNEP Medium Term Strategy and Programme of Work

UNEP aims to undertake GEF funded projects that are aligned with its own strategy. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy (MTS)¹⁵/ Programme

¹⁵ <http://www.unep.org/PDF/FinalMTSGCSS-X-8.pdf>

of Work (POW) 2010/11 would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist. The evaluation should present a brief narrative on the following issues:

- *Linkage to UNEP's Expected Accomplishments and POW 2010-2011.* The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ROtI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described.
- *Alignment with the Bali Strategic Plan (BSP)¹⁶.* The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.
- *South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

E. The Consultants' Team

For this evaluation, a team of two independent consultants will be hired, preferably of mixed gender.

The **Team Leader**, specialised in the evaluation of environmental projects and expert in international waters, will be responsible for coordinating the data collection and analysis phase of the evaluation, and drafting the main report. (S)He will ensure that all evaluation criteria are adequately covered by the two-person team. The team leader will cover:

- a) Component 2 of the project (development of partnerships) and its related outcomes, outputs and activities
- b) Two out of five transboundary water assessment methods developed by the project
- c) Inter-linkages between the five assessment methods and their partnerships
- d) Processes affecting project performance (Financial planning and management, M&E, UNEP supervision etc.)

The **Supporting Consultant**, with a strong background in transboundary water management, will review the three remaining transboundary water assessment methods. (S)He will prepare a technical working paper that will be annexed to the main report, the content of which will be agreed upon with the Team Leader.

The consultants certify to the EO that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of their contract) with the project's executing or implementing units.

F. Evaluation Deliverables and Review Procedures

Report summary. The Team Leader will prepare a 15-page bullet-point style summary of findings and recommendations of the evaluation, covering all evaluation criteria. This summary will be shared with the UNEP EO for comments, and, once revised, shared with the Steering Committee members one week in advance of the final Steering Committee meeting (tentatively planned the 3rd week of February 2011). Based on this report summary, the Team Leader will also prepare a PowerPoint presentation, to be presented to the final Steering Committee meeting. The purpose of this report summary is to engage the main project partners early on in a discussion on the evaluation findings and recommendations, before the actual evaluation report is drafted. It should also allow the design team of the subsequent TWAP to take evaluation findings and recommendations into account at an appropriate time in the design process.

¹⁶ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

The main evaluation report should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or an annex as appropriate.

Technical working paper. The format and contents of the working paper prepared by the Supporting Consultant should be agreed upon with the Team Leader before any data collection and analysis work is undertaken. Preferably, it should follow the same structure for each TWA method review, following the assessment criteria proposed in Annex 2. The Team Leader will carry out a first review of the working paper and provide comments to the Supporting Consultant for improvement. Only a version acceptable to the Team Leader will be submitted to the EO as an annex to the draft main report.

Review of the draft evaluation report. The draft report, including the working paper in annex, shall be submitted to the Head of Evaluation. The EO will review the report for comprehensiveness, and, when found acceptable, the Head of Evaluation will share the report with the Task Manager and her supervisor for initial review and consultation. DGEF is invited to comment on the draft evaluation report and will forward the draft to project stakeholders, in particular the Executing Agencies (UNEP/DEWA, UNESCO/IOC, UNESCO/IHP, ILEC and DHI), for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. Consultations will be held between the consultants, EO staff, the Task Manager and key members of the project execution team. These consultations will seek feedback on the proposed recommendations and lessons. The EO will collate all review comments and provide them to the Team Leader for consideration in preparing the final version of the report.

The consultants will prepare a **response to any comments** that contradict their own findings and could therefore not be accommodated in the final report. This response will be shared by the EO with the interested stakeholders to ensure full transparency.

Submission of the final Terminal Evaluation report. The final report shall be submitted by Email to:

Segbedzi Norgbey, Head
UNEP Evaluation Office
P.O. Box 30552-00100
Nairobi, Kenya
Tel.: (+254-20) 762 3387
Fax: (+254-20) 762 3158
Email: segbedzi.norgbey@unep.org

The Head of Evaluation will share the report with the following persons:

Maryam Niamir-Fuller, Director
UNEP/Division of GEF Coordination
P.O. Box 30552-00100
Nairobi, Kenya
Tel: + 254-20-7624686
Fax: + 254-20-623158/4042
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Tel: +1-202-458-3772
Fax: +1-202-458-3560
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The final evaluation report will be published on the Evaluation Office web-site www.unep.org/eou and may be printed in hard copy. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.

As per usual practice, the Evaluation Office will prepare a quality assessment of the final report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the draft evaluation report will be assessed and rated against both GEF and UNEP criteria as presented in Annex 4.

G. Resources and Schedule of the Evaluation

This Terminal Evaluation will be undertaken by two independent evaluation consultants contracted by the UNEP Evaluation Office. The consultants will work under the overall responsibility of the UNEP Evaluation Office and they will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their travel, obtain documentary evidence, meetings with stakeholders, field visits, and any other logistical matters related to their assignment. They will liaise with the UNEP/DGEF Task Manager and the Executing Agencies, who will provide full support on any logistical issues, allowing the consultants to conduct the evaluation as independently as possible.

The **Team Leader** will be hired for 9 weeks. (S)he will travel to Paris to interview UNESCO (IOC & IHP) experts and to Nairobi to attend the final Steering Committee meeting of the project.

The **Supporting Consultant** will be hired for 3 weeks and work from home.

The Team Leader will submit the Summary Report to the EO two weeks prior to the final Steering Committee meeting. The revised Summary report will be shared with the Steering Committee members one week prior to the final meeting.

The Team Leader will submit the first draft report latest by 28 February 2011 to the UNEP EO and revise the draft following the comments and suggestions made by the EO. The EO will then circulate the revised draft to project partners. Comments from stakeholders would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to UNEP / EO for collation and the Team Leader will be advised of any necessary revisions. The Team Leader will submit the final report no later than 2 weeks after reception of stakeholder comments.

H. Schedule Of Payment

Both consultants will be hired under an individual Special Service Agreement (SSA). The fee will be estimated as a lumpsum, inclusive of all expenses such as travel, accommodation and incidental expenses.

The Team Leader will receive an initial payment covering the travel costs upon signature of the contract. 40% of the honorarium portion of the fee will be paid upon acceptance of a draft report deemed complete and of acceptable quality by the EO. The remainder will be paid upon satisfactory completion of the work.

The Supporting Consultant will be paid in one single payment upon satisfactory completion of her (his) work. The Team Leader will advise the EO whether the Supporting Consultant has provided a satisfactory product.

In case the consultants are not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultants have improved the deliverables to meet UNEP's quality standards.

If the consultants fail to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants' fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Annex 2. List of Interviewees

Name	Designation
UNEP	
1. Michael Carbon	UNEP Evaluation & Oversight Unit
2. Salif Diop	Head, Ecosystems Section, DEWA
3. Elina Rautalahti	Project Manager, DEWA
4. Joana Akrofi	Associate Programme Officer, Ecosystems Section, DEWA
5. Patrick Mmayi	Programme Officer, DEWA
6. Ljubomir Jeftic	Project consultant
7. Isabelle Vanderbeck	Task Manager, DGEF ¹⁷
8. Rodney Vorley	Fund Management Officer, DGEF ¹⁸
9. Jacquie Alder	Director, Marine and Coastal Ecosystem Branch, DEPI
10. Takehiro Nakamura	Coordinator, Marine Ecosystem Unit, Marine and Coastal Ecosystem Branch, DEPI
GEF	
11. Alfred Duda	Senior Advisor, International Waters
Finland	
12. Emilia Van Veen	First Secretary and Deputy Permanent Representative to UNEP & UN-Habitat, Embassy of Finland, Nairobi
UNEP-DHI Centre on Water and Environment (Rivers group Coordination)	
13. Peter Koefoed Bjørnsen	Director, UNEP-DHI Centre on Water and Environment
14. Paul Glennie	Programme Advisor, UNEP-DHI Centre on Water and Environment
UNESCO IOC (Open Ocean and LME groups coordination)	
15. Keith Alverson	Head of Section, Secretariat of the UNESCO Intergovernmental Oceanographic Commission
16. Albert Fischer	Programme Specialist, Secretariat of the UNESCO Intergovernmental Oceanographic Commission
17. Julian Barbière	Programme Specialist, Secretariat of the UNESCO Intergovernmental Oceanographic Commission
18. Sherry Heileman	Fisheries & Environmental Consultant
UNESCO IHP (Transboundary Aquifers Coordination)	
19. Holger Treidel	Assistant Programme Specialist, Division of Water Sciences, International Hydrological Programme, Natural Sciences Section
20. Alice Aureli	Assistant Programme Specialist, Division of Water Sciences, International Hydrological Programme, Natural Sciences Section
ILEC (Lakes group coordination)	
21. Satoru Matsumoto	Associate Director, International Lake Environment Committee
22. Walter Rast	Director, International Center for Watershed Studies, Texas State University

¹⁷ UNEP's Division of GEF was under reorganisation at the time of the evaluation; these titles have been used for simplicity and reflect the supervisory roles played during the course of the project.

¹⁸ As above

Name	Designation
Other Partner Organisations	
23. Catherine Cross	Programme Officer, Water and Wetlands programme, IUCN East and Southern Africa Office
24. Andreas Lindström	Stockholm International Water Institute
25. Frank van Weert	IGRAC, DELTARES
26. Robin Mahon	Professor, Centre for Resource Management and Environmental Studies, The University of the West Indies
27. Peter Kershaw	Vice Chairperson, GESAMP
28. Louisa Wood	Head, Marine Assessment & Decision Support Programme, WCMC (by telephone)
29. Joan Fabres	Coordinator, UNEP Shelf Programme, UNEP-GRID Arendal (by telephone)

Other stakeholders met

Additional participants in the 2nd TWAP Steering Committee organised in Nairobi on 9-10 February 2011

Annex 3. Evaluation Programme

Dates	Activities
3 January onwards	Review of documentation from consultants' offices; telephone interviews
25-27 January	Meetings with UNESCO IOC and UNESCO IHP, Paris
4-11 February	Meetings with UNEP DEWA, DEPI, and DGEF Participation with Steering Committee members, Nairobi
8 March	Submission of first full draft to UNEP
18 March	Submission of review draft including updated financial information
27 March	Submission of technical annex (Annex 8)
28 April	Receipt of review comments and submission of final draft

Annex 4. List of documents reviewed or consulted

Project Definition and Reporting

- Project Identification Form (PIF)(18 December 2007)
- Project Identification Form Supplementary Information (Undated)
- Project Document (March 2009)
- Project Document revision (October 2009)
- Semi Annual Reports (July and December 2009)
- Project Implementation Review (PIR) (July 2010)
- Project Terminal report (draft of 19 January 2011)
- Progress Report on the Implementation of the TWAP MSP (April 2010), with Annexes (180pp)
- Miscellaneous briefing notes for UNEP Divisions

Legal Instruments

- Internal Cooperation Agreement (ICA) between UNEP Division of GEF Coordination & DEWA
- Letter of Agreement (LoA) between UNEP and UNESCO
- Small Scale Funding Agreements (SSFA) between UNEP and ILEC,
- Small Scale Funding Agreements (SSFA) between UNEP and DHI
- Donor agreement between UNEP and Government of Finland

Reports and Documentation for Project Meetings

- Inception meeting (30 June – 2 July 2009)
- Interlinkages and Global Assessment Working Group (IGA) (December 2009)
- Data Management and Indicators Working Group (DMI) (December 2009)
- First Steering Committee (13-14 April 2010)
- Information Management and Indicators Working Group (IMAIG) (12-14 July 2010)

Working Group Outputs and Related Reports

- Progress Reports for Water Systems Working Groups
- Reports of Water Systems Working Group Meetings
- Peer review comments for Lakes and River Methods
- Outputs of Correspondence Working Group on publications

Draft Methods (*Versions provided to 2nd Steering Group Meeting*)

- ILEC & Partners. Methodology for the assessment of transboundary lake/reservoir basins. February 2011
 - TWAP LME Working Group. Methodology for assessment of Large Marine Ecosystems. Feb 2011
 - TWAP Ocean Oceans Working Group. Open Ocean Assessment Methodology. 29 November 2010
 - UNEP-DHI Centre on Water and Environment (lead), IUCN, SIWI. Methodology for the assessment of transboundary rivers. January 2011
-
- UNESCO-IHP, IGRAC, WWAP, Methodology and Execution Arrangements for Transboundary Aquifers.

