



# PROJECT IDENTIFICATION FORM (PIF) <sup>1</sup>

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

## PART I: PROJECT IDENTIFICATION

Project Title:	A Transboundary Waters Assessment Programme: Aquifers, Lake/Reservoir Basins, River Basins, Large Marine Ecosystems, and Open Ocean to catalyze sound environmental management.		
Country(ies):	Global	GEF Project ID: <sup>2</sup>	4489
GEF Agency(ies):	UNEP (select) (select)	GEF Agency Project ID:	00658
Other Executing Partner(s):	DHI Centre, UNESCO IOC, UNESCO-IHP, ILEC – see Annex 3 for more details	Submission Date: Resubmission Date: Resubmission Date: Resubmission Date:	18 March 2011 01 August 2011 30 November 2011 09 December 2011
GEF Focal Area (s):	International Waters	Project Duration (Months)	24
Name of parent program (if applicable): ➤ For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	500,000

### A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
IW-1 (select)	Outcome 1.4: Climatic variability and change as well as groundwater capacity incorporated into updated SAP to reflect adaptive management	Enhanced capacity for issues of climatic variability and change and groundwater management	GEFTF	3,300,000	13,210,000
IW-2 (select)	Outcome 2.4: Climatic variability and change at coasts and in LMEs incorporated into updated SAP to reflect adaptive management and ICM principles (including protection of “blue forests”)	Enhanced capacity for issues of climatic variability and change	GEFTF	400,000	6,114,500
IW-4 (select)	Outcome 4.2: Plans and institutional frameworks for pilot case ABNJ have catalytic effect on global discussions	Demonstrations for management measures in ABNJ, (including deep-sea fisheries, ocean areas) with institutions	GEFTF	600,000	1,940,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others	Others (Data and Information Management, Networking and Monitoring)	GEFTF	450,000	1,044,000
Sub-Total				4,750,000	22,308,500
Project Management Cost <sup>4</sup>			GEFTF	250,000	1,765,500

<sup>1</sup> It is very important to consult the PIF preparation guidelines when completing this template.

<sup>2</sup> Project ID number will be assigned by GEFSEC.

<sup>3</sup> Refer to the reference attached on the [Focal Area Results Framework](#) when filling up the table in item A.

<sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project.

<b>Total Project Cost</b>		<b>5,000,000</b>	<b>24,074,000</b>
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## B. PROJECT FRAMEWORK

<b>Project Objective: To undertake a global assessment of transboundary water bodies, through a formalised consortium of partners, to support informed investments by the GEF and other international organizations, and to be sustained through a periodic process in partnership with key institutions aiming at incorporating transboundary considerations into regular assessment programmes.</b>						
<b>Project Component</b>	<b>Grant Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>Indicative Grant Amount (\$)</b>	<b>Indicative Cofinancing (\$)</b>
Component 1: A global comparative baseline assessment of transboundary aquifers (TBAs) using the TWAP Aquifers assessment methodology, including groundwater in SIDS, as well as a sustainable partnerships of international organisations and regional and global expert networks for periodic assessment of TBAs.	TA	<p>Improved strategic focus and cost-effectiveness of investments of GEF and other international agencies and programmes, based on a solid scientific foundation.</p> <p>Improved country capacity to manage transboundary aquifers by using TWAP TBA assessment methodology.</p> <p>Improved review of the state of transboundary water concerns in TBAs through a periodic sustainable assessment process linked to regular assessment programmes .</p>	<p>A systematic assessment of current status of at least 200 transboundary aquifers including aquifers in SIDS as well as provisional outlook projections of future status, with consolidated results within 24 months.</p> <p>A sustainable consortium of partners among institutions and experts, within 24 months.</p> <p>A data and information management system that will include assessment results, indicators, and links to partners, data sources and the TWAP platform (draft system set up within 6 months of project start, rolling improvements until project end at 24 months)</p> <p>A communication strategy for periodic reporting to stakeholders. (draft within 6 months of project start, rolling improvements until project end at 24 months)</p>	GEFTF	1,500,000	6,000,000
Component 2: A comparative baseline assessment of selected transboundary lake basins and lake basins in peril, using the TWAP Lake Basins methodology, as well as a sustainable partnerships of international organisations and	TA	<p>Improved strategic focus and cost-effectiveness of investments of GEF and other international agencies and programmes, based on a solid scientific and socio-economic foundation.</p> <p>Improved capacity to manage transboundary lake basins and linked</p>	<p>A systematic assessment of selected transboundary lake basins and lake basins in peril, in cooperation as appropriate with River Basins Workgroup, and relevant provisional outlook projections for lake basins in peril.</p> <p>A sustainable consortium of partners among institutions and experts.</p> <p>A data search engine</p>	GEFTF	300,000	1,210,000