February 2011

Outreach and Promotional Outputs

- TWAP Brochure prepared for 2009 International Waters Conference
- TWAP Website <http://twap.iwlearn.org/>
- September 2009 Monthly Update

Other Reports (*Selected*)

- GEF International Waters focal area strategy and strategic programming for GEF-4 (2007 – 2010)
- UNEP Medium-term Strategy 2010–2013
- UNEP Proposed biennial programme and support budgets for 2010-2011
- Bali Strategic Plan for Technology Support and Capacity-building (February 2005)
- UNEP UNESCO-IOC An Assessment of Assessments: Findings of the Group of Experts Pursuant to UNGA Resolution 60/30 (2009)
- Terminal Evaluation of the Global International Waters Assessment. Project No.GF/1100-99-01.

Annex 5. Progress on Activities and Outputs

Outputs	Status* (%)	Comments	Rating
Output 1: Project inception meeting involving major potential partners and experts (adoption of the set of Project Progress Indicators (PPI)).	100 %	<ul style="list-style-type: none"> The inception meeting was held at the end of June 2009 and involved lead major partners and other executive partners. A set of project progress indicators was adopted. 	S
Activity 1: Convene the project inception meeting involving the project team, major potential partners and experts.	100%	<ul style="list-style-type: none"> The inception meeting was held at the end of June 2009 and involved lead major partners and other executive partners. A detailed meeting report recording decisions and with substantive and useful annexes was produced by the Secretariat. The absence of GEFSEC, who was able to join only by teleconference, was regrettable. 	S
Output 2: Establishment of five Working Groups at the Water Systems level for five transboundary water systems (groundwater; lakes/reservoirs; rivers; LMEs; and open ocean).	95%	<ul style="list-style-type: none"> <i>The completion status is based on activity 4 below</i> 	S
Activity 2: Establish five Working Groups (WG) of experts: Groundwater; Lakes/Reservoirs; River basins; LMEs; and Open Ocean.	100%	<ul style="list-style-type: none"> Legal agreements were concluded between September and November 2009 with each lead partner, including clear terms of reference and workplans. The working groups were established through invitations to partner organisation and individual experts. Sub-contracts were issued where appropriate (i.e. to IUCN and SIWI). 	S
Activity 3: Convene meetings of the five WGs of experts for water systems	100%	<ul style="list-style-type: none"> Preparatory and first working group meetings were convened in the period November 2009 to February 2010, as follows, within the first 8 months of the technical implementation period <ul style="list-style-type: none"> ✓ Lakes/Reservoirs Core WG meeting, 15-18 October 2009 at ILEC office to prepare for the WG meeting at the World Lake Conference; ✓ First meeting of Lakes/Reservoirs WG, held during the "World Lake Conference", 1-5 November 2009 in Wuhan, China; ✓ First meeting of Rivers WG, 2-4 December 2009 in Copenhagen, Denmark ✓ First meeting of Groundwater WG, 3-4 December 2009, UNESCO, Paris; ✓ Large Marine Ecosystems WG meeting, 3-5 February 2010, UNESCO-IOC, Paris ✓ Open Ocean WG meeting, 3-5 February 2010, UNESCO-IOC, Paris Meeting reports were produced by the lead partners and were made available to other groups. 	S
Activity 4: Implement approved work plans for MSP and Five WGs	95%	<ul style="list-style-type: none"> Workplans for each of the water systems WGs were prepared for the inception meeting building on the indicative plans in the Project Document. 	S

Outputs	Status* (%)	Comments	Rating
		<ul style="list-style-type: none"> Revised workplans prepared by the groups for the period February to November 2010 were appended to the first Steering Committee meeting based on a list of elements provided by the Secretariat. Written progress reports were prepared in the second quarter of 2010. Completion dates in the workplans proved ambitious, largely due to issues at the MSP level that were beyond the control of individual groups. 	
Output 3: Establishment of an Information Management and Indicators Working Group (IMAIG)	80%	<ul style="list-style-type: none"> While activities described below were completed, the completion status and rating reflect that a number of issues related to inter-linkages and other cross cutting or common technical and operational issues remain unresolved. Discussions at the second Steering Committee drew attention to but did not always reach conclusion on these issues. 	MS
Activity 5: Establishment of an Information Management and Indicators Working Group (IMAIG)	100%	<ul style="list-style-type: none"> The proposal of the IGA and DMI working groups to establish an IMAIG group was approved by the Steering Committee in April 2010 and the group met in June 2010. 	S
Activity 6: Prepare Terms of Reference	100%	<ul style="list-style-type: none"> Terms of reference were prepared by the Secretariat and were accepted by the participants in the IMAIG meeting without any amendments. 	S
Activity 7: First meeting of IMAIG	100%	<ul style="list-style-type: none"> The meeting was organised in June 2010, within the timeframe anticipated and with participation of all lead partners, GEFSEC and several existing and potential technical partners as well as the Secretariat. The meeting advanced discussions on previously identified cross-cutting or common issues (Water quantity; Nutrients; Mercury; Bioproductivity, Vulnerability to climate change) and inter-linkages, and data management. Three correspondence working groups were established to continue work newly identified cross cutting issues (governance & socioeconomic issues) and operational issues requiring a coordinated approach (communications & publications and data & information management) 	S
Output 4: Methodologies of five major water systems, including assessment units/boundaries; priority issues; linkages among water systems; key indicators; institutional framework; partnerships, roles/responsibilities; and harmonization the framework among water systems	95%	<ul style="list-style-type: none"> The process to develop methods proceeded as envisaged in the activities below and advanced drafts of all five methods are now available. Outstanding issues include linkages between the systems and harmonization of institutional frameworks. <i>Timing issues have been reflected under output 3 activity 4 (workplans) and issues related to inter-linkages under output 3.</i> 	MS
Activity 8: Define scope, framework, and terminology of the assessment methodology.	100%	<ul style="list-style-type: none"> Each of the groups defined the scope and framework, working formally (through joint meetings) and informally with other groups. Clarification of terminology was to be addressed through development a glossary, a task 	S

Outputs	Status* (%)	Comments	Rating
		taken up by the Secretariat. The glossary is being incorporated into the method publication (overview chapter)	
Activity 9: Define assessment units (shared water systems and their respective boundaries).	100%	<ul style="list-style-type: none"> Assessment units were defined for all systems with Open Ocean deciding to take a thematic approach reflecting governance arrangements. The LMEs group was asked to look at SIDS, and Open Ocean at polar regions and the cryosphere. 	S
Activity 10: Prepare draft methodology document, circulate for review and revise	100%	<ul style="list-style-type: none"> All five draft documents were prepared by Nov 2010 building on internal review Several groups undertook validation exercises through consultation with relevant science or user groups but it was recognised that these processes provided only limited advice in view of time limitations. The steering group recommended at its first meeting that validation should be deferred to the FSP. A peer review process was organised by the secretariat for lakes, rivers, LMEs and Open Ocean. Comments were received for three groups. 	MS
Activity 11: Develop a suite of indicators for individual water systems with interlinkages among them	100%	<ul style="list-style-type: none"> Discussion on inter-linkages continued throughout the course of the project. Efforts were made to identify data needs from one group to another, and each of the groups has addressed interlinkages in its method. Several partners expressed dissatisfaction with the way inter-linkages have been addressed, some arguing that the opportunity to comprehensively address cause effect-linkages was missed and others uncertain that data they 'receive' from other system assessments will be usable in their own assessments. This will be an area requiring continued expert interpretation in the assessment. 	MS
Activity 12: Adapt and finalise the five methodologies	90%	<ul style="list-style-type: none"> Four groups provided revised drafts for the SC meeting. All five groups are finalising their methods based on recommendations made at the 2nd SC meeting, notably with respect to implementation arrangements. 	MS
Activity 13: Disseminate the methodology document through website and other means	80%	<ul style="list-style-type: none"> Draft methods were made available on the IW:TWAP website from December 2010. <i>See also activity 18.</i> The 2nd SC meeting agreed on a series of steps to finalise the methods and prepare a publication building on the work of the communications and publications correspondence working group. This is expected to be completed by April 2011. The overview chapter is well advanced. 	S
Output 5: Inventory of major regional and international agencies, available data, and existing networks that could potentially contribute to the assessment process	100%	<ul style="list-style-type: none"> The inventory was built in an iterative manner by each of the groups and can be expected to continue to develop providing opportunities to strengthen the assessments and synergies with other processes. 	S

Outputs	Status* (%)	Comments	Rating
Activity 14: Prepare Inventory and review of major regional and international agencies, available data, sources, ongoing programmes, existing networks and available methodologies that could potentially contribute to the assessment process.	100%	<ul style="list-style-type: none"> • A first cut at identification of data sources, programmes and networks was included in the project proposal. • WGs reported progress in their reports of March to June 2010 with several groups approaching this task through descriptions for selected indicators. • Concerns about progress in this activities were raised in the PIR • A database of data sources and partners was developed for the Secretariat by an intern http://twap.iwlearn.org/about/partnerdb (internal website). 	MS
Output 6: Partnership identified including identification of partners with data, modeling capability etc.	90%	<ul style="list-style-type: none"> • The 1st Steering Committee agreed a communications approach to avoid duplication of approaches to common partners. • This work was largely delegated to the working groups. Each group has developed a section on partnerships as part of its implementation arrangements. • The Secretariat developed a summary of 'Current status in establishment of partnerships and institutional arrangements' for the 2nd SC Meeting. • The SC agreed at its 2nd meeting that this activity be followed up during preparation of the FSP proposal which would require commitments to be made by partners to the Assessment. 	MS
Activity 15: Establish partnership for the implementation of the work plans of the five WGs	100%	<ul style="list-style-type: none"> • Partnerships were identified for each of the five WGs at an early stage of and were consolidated at the start of the project. • The diversity of partners reflects differences in the degree of organisation of the institutions and science community around the different water systems. • <i>This activity is not representative of Output 6 that is primarily concerned with the establishment of a partnership for implementation of the TWAP</i> 	S
Output 7: Information dissemination and exchange mechanism	100%	<ul style="list-style-type: none"> • <i>The rating on this output reflects the adequacy of the dissemination mechanism and not the timeliness of dissemination that is reflected under output 4.</i> 	S
Activity 16: Develop the project website and disseminate documents through website and other means.	80%	<ul style="list-style-type: none"> • The project website was established using the IW:Learn platform as planned, at http://twap.iwlearn.org. • The site included discussion forums for each of the groups but these were not actually used in the life of the project. • Draft methods were made available on the project website in Dec 2010. • The SC agreed on steps towards publication of the methods at its 2nd meeting 	S

*Implementation status as of 28 February 2011

Annex 6. Review of Outcomes to Impacts

Figure 6.1. Generalised Theory of Change for the TWAP

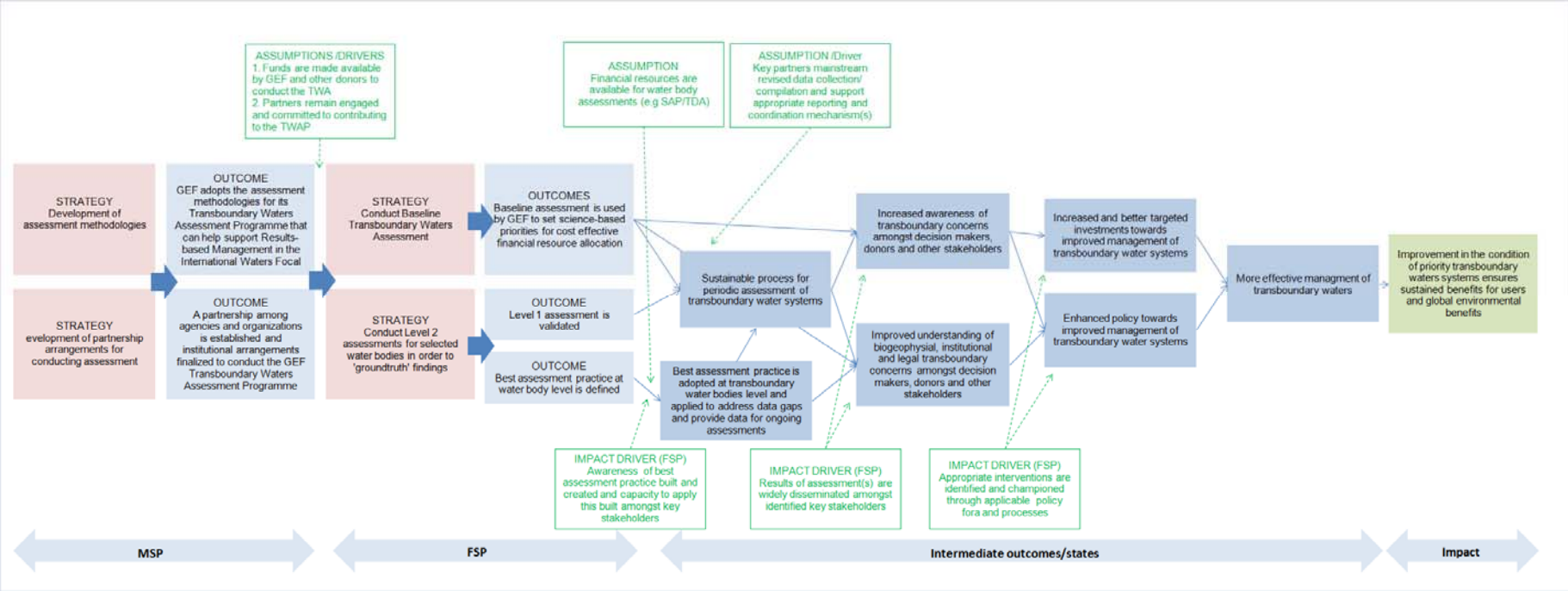


Figure 6.2. Results and ratings of Review of Outcome to Impact (ROtI)

Results rating of project entitled: <i>Development of the Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme (TWAP)</i>						
Project Objective To develop the methodologies for conducting a global assessment of transboundary groundwater, lake/reservoir and river basins, Large Marine Ecosystems, and open ocean areas for GEF purposes and to catalyse a partnership and arrangements for conducting such a global assessment						
Revised Outputs	Outcomes	Rating (D – A)	Intermediary	Rating (D – A)	Impact	Rating (+)
<p>Output 1: Project inception meeting involving major potential partners and experts (adoption of the set of Project Progress Indicators (PPI)).</p> <p>Output 2: Establishment of 5 Working Groups (WGs) at the Water Systems level for 5 transboundary water systems</p> <p>Output 3: Establishment of an Information Management and Indicators Working Group (IMAIG)</p> <p>Output 4: Methodologies of five major water systems, including assessment units/boundaries; priority issues; linkages among water systems; key indicators; institutional framework; partnerships, roles/responsibilities; and harmonization the framework among water systems.</p>	<p>1) GEF adopts the assessment methodologies for its Transboundary Waters Assessment Programme that can help support Results-based Management in the International Waters Focal Area</p>	<p style="text-align: center;">A</p>	<p>Best assessment practice is adopted at transboundary water body level and applied to address data gaps and provide data for ongoing assessments</p> <p style="text-align: center;">↓</p> <p>Sustainable process of assessment of transboundary water systems</p> <p style="text-align: center;">↓</p> <p>Increased awareness and improved understanding of biogeophysical, institutional and legal transboundary concerns amongst decision makers, donors and other stakeholders</p> <p style="text-align: center;">↓</p>	<p style="text-align: center;">C</p>	<p>Improvement in the condition of priority international waters bodies ensures sustained benefits for users and global environmental benefits</p>	<p style="text-align: center;">Moderately Likely</p>
<p>Output 5: Inventory of major regional and international agencies, available data, and existing networks that could potentially contribute to the assessment process</p> <p>Output 6: Partnership identified including identification of partners with data, modelling capability etc</p> <p>Output 7: Information dissemination and exchange mechanism</p>			<p>2) A partnership among agencies and organizations is established and institutional arrangements finalized to conduct the GEF Transboundary Waters Assessment Programme</p> <p style="text-align: center;">↓</p> <p>More effective management of transboundary water systems</p>			
	<p>Rating justification: The A rating reflects that the project's intended outcomes have largely been delivered and have been designed to feed into a continuing process with specific allocation of roles and responsibilities.</p>		<p>Rating justification: The C rating reflects that as of now there is no certainty that the assessment will be repeated on a regular basis with incorporation of new data generated through adoption of best assessment practice</p>		<p>Rating justification: The AC rating corresponds to 'moderately likely'. The MSP project was not expected to produce impacts.</p>	

Ratings:

Rating scale for outcomes and progress towards 'intermediate states'

Outcome Rating	Rating on progress toward Intermediate States
D: The project's intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project's intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project's intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

Six point scale for translation of ratings for 'achievement of outcomes' and 'progress towards intermediate states to ratings for the 'Overall likelihood of impact achievement'.

Highly Likely	Likely	Moderately Likely	Moderately Unlikely	Unlikely	Highly Unlikely
AA AB BA CA BB+ CB+ DA+ DB+	BB CB DA DB AC+ BC+	AC BC CC+ DC+	CC DC AD+ BD+	AD BD CD+ DD+	CD DD

Annex 7. Summary of co-finance information and Statement of Project Expenditure

Table 7.1 Statement of Expenditure by Project Component (GEF Funding Only)

Status as of 31 December 2010

UNEP BUDGET LINE/OBJECT OF EXPENDITURE	Estimated cost at design US\$	Actual Cost US\$	Expenditure ratio (Actual / Planned)
10 PROJECT PERSONNEL COMPONENT			
1100 Project Personnel (Project Manager P.4)			
1101 Project Coordinator	95'000	110'465	1.16
1199 Total			
1201 Data and information management system	6'000	0	0.00
1202 Links with IW:Learn learning exchange platform	8'000	8'022	1.00
1299 Total			
1600 Travel on official business (above staff)			
1601 Travel on technical assistance to working groups	27'000	38'120	1.41
1999 Component Total	136'000	156'607	1.15
20 SUB-CONTRACT COMPONENT			
2100 Sub-contracts (MoU's/LoA's for UN cooperating agencies)			
2102 Groundwater	150'000	150'000	1.00
2102 LME and oceans	300'000	300'000	1.00
2199 Total			
2200 Sub-contracts (MoU's/LA's for non-profit supporting organizations)			
2201 Lake (ILEC)	150'000	140'000	0.93
2202 Rivers (UCC and SIWI)	160'000	170'000	1.06
2999 Component Total	760'000	760'000	1.00
30 TRAINING COMPONENT			
3300 Meetings/conferences			
3301 Steering committee GEFSEC	9'000	4'722	0.52
3302 GEF International Waters	5'000	0	0.00
3999 Component Total	14'000	4'722	0.34
50 MISCELLANEOUS COMPONENT			
5100 Operation and maintenance of equip.(example shown below)			
5200 Reporting costs (publications, maps, newsletters, printing, etc.)			
5201 Printing	0	0	NA
5299 Total			
5500 Evaluation			
5501 Terminal evaluation	40'000	38'768	0.97
5999 Component Total	40'000	38'768	0.97
TOTAL	950'000	960'097	1.01

Table 7.2 Summary of Cofinance based on information available as of 28 February 2011

Co financing (Type/Source)	IA own Financing (mill US\$)		Government (mill US\$)		Other* (mill US\$)		Total (mill US\$)		Total Disbursed ** (mill US\$)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
Grants	0	0	150,000	395,256	0	0	150,000	395,256	181,602
- Government of Finland			150,000	395,256					
Loans	0	0	0	0	0	0	0	0	0
Credits	0	0	0	0	0	0	0	0	0
Equity investments	0	0	0	0	0	0	0	0	0
In-kind support	358,290	638,600			710,180	571,545	1,068,470	1,210,145	1,210,145
- IUCN					100,000	45,000			
- IGRAC					42,840	76,545			
- ETH-Zurich					24,040	24,000			
- UNESCO-IHP					50,000	60,000			
- UNESCO-IOC					140,000	108,000			
- UNEP DHI Centre on Water and Environment (UCC-Water)	73,000	82,000							
- SIWI					40,000	40,000			
- BMZ/BGR					50,000	50,000			
- ILEC					92,000	102,000			
- GESAMP					33,300	0			
- GRID-Arendal	85,290	115,800							
- Univ. of Kalmar					100,000	0			
- Univ. of Western Cape					38,000	38,000			
- DEWA	200,000	350,000							
- DEPI	100,000	60,800							
- NOAA					42,840	Unknown			
- UNEP-WCMC	24,040	30,000							
- LOICZ					50,000	8,000			
Other (*)	0	0	0	0	0	39,000	0	39,000	39,000
- UNESCO IOC Cash contribution					0	39,000			
Totals	358,290	638,600	150,000	395,256	710,180	610,545	1,218,470	1,644,401	1,430,747

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries

** Note disbursement on Government of Finland funding is reported as of 31 December 2010. The funds are expected to be fully disbursed by the end of the project.

Annex 8. Review of the TWAP Methods

Designed as a complementary activity to the MSP evaluation, the following assessment provides an introduction and overview of the processes undertaken by each working group (WG) to develop their methods and a brief review of the methods based on criteria developed for the evaluation terms of reference. The reviews are based primarily on the methods themselves¹⁹ with background on process provided for context. They are not intended to be used as a peer review or validation of the methods but instead explore issues that may need to be addressed during the further preparation and implementation of the assessments.

The report is organised in six sections reflecting the organisation of the planned method publication. Part 1 presents an overview of findings while Parts 2 - 6 address methods for each of the five water systems.