regional and global expert networks involved in periodic assessment of lake basins.		lentic and lotic water systems.  Improved review of the state of transboundary water concerns in lake and linked water systems through a periodic sustainable assessment process linked to regular assessment programmes.	system (LAKES) for use in acquiring relevant data from multiple input sources  A communication strategy for periodic reporting to stakeholders.			
Component 3: A global comparative baseline assessment of transboundary river basins basins, using globally available information from data bases, and simulation modelling, as well as a sustainable partnerships of international organisations and regional and global expert networks for periodic assessment of river basins	TA	Improved strategic focus and cost-effectiveness of investments of GEF and other international agencies and programmes, based on a solid scientific foundation.  Improved country capacity to manage transboundary river basins.  Improved review of the state of transboundary water concerns in river systems through a periodic sustainable assessment process linked to regular assessment programmes .	A systematic assessment and provisional outlook projections for approximately 260 transboundary river basins, including selected rivers, lakes and deltas at risk , with draft results within 12 months and consolidated results within 24 months.  A sustainable consortium of partners among institutions and experts (by 24 months).  A data and information management system that will include assessment results, indicators, and links to partners and data sources and the TWAP platform (preliminary system established within 18 months).  A communication strategy for periodic reporting to stakeholders, established within 6 months.	GEFTF	1,500,000	6,000,000
Component 4: A global comparative baseline assessment of large marine ecosystems (LMEs) using the TWAP LME assessment methodology and a sustainable partnerships of international organisations and regional and global expert networks for periodic assessment of LMEs.	TA	Improved strategic focus and cost-effectiveness of investments of GEF and other international stakeholders based on a credible/valid scientific foundation  Improved country capacity to assess and manage LMEs.  Improved review of the state of transboundary water concerns in	A systematic assessment of state and stressors and provisional outlook projections for 64 LMEs including impacts on human wellbeing within 24 months, based on ecological status, stress, socio-economic and governance indicators.  Sustainable partnership among institutions and experts to conduct periodic assesment of LMEs within 24 months.	GEFTF	400,000	6,114,500

		<p>LMEs through a periodic sustainable assessment process linked to regular assessment programmes .</p>	<p>A communication strategy for periodic reporting to stakeholders within 6 months.</p> <p>A data and information management system that will include assessment results, indicators, and links to partners, data sources and the TWAP platform within 24 months.</p>			
<p>Component 5: A global baseline assessment across themes important for the open ocean, considering human and natural system vulnerabilities, and using elements of the TWAP Open Ocean methodology.</p>	TA	<p>Enhanced global cooperative management action on environmental issues involving the open ocean and affecting human wellbeing.</p> <p>Improved strategic focus and cost-effectiveness of investments of GEF and other international agencies and programmes.</p> <p>Improved review of the state of the open ocean through a periodic sustainable assessment process linked to regular assessment programmes</p>	<p>A metric- and mapping-based assessment (at least three global maps) transforming existing scientific data and projections for the open ocean into stakeholder-relevant information for several themes of relevance (within 12 months).</p> <p>Individual review assessments of high uncertainty but potentially high impact of environmental issues and governance arrangements (within 24 months).</p> <p>Growing partnership among institutions and experts to conduct periodic assesment of the open ocean (within 24 months).</p> <p>A data and information management system that will include assessment results, indicators, and links to partners, data sources and the TWAP platform (within 24 months).</p>	GEFTF	600,000	1,940,000
<p>Component 6: Data and information management, networking and monitoring.</p>	TA	<p>Improved data and information management in support of the project per se and in support of a periodic and long term assessment process</p> <p>Improved knowledge management with compiled knowledge and experiences about</p>	<p>A project data and information management platform for show casing and vizualising main assessment results and as a clearing house on transbouydray water system information (by 24 months).</p> <p>Dedicated project website connected with IW:LEARN</p>	GEFTF	450,000	1,044,000

		the project shared with other GEF projects and GEF Sec. and accessible on IW:LEARN, and use of the GEF5 IW indicator tracking system.	and other GEF knowledge management systems (within 6 months).  Participation at the International Waters conferences; three to four experience notes and tracked project progress reported using the GEF5 IW tracking tool.  Periodic reports and reviews of project performance.			
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Sub-Total					4,750,000	22,308,500
Project Management Cost <sup>5</sup>				GEFTF	250,000	1,765,500
<b>Total Project Costs</b>					<b>5,000,000</b>	<b>24,074,000</b>

**C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$) -**  
**PLEASE SEE ANNEX I FOR SUMMARY AND DETAILED BUDGET BREAKDOWN PER COMPONENT AND SOURCE OF FUNDING**

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
GEF Agency	UNEP-DEWA	Grant	1,790,500
Bilateral Aid Agency (ies)	DHI Center with partners SIWI, IUCN, Kassel and Frankfurt Univ., City University of New York, Oregon State Univ., IGBP, CIESIN & others	Grant	425,000
Bilateral Aid Agency (ies)	DHI Center with partners SIWI, IUCN, Kassel and Frankfurt Univ., City University of New York, Oregon State Univ., IGBP, CIESIN & others	In-kind	5,575,000
Bilateral Aid Agency (ies)	UNESCO-IHP, with partners; IGRAC, WWAP, ISARM, FAO, OAS, OSS, University of Frankfurt, ETHZ, University of Western Cape, UN regional economic commissions, European Commission & others	Grant	400,000
Bilateral Aid Agency (ies)	UNESCO-IHP, with partners; IGRAC, WWAP, ISARM, FAO, OAS, OSS, University of Frankfurt, ETHZ, University of Western Cape, UN regional economic commissions, European Commission & others	In-kind	5,600,000

<sup>5</sup> Same as footnote #3.