1. General Findings

Process

- ✓ The five-system approach allowed each working group to adapt its approach to the particular characteristics of each water system as well as to accommodate substantial differences in existing knowledge and data related to the system. This is in contrast to the Global International Water Assessment (GIWA) where the uniform approach to inland waters and shelf areas was seen as a constraint.
- ✓ The WG approach was flexible and inclusive. The lead partners were able to identify and mobilise groups of relevant, technically-strong, data-rich and motivated partners to develop the five methods. In a few cases, potential partners were unable to identify suitably collaborators to take part in the WGs. The partners involved in the method development will typically form the core group of future applicants of the method (implementation partnership).
- ✓ The lead partners assigned dedicated personnel to the project after negotiation or signature of legal agreements with UNEP in the last quarter of 2009. The WG managers were generally satisfied with the available time and resources though one manager pointed out that an additional WG meeting would have been useful. In practice, the extension of the project into the first quarter of 2011 and ongoing work to complete methods for publication reflects that in practice the time available for completion of tasks was insufficient in view of the slow start of the project.
- ✓ Potential users of assessment results were involved in the method development to a varying degree, typically through programmes or bodies involved in assessment activities designed or intended to inform policy-making and management. All five WGs anticipate engagement of a wider range of stakeholders during the assessments including for validation of the assessment process and results.
- ✓ The methods were presented to technical audiences at a number of meetings and useful feedback was provided by them. However, time for discussion was often limited and participants had not generally had the opportunity to review documents in advance of the meetings. Peer review comments were received for Lakes and Rivers methods. The lead partners have emphasised the need for validation of the results of the assessments.
- ✓ As well as collaborating under the overall umbrella of the medium-sized project (MSP), a number of groups worked together in an informal manner, for example in organising joint meetings with overlapping sessions. This allowed expertise and ideas to be shared in a cost-effective manner.

Methods

- ✓ The methods were designed in the context of the wider TWAP aims to help GEF prioritise allocation of resources and help track the changing status of transboundary water systems and effects of management interventions over time.
- ✓ The methods are well-structured and well-presented with a coherent presentation of the approach taken, conceptual framework(s) adopted and metrics/indicators/indices selected. They provide a good basis to move forward towards the baseline assessment and ongoing TWAP.

¹⁹ Latest drafts available as at 28 February 2011

- ✓ The WGs have drawn on existing programmes to the extent possible while acknowledging and taking a pragmatic approach to data gaps or weaknesses and, in several cases, recognising the need for continued expert input.
- ✓ Four of the five methods (excluding Open Ocean that does not use individual water body assessment units) include proposals for rating or ranking of systems while some note the need for further work in this area (e.g. to develop an ecosystem health index (LMEs) or models for cumulative impacts). None of the prioritisation approaches currently satisfies the two-factor approach of 'urgency of intervention' and 'potential to make a difference' proposed by GEFSEC; an issue that needs to be resolved in a harmonised manner across the five water systems.
- ✓ Four of the five methods anticipate multi-level assessments (2 or 3 levels) including a baseline assessment and more detailed assessments for a subset of water bodies. The descriptions of 'Level 1.2' and 'Level 1.3' (Lakes) and 'Level 2' assessments (all) differ amongst the groups and none corresponds exactly to the vision for conducting 'Level 2' assessments during the next phase of the TWAP that was presented by GEFSEC to the Steering Committee Meeting in February 2011. Nevertheless, the approaches developed by the WGs are well-justified and may be useful at a later stage in the TWAP.
- ✓ Common and cross-cutting issues are identified but have been addressed in a different manner by each group. Further work is required to better define needs and where appropriate develop common modalities in these areas (governance, socio-economic issues, nutrients and mercury, input-output analyses).

Partnerships and Implementation Arrangements

- ✓ Coordination arrangements are proposed by each of the groups and reflect the leadership roles agreed at the February 2011 Steering Committee meeting.
- ✓ The working groups have identified key partners for the assessments, including data holders, assessment partners and experts, often identifying their roles and responsibilities and comparative advantages. Several WG's have identified gaps and/or note that further partners will be identified.
- ✓ Ideas for data and information management are generally presented as proposals, with most groups preferring a distributed data system. The proposals for information management will need to be adapted according to the overall information management system established for the TWAP.
- ✓ Several methods include indicative costing for conducting the assessment. Costing and identification of cofinancing as well as the funding 'baseline' (resources that will be leveraged by the assessments) are being carried out during parallel development for the Project Identification Form for the planned full-sized project (FSP).

2. Groundwater /Transboundary Aquifers

A. Development of the method

Working Group Process

The UNESCO-IHP were selected as the lead agency by UNEP for the Transboundary Waters Assessment Programme (TWAP) transboundary groundwater/aquifers assessment component based on their extensive work around the globe on issues related to the environmental and socio-economic aspects of groundwater/aquifers and the expertise, data sources and partnerships available to them. The core group for developing the method/indicators for the TWAP comprised the International Groundwater Resource Assessment Centre (IGRAC), the Food and Agriculture Organization (FAO), the United Nations World Water Assessment Programme (UN WWAP), and the global network of UNESCO water-related centres and chairs. In addition to these institutions/agencies, the groundwater/aquifer coalition proposed for the TWAP Full Sized Project (FSP) includes a regional coordinators' and experts' network as well as local providers of expertise and data. Through its earlier work on the Resources Allocation Framework (RAF) with GEF, UNESCO also has had a close working relationship with the GEF International Water (IW) focal area.

One of the major issues for the Groundwater/Aquifer Working Group was that there is no ready-made inventory of the world's aquifers. Identification and delineation of international groundwater/aquifer basins are thus major

issues. Questionnaires are proposed to be used to guide and organize the identification/delineation/characterization process.

Informal discussions at the aftermath of the Second Steering Committee meeting with some members of the Working Group indicated that the time and resources allocated for the MSP groundwater/aquifers component were adequate for fulfilling the requirements of the MSP.

Foundations

The assessment framework is well-developed and based on the Driving forces, Pressures, State, Impacts, Responses (DPSIR) framework. The method builds on the experience gained through the GEF-RAF work carried out by UNESCO as well as the Internationally Shared Aquifer Resource Management (ISARM) initiative launched by UNESCO-IHP in the year 2000. The ISARM approach and experience has inspired the methodological design of the identification and characterization part of the MSP. A key role in the method is played by the GEF Benefits Index (GBI), a measure of the potential to generate global environmental benefits that can accrue through the International Waters (IW) focal area action on the groundwater resources contained in transboundary aquifers. The emphasis in GEF-TWAP is on helping GEF prioritise its investments by identifying areas and water bodies where highest returns are to be expected in terms of environmental benefits. This index has been decomposed for the MSP into three components—Intrinsic Value and Functions, Human and environmental dependency and Vulnerability to stress. (Section 2.6).

Validation and Peer Review

An international GEF-TWAP workshop was held in Utrecht in April 2010, organized by IGRAC and UNESCO-IHP that was attended by nearly 40 participants from various agencies, universities, private sector representatives, and individuals engaged in various aspects of aquifers and underground water. The outlines of a method for assessment, indicators and data sources were then proposed for the TWAP. However, it is not clear how much consultation took place with stakeholders on the ground—governments, academics, NGOs/CSOs, etc.

A peer review session to validate the method was held at a side event at the ISARM2010 International Conference titled: *Transboundary Aquifers: Challenges and New Directions*, at the UNESCO HQ in December 2010. The comments received there have been addressed in the revised version of method.

There is no mention though of specific mechanisms for peer reviews and stakeholder feedback in the current report; however it is recognized that these will need to be developed in the FSP. The proposed Advisory Panel will presumably play an important role in carrying out peer reviews.

B. Review of method: Assessment and Indicators

Objectives, Scope and Framework

Overall, the method and indicators developed and presented in the report for review correspond very well with the objectives outlined for the MSP. The scope and framework for the work to be carried out during the development and implementation of the FSP, if it is approved by GEF, are well-articulated as are the needed arrangements for carrying out the work. On the whole it is a very good report on the work carried out during the MSP by the partners, with concrete suggestions for proceeding with the FSP.

Shareholders and Beneficiaries

Currently the primary audiences/users of the assessment are identified as the GEF along with the proposed members of the groundwater coalition. They have all been involved in developing the method and indicators to make sure their information needs are met and they can play active roles in the assessments. There is certainly a need to engage other stakeholders on the ground in developing and implementing the assessment. Other audiences and their specific needs will have to be identified and addressed during the assessment. This is proposed to be done through the active engagement of stakeholders in actual assessments through workshops and questionnaires.

Data, Indicators and Sources

Global applicability of the indicators developed has also been a primary concern. The indicators have been divided into “core” indicators for all aquifers and others that could be selectively implemented. The method focuses on two

main categories of indicators—Current State Indicators and Projected State Indicators. The data are proposed to be provided and verified through the interactions with regional and national level agents and agencies. It is recognized that flexibility will have to be built into the FSP.

Interlinkages and Cross-cutting Themes

The method recognizes the interlinkages of groundwater with the other four water systems, in particular with lakes and rivers. In Level 1 it is proposed that regional networks of experts may identify for each Transboundary Aquifer (TBA) and Small Island Developing States (SIDS) whether physical linkages exist that would be described in the assessments. For other linkages also the same mechanism is prescribed.

The strong interlinkages in the political, socio-economic and governance arenas are recognized and it is proposed that a common set of indicators for them should be developed and accepted by all five water system Working Groups, with the clear recognition that the needs of different water systems in different geographical locations will inevitably vary greatly.

Regarding cross-cutting issues, while nutrients is a common issue with other water systems, mercury does not have relevance for groundwater. “Virtual Water” and “Water Footprint” are also mentioned but no related indicators are presented.

Outputs and Products

The main output for the MSP was the method and indicators along with a listing of partners for developing and implementing the assessment. One of the main outputs of the FSP will be an inventory consisting of a listing, by region, of all major known TBAs and their spatial distribution and expression on the surface (**Section 8**). Each identified TBA, to the extent possible, will be represented on a two dimensional map. Consideration will need to be given in FSP to any additional basin-specific outputs required.

C. Review of method: Partnership and Arrangements

As one of the main outcomes of the MSP, UNESCO-IHP is planning to establish a TWP Groundwater Coalition for developing and implementing the assessments. The institutional arrangements/organizational structure are proposed in the report but the specifics are to be worked out in the FSP. The TWAP-Groundwater Advisory Panel, comprising hydrological, socio-economic, legal, and institutional experts will provide advice and support to the Core Group for overall coordination of the FSP assessments.

There is a proposed Data and Information Management system with elaboration of the flow of information in the assessment. The modalities and mechanisms for making the outputs/outcomes available are also mentioned. The Information Management System will be organized and managed by IGRAC. A Task Force on remote sensing and modeling will also be established and managed by IGRAC.

The needs for capacity-building have not been fully addressed in the MSP. These are expected to be ascertained during the implementation phase of the FSP.

The cost estimates are based mainly on the experiences of implementing the GEF-RAF and ISARM. More pertinent estimates were provided during and in the aftermath of the second Steering Committee meeting.²⁰

D. Conclusions

The groundwater/aquifer component of the TWAP MSP is well- developed and would serve the needs of TWAP FSP in an adequate legitimate manner. However coordination/guidance issues with the implementing agency, UNEP, need to be worked out and clear guidelines and working arrangements established for it. The interlinkages with other four methods for assessments will need to be further explicated, shared and agreed to, especially in the political, governance and socio-economic arenas. Overall, the method and indicators developed through the MSP provide a firm ground for going ahead with the development and implementation of the FSP groundwater/aquifer component.

²⁰ GEF Medium Sized Project: Report on the Second Meeting of the Steering Committee for TWAP, 9-10 February 2011, Nairobi, Kenya. (As circulated on 23 March 2011).

3. Transboundary Lake/Reservoir Basins

A. Development of the method

Working Group Process

The International Lake Environment Committee (ILEC) was invited by the United Nations Environment Programme (UNEP), to take lead in developing the transboundary lakes assessment method and indicators based on their substantial and long-term work around the world with local partners and in managing the biennial World Lake Conferences; their participation in the recently completed GEF medium-sized project titled “Towards a Lake Basin Management Initiative” (LBMI) on which TWAP could build; their maintaining the global Lake Data Base; their extensive global network of members and partners; their knowledge of various data sources and data bases available globally and regionally; the existence of a developed mechanism for scientific/technical oversight of their work, and support for their work from many governments. The ILEC Scientific Committee was engaged throughout the implementation of the TWAP-MSP transboundary lake basin component.

The Lakes Working Group members comprised: the ILEC Secretary and two members of the ILEC Scientific Committee; a visiting researcher at ILEC; experts from Kyoto, Nagoya, Shiga and Texas Universities; and a consultant on past GEF experiences and development of governance framework. All have substantial international experience and established reputations in their respective areas of expertise related to lakes.

Foundations

The transboundary lakes assessment method and indicators were based on the experience of ILEC and partners in implementing the GEF and World Bank sponsored Transboundary Lake Basin Management Initiative (LBMI). ILEC has been focusing on the resource value of the lakes within the context of the 2005 Millennium Ecosystems Assessment, with particular emphasis on regulating services. The LBMI approach has been developed and tested in different lake systems around the world.

Validation and Peer Review

The proposed method and indicators, as the main output of the MSP, have already been tested in 28 lake basins around the world. The report also demonstrates how some of the indicators, especially those relating to identification and delineation of lakes, have been applied for Africa, particularly in the Nile Basin. The ILEC Scientific Committee has been engaged throughout these exercises.

Presentations about the TWAP were made at meetings held in India, Mexico and St. Petersburg (Russia) and comments and suggestions of participants elicited and subsequently incorporated into the development of the Lakes method and indicators.

The Lakes Working Group convened three meetings: a international consultation meeting during the 13th World Lake Conference in Wuhan, China in November 2009, a joint meeting with the Integrated Lake Basin Management-Governance (ILBM-G) annual review meeting held in Kuala Lumpur, Malaysia during February 2010, and a core group meeting held in Kasatsu, Japan during May 2010. These meetings provided opportunities to solicit inputs from various stakeholders. The meetings and associated activities contributed to the agreement amongst the WG members regarding the relationships between TWAP and ILBM projects which share many similarities.²¹

A stakeholder workshop was organised together with the Rivers Working Group, in Bangkok in August 2010 that was attended by representatives of the Mekong River Commission, regional government representatives, NGOs and private sector, who validated the scientific quality of the method, and made suggestions for improvement. These suggestions were incorporated into the method.

The anticipated implementation of the Full Sized Project (FSP) and the ongoing lessons being learned are seen as the main mechanism for assessing and updating the method. In addition, shareholder workshops and questionnaires are to be used for systematic review of the approach or results.

²¹ Lakes Assessment Protocol (LAP): Transboundary Water Assessment Programme, Working Group Progress Report, February-May 2010.

B. Review of Method: Assessment and Indicators

Objectives, Scope and Framework

The method and indicators were developed based upon the experience from the earlier LBMI project leading to the development of the Integrated Lake Basin Management (ILBM) approach based on six “pillars”—Institutions, Politics, Participation, Technology, Information and Finance.

The underlying key conceptual bases for ILBM are: Basin Approach; Characteristics of Lakes; Ecosystem Services, and Governance Challenges. The geographical scope of the assessments is global but this will be narrowed down in Level 1.2 and Level 1.3²², as needed.

The method proposed introduces an interim level between Level I and Level II assessments. In the suggested three-level framework, Level 1.1 will focus on identifying all transboundary lake basins globally, compiling and demonstrating the basic indicators and reducing the list of lakes to be considered for assessments. In Level 1.2, more detailed indicators will be compiled and the list of lake basins for further consideration will again be reduced. In Level 1.3, the most detailed basin and in-lake indicators will be compiled and basin delineation will be refined, allowing for very detailed studies (assessments) of a much smaller set of target basins—a Transboundary Diagnostic Analysis (TDA)-like, questionnaire-based, stakeholder-owned process.

The Interpretation/Notes provided in the report at the bottom of the tables for each of the indicators are particularly useful. These explicate the criteria/rationale for choosing the specific indicator, data/information sources, and existing gaps and ways to address them. The indicators for Institutions, Politics and Participation (3.1-5.5) may be useful for other water systems, particularly rivers, aquifers and, to some extent, LMEs. The framework will have to be made basin-specific as the assessment proceeds; a need recognized in the report. The report of the Working Group presents some “universal” and comparable indicators while recognizing the uniqueness of specific basins where fewer or more indicators may have to be applied. In that sense the need for flexibility is acknowledged.

As far as can be made out from the report and interviews with two members of the Working Group, both time and resources were adequate for developing the lakes assessment method. This is because, although the method is novel, it is based on a strong foundation of work ILEC had already done.

The report does not specify timeframe for data collection nor does it include *specific* mechanisms for data verification. It will, according to the report, all depend on how the FSP unfolds.

Stakeholders and Beneficiaries

The main and immediate stakeholder and beneficiary for the Lakes method and indicators is the GEF. However, in both a direct and indirect manner, all the agents and agencies that have participated in the MSP and will participate in the FSP have become audiences through the consultations on interlinkages among the five water systems and through Steering Committee presentations and deliberations. The report itself does not identify specific audience(s), especially at the basin level. Nonetheless, the countries sharing lake basins, international and regional organizations, lake basin organizations, NGOs/CSOs, and scientific communities would naturally form other audiences. The identification of specific stakeholders and partners will depend on which lake basins are chosen for assessment in Level 1.3.

The need for capacity-building of institutions and stakeholders who will work on the assessment is recognized (Part VI) and will be further identified through a questionnaire/review meeting process (Level 2) but more activities may be required.

A second stakeholder workshop, similar to the one held in the Mekong Basin, is proposed before the development and launching of the assessment.

Data, Indicators and Sources

Part V of the lakes report provides details on how data will be collated, analyzed, and stored, and how information will be presented and made available to all interested parties and stakeholders during the implementation of the FSP. The Lakes WG had earlier cooperated with the Shiga University and others in the preparation of a Learning

²² Levels 1.2 and 1.3 were referred to respectively as levels 1.5 and 2 in the draft of the methodology provided to the evaluators

Acceleration and Knowledge Enhancement System (LAKES), as a tool for extracting information from compiled reports.

The indicators have been developed to meet the following criteria: Ease of understanding; Meaningfulness and Relevance; Availability at Global Scale, and Contributions and Acceptability by Stakeholders.

The sources of data for each proposed indicator are presented in separate tables in Part III of the lakes assessment report. A comprehensive list of data sources is also provided in Annex II of the report.

Interlinkages and Cross-cutting Themes

The report clearly recognizes the interlinkages that exist, with varying degree of strength and intensity, among the five water systems, especially with rivers (Part IV). It suggests that all the indicators developed for the lakes, except 1.2 (lenticity) and 1.3 (lake to basin area) should be applicable to rivers also. Again the linkages are very likely to be basin-specific, some requiring more analysis, some less when the method and indicators are employed for assessments.

C. Review of Method: Partnership and arrangements

In terms of implementation of the FSP, ILEC will continue to be the group leader working with its members and other partners. Data sources and partners are listed in a report Annex.

During the FSP, the large amount of information generated by the assessments will be managed in-house at the ILEC by the Technical Coordinator. It will be made available to the other TWAP Working Groups, GEF and other stakeholders through a password-protected site. The 'geodatabase' will be made public and accessible through the ILEC server. The final output of the TWAP-Lake Assessment Method approach has to be integrated into the global, regional, national and local ILBM 'platforms' requiring a concerted effort by the relevant international and global initiatives. ILEC has begun to explore the possibility of developing and sustaining such platforms in China, India, Japan, Kenya, Malaysia, Mexico, Nepal, Philippines and Russia.

A section on "Financial resources necessary for the implementation" is included in Section VI which provides an outline budget for the assessment totalling \$2 million, excluding in-kind contributions from ILEC and its members.

D. Conclusions

The TWAP-MSP Lake Assessment report is comprehensive, well-prepared and well-presented. It addresses the objectives stated for the MSP and delivers adequately. Clearly, the report is based on the rich experience that ILEC has accumulated from around the world over time as well as additional thinking in the context of the MSP.

The priority issues, identified in the report, for the assessment of transboundary lakes are identification, characterization and mapping of all or most of such lakes around the world and creation of a comprehensive and accessible data base.

The method presented, which has been tested and is being used and embellished by ILEC, is comprehensive and provides a strong basis for moving ahead with the FSP and the baseline assessments needed at Level I. It is mindful of the data needs of specific basins, including the interlinkages with other water systems, and it provides common indicators in the political, socio-economic and institutional realms that could be gainfully used in assessments of other water systems. Issues of wider stakeholder participation at the national and local levels, and capacity-building, will have to be tackled in the development and implementation of the FSP.

4. Transboundary Rivers

A. Development of the Method

Working Group Process

The designated lead partner for developing the method and indicators was the UNEP-DHI Center for Water and Environment (UCC-Water) that established a consortium with the International Union for Conservation of Nature (IUCN) and Stockholm International Water Institute (SIWI) who were subcontracted to participate in the work of

the rivers working group. The seven WG members represented the three consortium members (**Annexes I and II**). The WG also had close coordination with the other working groups, particularly for groundwater, lakes and LME.

The criteria for the selection of partners for developing the transboundary rivers assessment method and indicators were mainly expertise- and data-driven. All the selected participating agencies had (have) the needed expertise, institutional capacities and resources as well as international recognition in their respective fields. They also have extensive networks of sister agents and agencies working in the field of transboundary river basins and related assessments. As per the Project Document the approach was to build as far as possible on existing databases and assessments available with the partners. This approach was adopted to also ensure ownership, quality and sustainability of the TWAP assessments to be undertaken during the yet to be developed full-sized project (FSP). A significant amount of in-kind support for the MSP was provided by the Consortium Partners.

A rivers WG meeting was held at DHI on 1-2 March 2010 with the participation of UDC, SIWI and IUCN. The issues discussed included partnerships/data availability, indicators, a draft report and work plan.²³ The method and indicators were subsequently developed based on the outcome of the meeting.

In the evaluators' informal consultations with some members of the rivers WG after the Second Steering Committee meeting (Nairobi, February 2011), it was indicated that the time and resources available for the MSP were adequate for the tasks undertaken.

Foundations

The method was developed through ongoing consultations within the rivers WG as well with the other four TWAP WGs and the GEF Secretariat. It takes an issue-based approach rooted in the DPSIR (Diving forces, Pressure, State, Impacts, Responses) framework, further developed in the Millennium Ecosystem Assessment (MEA), capturing human and ecosystem vulnerability, with particular emphasis on governance and socio-economic issues.²⁴

Validation and Peer Review

Recognizing the need for validation of the method/indicators, a stakeholder workshop was held in the Mekong River Basin, together with the lakes WG, in Bangkok in August 2010 that was attended by representatives of the Mekong River Commission, regional government representatives, NGOs and private sector, who validated the scientific quality of the method, with some suggestions for improvement. These suggestions were incorporated into the method (Section 6.2 and Annex VII)²⁵. A second workshop along the same lines was planned for the Volta river basin but could not be held during the MSP.

The method and indicators were presented also within a peer group setting at the World Water Week in Stockholm (2010) which was attended by approximately 80 researchers, government representatives, NGOs and other water professionals from both developing and developed countries. Most of the comments and suggestions received from these consultations have been incorporated into the latest version of the method. These consultations ensured realism of the approach, preliminary estimation of the existing capacities as well as capacity-building needs of participating entities, and full use of the pre-existing experiences and best practices.

The consultations in Bangkok and Stockholm generated knowledge about the needs of a large set of the target audiences. It is stated in the report of the rivers WG that the specific needs of an extended set of target audiences in the small set of river basins selected for Level 2 assessments will be addressed during the FSP.

The method makes provisions for peer reviews and stakeholder feedback of the assessment approach. The draft report was peer-reviewed by two independent reviewers, organized by the UNEP-TWAP Secretariat in December 2010. Their comments and suggestions were incorporated in the version of the report submitted for evaluation.

The report further recognizes the need for assessing and updating the method, as needed, during its application in the FSP, however no specific mechanism is yet proposed for doing so.

²⁴ Summary for Decision-makers, Methodological Design, Volume 4, Methodology for the assessment of transboundary rivers, February 2010.

²⁵ GEF Medium Size Project, Development of Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme (TWAP), First Stakeholder Consultation Workshop, Rivers and Lakes Workgroups, Bangkok 10 August 2010, Final Report.

B. Review of the Method: Assessment and Indicators

The Rivers method report is a comprehensive and well-written document. The Annexes I-VIII provide all the information needed to address the specific questions enumerated under Process Indicators and Results Indicators in the Terms of Reference for the Terminal Evaluation. In Annex IX a cross-check list is provided vis-à-vis all the 22 elements of the TWAP final Framework Method that were agreed at the IMAIG meeting.

Objectives, Scope and Framework

The scope of the method, including linkages with other international water (IW) systems, is well-defined and is in correspondence with the objectives of the assessment (**Section 1.2**). In terms of geographical scope, while Level 1 assessment is proposed to cover the globe, Level 2 will identify a small set of basins for targeted and detailed assessments, identify hot spots and undertake casual chain analysis and forecasting. The basins are proposed to be chosen to provide a wide geographical and socio-economic coverage.

The Consortium Partners brought to the endeavour to develop the method their substantial knowledge of the existing and approved assessment tools and instruments. The two consultations (see section A above) further embellished this knowledge. This knowledge has been built upon and incorporated into the method.

Level 1 framework is presented in Section 1.3.1 as well as an explanation for choosing it, followed by an enumeration of criteria for choosing the set of indicators, especially the Governance and Socioeconomic indicators (Part III and Annex III). For Level 2, it is expected that a clear objective and framework will be further developed during the FSP (Section 1.3.2). Adequate indicators are included in the method, including indicators on the current environmental state and trends, the degree of environmental threats and actual degradation, and two-way linkages with human and external natural factors (Annex 3). The approach taken is to have a small set of core indicators. It is acknowledged that in Level 2 assessments, depending on the needs in selected river basins, additional indicators may be required. On the other hand, some or many of the Level 1 indicators may not have relevance.

Flexibility is built-in for Level 2 assessments because it is recognized that in the small set of selected transboundary river systems there may be different needs. For Level 1, however, a universal approach is taken to ensure, as far as possible, comparability and aggregation of results to the global level. It is clear that many of the associated issues related to comparability and aggregation would need to be addressed during the FSP.

Stakeholders and Beneficiaries

The primary audience and beneficiaries for the MSP method are identified as the GEF (Section 1.1), followed by the Consortium Partners. While the potential target audiences are not exhaustively and individually specified for now, there is a clear recognition in the report of the need to identify and interact with them during the FSP, including international bodies, national policy makers, river basin organizations, relevant industries, NGOs, and the general public. A long list of data holders and potential audiences is provided in Section 2.2, Annex 2. The method seeks to ensure stakeholder participation mainly through consultations, dissemination of outputs, identification and engagement of stakeholders on the ground for carrying out assessments and using the results, and capacity-building, when and where needed.

Data, Indicators and Sources

Five ‘clusters’ of issues were identified as being relevant to both population and ecosystems and indicators are proposed for each one of them: water quantity (3 indicators), water quality (2 indicators), ecosystems (3 indicators), governance (3 indicators), and socio-economic (3 indicators). A sixth cluster of ‘projected transboundary stresses 2030/2050’ is also included, covering a cross-section of the other five clusters. Indicators were selected along five criteria: Availability, Acceptability, Applicability and Aggregation. A risk scoring system for each indicator on a five point scale (1-high, 5-low) is also presented.²⁶

Interlinkages and Cross-cutting Themes

Interlinkages with the other four water systems as well as some common issues among them are clearly recognized and presented in Sections 4.1, Part 4. Annex VIII presents a draft set of “interlinking” indicators and cross-cutting issues that were shared with the Lakes and LME groups in June 2010. Two main approaches—*an issue-based*

²⁶ Volume 4: Methodology for the Assessment of transboundary rivers, submitted for evaluation, January 2011.

approach and an *input-output based* approach are recommended for the FSP. Further, the interlinkages of rivers with each of the four other water systems are described, as are common issues.

Common and cross-cutting elements linking the five methods were discussed from the design stage. As agreed by all five groups in July 2010 (IMAIG 2010) only two cross-cutting issues were addressed—Mercury and Nutrients.

Outputs and Products

For MSP the main output of the rivers WG were the method and indicators as well as partnership arrangement that have been delivered. Four outputs are enumerated for Level 1 (**Section 1.2**). These include: A database of indicator values, global maps and tables, a Level 1 assessment report, and support for prioritization of transboundary river basins. For Level 2 the main output will be assessments of the small set of selected basins. It is proposed these outputs will be tailored to the needs of target audiences in the basins as well as other audiences. Experiences gained from both levels may be used as input to IW:Learn 3 and support the development of the GEF's TDA/SAP Process.

C. Review of Method: Partnerships and Arrangements

A Consortium for implementation of the assessment is proposed that would comprise a UNEP Consortium Coordinator, seven 'Consortium Partners' selected on the basis of their experience and capacity to undertake such an assessment and five 'Assessment Partners' that hold either data or expertise that can be used by the Assessment Consortium in the computation of indicators. Further partners may be brought in depending on data requirements. An important consideration in the selection of partners was the idea of keeping the total number of institutions involved in the FSP to a manageable number. Institutions were selected that could provide data/expertise for more than one indicator where possible. This is posited to make the FSP easier to coordinate and represent a potential cost-saving for TWAP.

The method report provides guidelines for the organization of the assessment work during the FSP. It is posited that an indicative work plan/schedule for data collection, analysis, and production and review of outputs will be developed in the proposal for the FSP.

Regarding data and information management, a decentralized system is proposed with each Consortium Partner responsible for databases and information for their respective indicators.

It is recognised that a transparent process with appropriate criteria for the selection of the assessment teams, responsible for producing and reviewing the assessments, *is* critical to the scientific credibility and legitimacy of the assessments to be produced. This has not been fully addressed in the method report. It is assumed that this will form a core activity during the FSP.

The WG tried to assess the capacity-building needs for the groundwater/aquifer component of the FSP. To quote from the report: "During the Level 1, it is not envisaged that there will be any need for capacity building. However, there is expected to be some form of training involved of basin stakeholders or regional experts to collect data for the governance assessment. Level 2 will present the opportunity for some informal capacity building, particularly within RBOs, and potentially within some public authorities/government agencies. This may be in the form of on-the-job training on the implications of TWAP, transboundary IWRM and the benefits of the TDA/SAP process" (Section 6.3).

While the method does provide some guidance on estimating the cost of assessments, especially for Level 2 and identifies some funding sources, including in-kind support, these were not fully elaborated. It recognized that resources will be needed for some capacity building of the research team and stakeholders, however these were not estimated. Updated cost estimate have been provided following the Second Steering Committee Meeting, Nairobi Kenya, 9-10 February 2011. In Part V of the report, appropriate guidance is provided on communication of assessment results to key audiences/intended users.

D. Conclusions

The MSP transboundary rivers assessment document that was submitted for evaluation provides a solid basis/foundation for moving ahead with the development and implementation of the FSP. It is comprehensive and well-written, addressing the directives and needs outlined in the various project documents. It was suggested that the document be embellished further based on the deliberations at the Second Steering Committee meeting in Nairobi, 9-10 February 2011. In particular, the report will be considerably embellished by inclusion, in the Summary for

Decision-makers up front, of the lessons learned, and the best practices and recommendations elicited through the experience of implementing the MSP.

5. Large Marine Ecosystems (LMEs)

A. Development of the Method

Working Group Process

The TWAP Large Marine Ecosystem (LME) component was implemented and coordinated by UNESCO-IOC that was involved in the development of the project, reflecting a fit to the programme and mandate of IOC. An experienced consultant was contracted as coordinator in September 2009 in anticipation of the signing of a letter of Agreement (LoA) with UNEP.

The WG of some eighteen experts and institutional partners was established by January 2010 with partners identified based on their assessment experience and/or access to relevant data. Some invited partners – notably FAO, the International Maritime Organisation (IMO) and IUCN – were unable to identify suitable experts. The group included representatives with experience working with LME assessments or programmes in a cross-section of regions.

The first WG meeting was held from 3 -5 February 2010, together with that of the Open Ocean WG. Task teams were established to develop particular aspects of the method and experts were contracted for specific tasks including review of transboundary diagnostic and causal chain analyses for LMEs; development of interlinkages aspects, and development of a method for mapping cumulative human impacts. The second WG meeting was organised in collaboration with the Open Ocean WG from 23 -25 June 2010. Members of the LME WG took part in the three correspondence working groups (CWGs) established by the IMAIG at its June 2010 meeting. A first full draft of the method was submitted to UNEP in November 2010 and revised text was prepared for the February 2011 TWAP Steering Committee Meeting²⁷.

Overall, time and resources were considered sufficient to develop the method though the late start of the project has had repercussions in terms of completing the report. The manager and coordinator suggested a wrap-up meeting of the working group meeting would have been useful to help consolidate the method and partnership arrangements.

Foundations

There was disagreement in the working group as to whether the existing five-module LME assessment process could be used for TWAP purposes, reflecting the balance between two risks identified in the Project Document, namely, that methods do not build on ongoing work, and, that participating institutions insist on using their own methods. The majority of the group felt the approach should be adapted and supported complementing the five-module approach with a more dynamic conceptual framework. This ‘majority consensus’ is reflected in the method presented by the WG.

Validation and Peer Review

The LME method was introduced or presented at four meetings though time for discussion at these meetings was limited:

- The May 2010 *Global Oceans Conference* session on harmonization of indicators (general introduction);
- The July 2010 *Twelfth Annual LME Consultative Committee Meeting* attended by representatives from GEF LME projects and organizations involved with assessment and management of LMEs;
- The September 2010 *Twelfth Global Meeting of the Regional Seas Conventions and Action Plans* held in conjunction with the OSPAR Ministerial Meeting;
- The October 2010 Conference *A Unified Approach for Sustainability in a Changing World: From Ocean Policy to Observations*.

²⁷ TWAP LME Working Group. Methodology for assessment of Large Marine Ecosystems. Feb 2011

No peer review comments were received through the peer review process organised in December 2010 by the TWAP Secretariat.

B. Review of the Method: Assessment and Indicators

The LME method is well written with a good executive summary and follows the structure proposed by the Communications and Publication CWG.

Objectives, Scope and Framework

The method identifies the objectives of the assessment in terms of the MSP rationale and intended outputs, noting this assessment *'will help GEF in setting priorities for its resource allocation based on the understanding of baseline environmental and water resource conditions and tracking the longer term relative results of its interventions.'*

The assessment is expected to take place at two levels: Level 1 comprising global comparative assessment of all 64 LMEs (including their transboundary estuaries/deltas where these occur) and the Pacific Warm Pool using a set of core indicators for which data are available globally, and Level 2 representing a more advanced assessment of selected LMEs, based on available data and ongoing monitoring and assessment programmes and initiatives.

The method builds on the five-module approach for LME characterisation together with a 'conceptual framework' that is designed to more explicitly show the links between human vulnerability and natural and anthropogenic stressors, ecosystem services and consequences for humans. A similar conceptual framework was used by the Open Ocean group.

Key issues that arose from the validation meetings were that caution should be exercised in scaling down of the indicators from the global to the regional level and that there is inconsistency and even a sense of conflict between the Regional Seas and LMEs spatial scales and between political versus ecological criteria and realities. Elsewhere, it is noted that an overall index of LME health is not readily available and needs to be developed under the FSP.

Stakeholders and Beneficiaries

The main user of the TWAP assessment results is clearly identified as the GEF. Other key stakeholders/users identified include countries involved in GEF LME projects, UN organizations, Regional Seas Programmes, other relevant regional institutions and programmes as well as non-governmental organizations (NGO) and national governments.

The method highlights the importance of having assessment results validated and accepted at the regional/national levels and notes that *'a mechanism will be established to engage regional and national entities throughout the assessment process, including in reviewing the assessment results, to ensure credibility and acceptability at these levels'*. The method anticipates development of a capacity building plan during the FSP.

Data, Indicators and Sources

Indicators are organised under five themes reflecting the five LME modules, with 'core' and 'other' indicators for each theme. Relevance, data availability and institutions/experts are described for each. Linkages to policy are highlighted in the theme introductions. Available data for pollutants are recognised as being patchy and that on habitats as being compiled from multiple sources. 'Other' socio-economic data are largely reliant on fine scale studies while governance indicators require continued expert input.

Interlinkages and Cross-cutting Themes

The text on interlinkages is more conceptual than practical, recognising the importance of inter-linkages and need for consistency, and identifying some 'common parameters' but not describing how these will be addressed.

Outputs and Products

The assessment products are well-defined with a view to accessibility to potential users. In the absence an overall 'index of LME health', the approach to prioritisation is based on an asymmetrical scoring system that was developed by the Rivers WG. This was described by the coordinator as needing further refinement during the FSP.

C. Review of the Method: Partnership and Arrangements

The partnership and institutional arrangements at the LME level are built around establishment of an assessment consortium comprising the coordinating assessment partner (UNESCO-IOC), assessment partners, data partners and an expert advisory panel that provides a potential vehicle for engaging users. Criteria are included for identification of partners and data sources.

The proposal includes a rough estimate of the cost of producing the first assessment by component. Indicative partners are identified for each assessment component and their roles are defined. Partners have expressed their commitment to the assessment with informal pledges of cofinancing in the context of the parallel development of the FSP.

The method includes a useful discussion on data management and presentation of ‘soft’ and ‘hard’ data to maximise accessibility of assessment results while respecting data ownership. The proposed combination of centralised and decentralised systems is well-justified but requires agreement on roles and responsibilities (and associated budget allocation) at the level of all five water systems.

D. Conclusions

The LME method provides a sound foundation for moving towards the FSP and baseline assessment. The text is reflective and identifies next steps that need to be followed up during preparation of the FSP and during the FSP itself. The WG has taken a pragmatic approach to the overall method and to handling data gaps or shortcomings.

Significant gaps in the LME method that will need to be addressed in a consistent manner across the different water systems are the approach to interlinkages (all) and prioritisation (all but Open Oceans). The LME WG has stressed the importance of stakeholder engagement to validate the results of the assessment, a point that is also applicable to other water systems.

6. Open Ocean

A. Development of the Method

Working Group Process

The TWAP Open Ocean (LME) component was implemented and coordinated by UNESCO-IOC that was involved in the development of the TWAP MSP, reflecting a fit to the programme and mandate of IOC and also desire of the Ocean Observation and Services Section to expand the utility of the Global Ocean Observing System (GOOS). A well-qualified coordinator was recruited on an ‘extra-budgetary staff’ basis as soon as the letter of agreement with UNEP was signed in October 2010.

IOC convened a Working Group (WG) of some natural and social science experts from national and international research organisations and programmes including regional programmes linked to oceans management. Experts were identified based on their ability to provide perspectives from different disciplines as well as interdisciplinary perspective. The core group was augmented by an extended correspondence group. Most of the experts worked on a voluntary basis.

Two WG meetings were organised, from 3 -5 February 2010 and 23 -25 June 2010, both in collaboration with the LME WG and with one-day overlapping sessions allowing for sharing of experts and exchanges on common issues. Members of the Open Ocean WG took part in the three correspondence working groups (CWGs) established by the IMAIG at its June 2010 meeting. A first full draft of the method was submitted to UNEP in November 2010²⁸.

Overall, time and resources were considered sufficient to develop the method though the late start of the project has had repercussions in terms of completing the report.

²⁸ TWAP Ocean Oceans Working Group. Open Ocean Assessment Methodology. 29 November 2010

Foundations

The geographic scope for the method is the ocean area beyond the boundaries of the established LMEs and comprising 'high seas' beyond the territorial waters of individual nations and exclusive economic zones of a number of islands. There was no existing method to draw on but the assessment has been designed to draw on data held in various internationally-agreed databases, and will reference these to ensure traceability. The importance of ongoing expert input was stressed.

Validation and Peer Review

The Open Ocean method was introduced at a number of meetings with the aim to refine the identification of priority issues rather than specifically validate the method.

- The May 2010 *Global Oceans Conference* session on marine indicators;
- The May 2010 *UN Oceans meeting*;
- The September 2010 *Twelfth Global Meeting of the Regional Seas Conventions and Action Plans*.
- The December 2010 *American Geophysical Union* meeting

No peer review comments were received through the peer review process organised in December 2010 by the TWAP Secretariat.

B. Review of the Method: Assessment and Indicators

The Open Ocean method is well written with an executive summary that sets out the rationale for the assessment. It broadly follows the structure proposed by the Communications and Publication CWG.

Objectives, Scope and Framework

The method identifies the purpose of TWAP as being '*to help the Global Environment Facility (GEF) identify priority areas for intervention in the management of shared water systems, as well as to help governments in managing their shared water bodies*'.

The Open Ocean WG adopted a similar conceptual framework to LMEs, designed to clarify the goals of the assessment, the relationship between human and natural systems and the choice of indicators based on key questions.

The Open Ocean approach differs from other water systems approaches in that, after thoroughly reviewing several options for characterising assessment units, the WG agreed on a thematic approach to the assessment reflecting management arrangements for the open ocean. This means the assessment would take place at just one level.

Stakeholders and Beneficiaries

The main user of the TWAP assessment results is identified as the GEF while it is anticipated that results will also feed into the UNGA 'Regular Process'.

The assessment is intended to include a cross-cutting assessment of key research and monitoring needs, with a view to developing clear and scientifically sound messages of relevance to policy makers. It will also include an identification of capacity building needs.

Data, Indicators and Sources

Indicators are organised under four major themes (climate, ecosystem, fisheries and pollution) are introduced in a clear, user-friendly manner that highlights the relationships and complementarity between the different metrics, indicators and indices. Relevance, data source and partners are identified to the extent possible in the report annex.

The WG emphasized that an assessment approach exclusively based on metrics, indicators, and indices was not feasible for the open ocean due to a lack of data. The role of ongoing expert assessment is emphasised in the method.

Interlinkages and Cross-cutting Themes

The report notes that there are surprisingly few interlinkages between the priority issues for the open oceans and the other water systems apart from strong links with LMEs in terms of physical and biogeochemical circulation links, migratory species, and continuous habitats. In terms of inputs, atmospheric deposition is more significant than outputs from (the relatively small) LMEs, while the major influence of oceans on other water systems is through rainfall derived from evaporation of freshwater from the ocean surface. The method includes a basic description of how these and other linkages will be handled under the different thematic components of the assessment but it does not describe how data will be shared with other water systems groups.

Outputs and Products

Outputs and products are not explicitly described but the method envisages a global mapping approach allowing for visual explanation of issues to policy makers at appropriate scales, overseen by IOC or GRID-Arendal.

Given the thematic focus of the assessment, geographical prioritisation is not addressed although mapping will allow areas of concern to be pinpointed by theme. Preliminary approaches are described for mapping cumulative impact and for forecasting scenario analyses, both recognised as needing further work.

C. Review of the Method: Partnership and Arrangements

The partnership and institutional arrangements at the Open Ocean level are built around establishment of a small secretariat with a dedicated coordinator and of a partnership of institutions to undertake mapping of indicators and implementation of expert assessments.

For mapping of indicators, partners are identified for each assessment component and their comparative advantage and roles are defined. For the expert assessment, two groups of authors will be engaged based on an open call to GEF, TWAP Partners and UN-Oceans members. Financial support to authors would be provided on a needs basis where institutions are unable to contribute.

The December 2010 draft of the method does not include costing for the baseline assessment nor any indication of cofinance but this information was being compiled for the final report building on preliminary data that were presented at the February 2011 Steering Committee meeting.

D. Conclusions

The Open Ocean WG has developed a well-justified method that addresses the specific challenges presented by the open ocean system. The extent to which this water system differs to other systems underscores the value of the individual water-system specific approach adopted by the TWAP as compared to the single method adopted in the Global International Waters Assessment (GIWA).

The method provides a sound foundation for moving forward to the baseline assessment and the assessment itself is expected to yield useful information for guiding GEF investments and, over time, development of better targeted management interventions.

Annex 9. Feedback on Comments Received on the Draft Report

Source	Comments	Evaluators' Response
Project Secretariat	<p>Draft 18 March 2011: 154: The capacity of the Secretariat was significantly curtailed during the last months of the project from <i>December 2010</i> as a result of the reduced working hours of the project manager based on medical advice (that was unrelated to the working environment). The DEWA team made efforts to compensate for this shortfall but was at time stretched in view of other commitments. <i>The reduced capability in terms of providing technical guidance on finalisation of methodologies, including partnerships and implementation arrangements, was regrettable.</i></p> <p>Zero Draft- 16 March 2011: 154: The capacity of the Secretariat was significantly curtailed during the last months of the project as a result of the reduced working hours of the project manager based on medical advice (that was unrelated to the working environment). The DEWA team made efforts to compensate for this shortfall but was at time stretched in view of other commitments. <i>The reduced capability in terms of providing technical guidance on finalisation of methodologies was regrettable.</i></p> <p>The revised sentences give a more misleading picture of the situation than in the Zero draft. Actually all methodologies were submitted before December 2010 and the Secretariat had given all technical guidance regarding methodologies and partnership arrangements before December as well. The latest effort was to open 15th December, 2010 the online Partnership Database (name: Partner DB) on the TWAP web site.</p> <p>Your response to our comment/argument on paragraph 154 as disingenuous is most unfortunate. Guidance on partnership and implementation arrangement had been provided to WGs throughout the implementation and during the IMAIG including comments from GEFSEC on the July drafts. The period you are referring to here as when the Project Manager was ill is irrelevant given the activities on the work plan of the project. Project implementation was a team approach. WGs were not officially informed at any point that the PM was on sick leave. The focus during that period has nothing to do with technical guidance on finalization of partnerships and implementation arrangements which was one of the components from the word go.</p>	<p>It is clear that the methods were not finalised by the time of the February 2011 Steering Committee. WG's reported that they regretted the lack of guidance and direction in the later stages of the project.</p> <p>We are not in a position to confirm whether this was due to or exacerbated by staff absence and have already noted elsewhere the role played by the change in strategic direction that undermined the secretariat's authority and direction.</p> <p>The offending sentence has been removed. It was not intended to be viewed as a criticism of the secretariat and we apologise for any inadvertent offence this may have caused.</p>
ILEC	p2, Acronyms. ILEC's correct name is International Lake Environment Committee Foundation (ILEC). It incorrectly says "Lakes".	Corrected
	Same mistake in Paragraph 22.	Corrected
	Paragraph 143. "There was some tendency for groups to become isolated notably in the case of the Lakes that appears to have been increasingly out of the loop on guidance provided through informal communications." Well, if we are out of the loop, we don't know if we're out of the loop, now do we? Can the Evaluator explain this so we know what is going on? Our biggest problems are the lack of circulation of our promptly-submitted documents as well as a lack of GEFSEC	The text has been clarified. While some other groups had informal contacts with GEFSEC, ILEC was not party to such informal communications to the same extent. This is no fault of ILEC's especially since such communications were at odds with the agreed

	response to our multiple queries let alone specific comments on our methodology.	communications protocol.
	Annex 4 -Working Group Outputs and Related Reports, there should be a space between "for" and "lakes".	Corrected
	Annex 8 – various	These changes have been made. However it should be noted that the version of the method provided to the evaluators refers to evaluation levels 1.5 and 2, rather than levels 1.2 and 1.3 suggested in the comments. For consistency, this change is also reflected in paragraph 66.
Isabelle Vanderbeck	Para 2. Needs editing? [text flow]	Done
	Para 6. This para speaks in past tense whereas para 7 is presented in present tense. Shouldn't we harmonise the tenses	Done. All is now in past tense.
	Para 38. Out of curiosity - what would you have wanted to get out of this comparison other than perhaps gauging the relative success. Corporate projects per se are actually very few. Most global projects are in my view very targeted LOICZ project on C, N,P budget s in the ocean, or the regionally based POPs assessment project, ...helping the GEF filling in the knowledge base gaps as opposed to GIWA and TWAP serving the GEF IW Focal area in the absence of a convention hence indeed fulfilling a real corporate role.	This is a response to the suggestion of benchmarking in the TOR. It would at best have been possible to gauge relative success in this kind of project.
	Para 42. Is the wording really accurate. I would perhaps say something like "...during the MSP closure process....in organizing the closing Steering Committee	The Secretariat was also busy with the PIF and PG discussions that are beyond the TWAP MSP as such. Hence reference to a process of preparing the TWAP - but this wording has been clarified.
	Para 48. The river system validated /tested their methodology in two different locations.	We believe it was tested in only one location in the end – but this paragraph is referring explicitly to changes at the level of the results framework where reference to validation was dropped.
	Para 48. Stakeholder validation was handled differently by the WGs. E.g. the GW group validated the methodology with all the key GW stakeholder group representatives on the occasion of an ISARM event in Paris in Dec. 2010	The individual group validation efforts are described in more detail in Annex 8, but most groups acknowledge shortcomings.
	Para 49. Should they be listed [additional activities mentioned in the PIF]	Added in brackets – this is a minor point. In fact there was only one – the activity numbers in the PIR are repeated so it's hard to follow.
	Para 51. Not sure this is very clear as stated. Might be worth elaborating. [Weaknesses in final methodologies]	These are described in detail in Annex 5 (referenced in the previous paragraph in the text) but I have added a few words for clarity.
Para 63. That is true indeed but I believe this is more something which will happen once the assessments are undertaken. This project although assessed/evaluated as a standalone one, forms part of a process and is somehow to be considered like a preparation phase [Approach to	One concern is that once a process for prioritisation is agreed (that may be two pronged – i.e. need and tractability) the methods will need to be tweaked to	

prioritisation]	provide the necessary data /information.
Para 65. Out of curiosity, which ones given that it was a decision made unanimously I was told.[Dissatisfaction with treatment of interlinkages]	These were mainly ‘technical partners’ – i.e. WG members, who in some cases represent potential clients.
Para 65. I personally believe that these linkages are inevitable hence the matter will resurface as we proceed with the analysis of the assessment results. Depending how soon this is realised we might actually need o readjust the methodologies in the course of the FSP. [And] I am not sure to understand why it is outside the scope of IW?	Agreed. we have added a few words to clarify outside scope of IW – the more systemic approach some partners would have liked could arguable not be accomplished looking only at IW systems but would require examination of the full system.
Para 77. Not sure to get the point [Roll-out of methodologies]	This relates to level 2 assessment that at least some partners envisage as more than a top down /desk exercise. Roll out of <i>methods</i> changed to roll out of <i>assessments</i> .
Para 78. I am not sure to fully understand the value added of having more partners in the SC. Partners input was needed at the WG level. At the level of the SC we only needed reps of each system mostly with those champion fully able to speak on behalf of their constituencies. In the SC1 we did connect River partners via telecom.	Agreed. The paragraph relates to sentiment around voluntary inputs (reflected in lessons on voluntary /WG membership); it doesn’t say they should have taken part in the SC. In this project the SC also played a technical coordination role.
Para 80. Not sure to get the point. Might benefit from being clarified [elasticity of timing]	The original timing for the project was generous but the extended inception phase meant the WG started late; there was no longer sufficient buffer time to accommodate the quite radical change in direction. <i>Elasticity</i> changed to <i>flexibility</i> .
Para 83. Shouldn’t they be specified. Indeed the TE serves as well as the report for the project hence would benefit from being as complete as possible especially given that all of those statement and key recommendations will be critical inputs for the PPG [Incomplete treatment of crosscutting & operational issues]	These are specified under effectiveness and in the recommendations
Para 85. I would say for rather than of	OK – though I think the MSP intention was ‘of’
Para 87. The main constraint to this impact assessment in my view is that the MSP is a large PPG rather than a standalone project meant to generate environmental impacts per se. The impact/result I see is that we had no detailed and specific water body based assessment methodologies. We now do. Such methodologies could potentially service all SPs of GEF4 but also most SP1,2 and 4 of GEF5 unknown at the time of the MSP design in GEF4. [Refers to RoTI]	Agreed that the ROTI is working very upstream from this impact – the causal chain in Annex 6 describes this longer journey and makes assumptions explicit. Reference to GEF 4 SPs is elsewhere in the report as per TOR; I have not explicitly considered GEF 5.
Para 109. I suppose you refer to a PCU? [project coordination] .. [and] Noted but believe this forms integral part of any given project. One cannot really do without a coordination team. Who will write as an example the annual PIR?	This reference to coordination would not necessarily imply a (large) central PCU – structure should follow function here. I have changed ‘strong’ coordination to ‘large’ - the alternative being a small coordination that deals only with project management aspects.
Para 127. Such as ? [partners unable to contribute as fully as they would have liked]	Changed to specify technical partners. There are related lessons on working group participation.

Para 132. I am not sure to understand what is meant here? [pre-selection of LMEs]	Changed to <i>pre-identification</i>
Para 135. Andy Hudson of UNDP was commented for part of the SC1	Ok – revised accordingly
Para 152. They were tabled at the SC1 given the bilateral dialogue between some WG lead and GEFSec [communications protocol]	This aspect is referred to later in the paragraph.
Para 153. I would reword this para to read “The draft terminal report has reflected this tension under ‘lessons learned’ stating that the direction of GEFSEC..” as this is more accurate	Done – this is clearer.
Para 153. To read “A wide range of experts...”? .. [and] Two verbs?	Both corrected
Para 159. Validation/stakeholder consultation as sated in my above comment was not dropped per se but rather ‘practiced’ differently by the WGs	Both aspects were dropped as a systematic actively (i.e. in the results framework). Phrasing has been clarified
Para 161. This contradicts para 159?!	Not really – these were individual approaches. Further details in annex 8.
Para 250. But there was \$\$ for that in the MSP. We ran short and DEWA added \$ to make sure AI could come to the last Feb 2011 SC in business class including 2 days prior to the meeting and one day post meeting...	The text notes both where the GEFSEC did take part and highlights this was valuable, but also the regrettable absence in the PPG stage. Hence the lesson refers to desirability of participation at all stages.
Rating table – A : It seems that what I thought would have been an average is actually the lowest rate in the category. Is there a reason for that?!	This is the as per guidance for completing the table “the aggregated rating for Attainment of objectives and results may not be higher than the lowest rating on either of these two criteria” [Relevance and effectiveness]. I have added a footnote.
Rating categories on sustainability: L is missing?	I have corrected the ratings – these should be L, ML, MU, and U. This doesn’t affect the ratings provided.
Para 271 (Rec 4). Why not in PPG?	This could be in the PPG but I preferred not to make too many assumptions about what the GEF may approve in terms of next steps.

Annex 10. The Evaluators

Sarah HUMPHREY, PhD

Profile

Over 18 years working on environmental research and policy, project and programme development and institutional strengthening with a wide range of non-governmental, intergovernmental and research organisations in Europe and Africa.

Technical background in environmental management, policy and governance, sustainable development, conservation, and project and programme evaluation

Education

Open University Business School: MBA (Merit)

Department of Marine Sciences and Coastal Management, University of Newcastle

PhD: *Analysis of Approaches for Evaluating the Success of Coastal Management in Europe*

King's College, University of London: BSc. (Hons Class I): Human Environmental Science

Coastal Resources Center, University of Rhode Island: Summer Institute in Coastal Management

Employment

From 2008 **Consultant in Environment, Sustainable Development and Conservation** for WWF, IUCN, Oxfam International, UNEP, EC, WIOMSA, IOC ReCoMaP, and others

2000 - 2007 **WWF International, Gland, Switzerland**
Programme Officer, Africa and Madagascar Programme

1999 – 2000 **European Commission, Brussels, Belgium**
Stagiaire, Environment Directorate: Nature, Coastal Zones and Tourism

1997 - 1999 **University of Newcastle, UK**
Research Associate, Department of Marine Sciences and Coastal Management

1996 - 1997 **Western Indian Ocean Marine Science Association (WIOMSA), Zanzibar, Tanzania**
Development Officer

1990 - 1995 **IUCN - The World Conservation Union, Switzerland & Kenya**
Research Assistant then Programme Officer, Marine and Coastal Programme

Arun ELHANCE, PhD

Dr. Arun P. Elhance is an independent consultant/author/editor/strategic advisor based in Nairobi, Kenya. He works in the fields of environment (including climate change and water resources), sustainable development and environmental security. He is the author of *Hydropolitics in the 3rd World: Conflict and cooperation in International River Basins* (Washington, DC: US Institute of Peace Press, 1999) and several refereed journal articles and newspaper op-eds on various themes.

Some of the clients he has recently assisted with research and analysis, strategic planning, report writing and editing, and evaluations include:

- African Ministers Council on Water (AMCOW)/African Union (AU)
- African Ministers Council on Science and Technology (AMCOST)
- African Network of Basin Organizations (ANBOW)
- Africa Groundwater Commission (AGWC)
- United Nations Environment Management Group (EMG)
- UN Water/Africa
- United Nations Environment Programme (UNEP) and UN Habitat
- GTZ, SNV, WaterAid, GWP
- African Civil Society Network on Water and sanitation

He was a Jennings Randolph resident Senior Peace Fellow at the US Institute of Peace in Washington DC during 1991-92. His educational qualifications include:

- Ph.D. -- Economic/Political Geography, Boston University, 1987
- M.A. -- Operations Research, Lancaster University, 1973
- B.Sc. (Hons) -- Mechanical Engineering, London University, 1971
- B.Sc. -- Physics, Chemistry and Mathematics, Agra University, India, 1968

Dr Elhance has been a faculty member at the Indian Institute of Management, Bangalore, India (1976-79); Boston University, Boston, USA (1979-84) and at the University of Illinois at Urban-Champaign, Illinois (1984-1991). He was a senior programme/organization manager at the Social Science Research Council (SSRC), New York, USA (1993-1996); International Peace Academy (IPA), New York, USA (1996-2000); and World Conference on Religions for Peace (WCRP), New York, USA (2000-2003).

Dr Elhance is a film-maker on the living conditions in the slums of Nairobi, Kenya and is planning to make a feature-length film with artists from India and Kenya.