Bilateral Aid Agency (ies)	ILEC with partners; Shiga Univ., Texas State Univ., RIHN; Russian Academy of Sciences; Lake Laguna Development Authority; Chlika Development Authority; Federal Univ. of Rio de Janeiro; Indian Association of Aquatic Biologists; Univ. of Palermo; Univ. of Nairobi; and Pro-Lago Atitlan.	In-kind	1,210,000
Bilateral Aid Agency (ies)	UNESCO-IOC with partners; NOAA, CERMES, CMAP, GESAMP, IGBP/LOICZ, WCMC, UBC Sea Around Us project, Univ. Dalhousie, Univ. Miami, GOOS, EC-GEOWOW, WCRP, GRID-Arendal and others	Grant	4,315,000
Bilateral Aid Agency (ies)	UNESCO-IOC with partners; NOAA, CERMES, CMAP, GESAMP, IGBP/LOICZ, WCMC, UBC Sea Around Us project, Univ. Dalhousie, Univ. Miami, GOOS, EC-GEOWOW, WCRP, GRID-Arendal and others	In-kind	3,739,500
National Government (select)	Finland	Grant (select)	1,019,000
<b>Total Co-financing</b>			<b>24,074,000</b>

**D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>**

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
UNEP	GEF TF	International Waters	Global	5,000,000	500,000	5,500,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
<b>Total Grant Resources</b>				<b>5,000,000</b>	<b>500,000</b>	<b>5,500,000</b>

<sup>1</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table <sup>2</sup> Please indicate fees related to this project.

## **PART II: PROJECT JUSTIFICATION**

### **A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

#### **A.1.1 the GEF focal area/LDCF/SCCF strategies:**

The proposed project is consistent with GEF-5 International Waters Focal Area Strategy and responds to Strategic Priorities 1,2, and 4 of the International Waters Strategy, as well as the Strategic Goals of the GEF-5 Programming Document, by undertaking a global assessment of transboundary water bodies, through a formalised consortium of partners, to support informed investments by the GEF and other international organizations, and to be sustained through a periodic process in partnership with key institutions, aimed at incorporating transboundary considerations into regular assessment programmes.

#### **A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:**

NOT APPLICABLE

#### **A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:**

To the extent possible and feasible given its scope, while the proposed project is global, it can support existing and future GEF IW TDA-SAP projects that are country-driven, by assessing transboundary waters, developing sustainable partnerships for assessments, and providing feasible assessment methodologies that can be adapted and implemented for all transboundary water systems. The proposed project will be linked to planned and ongoing assessment activities at national, regional and global levels, including GEF projects, by embellishing them and adding value to the data and information they produce, through analysis and synthesis. This project will in some form also provide a basis for identifying regional priorities within the defined assessment units. Therefore, the project will contribute to support the national and transboundary priorities in international waters of practically every GEF-eligible country. The project will be closely linked with the UNEP Regional Seas Programme (RSP), under which 18 Regional Seas Conventions and Action Plans exist around the world. Further, the project will be linked with the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and associated National Action Plans, and the UNGA 60/30 Regular Process. The countries are also parties to other international agreements and frameworks with relevance to aquatic issues, such as UNFCCC, MARPOL, CBD, Ramsar, FAO Code of Conduct for Responsible Fisheries, River Basin Organisations and Commissions. TWAP will be closely linked with the UN World Water Assessment Programme, the flagship programme of UN Water. All these frameworks need indicators and assessments for monitoring and reporting on the relevant component of the environment. The assessments will also support efforts towards achievement of the MDG and WSSD targets, through the assessment of the water systems around the globe and the development of the cooperative interactive network of partners that will implement such assessment. In particular, support is expected for the achievement of Goal 7 (Ensure Environmental Sustainability) of the MDGs.

### **B. PROJECT OVERVIEW:**

#### **B.1. Describe the baseline project and the problem that it seeks to address:**

##### ***The Problem***

The ecosystem services provided by the world's water systems (groundwater aquifers, lake basins, river basins, large marine ecosystems and the open ocean) support the socioeconomic development and wellbeing of the world's population. Many of these systems extend across, or lie beyond, national boundaries, and are referred to as "transboundary waters". These systems, which cover most of the planet, continue to be impacted and degraded by multiple and complex

human-induced and natural stresses that threaten the sustainability of these resources and, in turn, human survival and wellbeing. Further, management of Transboundary waters is increasingly becoming constrained by limited availability of funds, resulting in the need for better prioritization of the allocations of limited financial resources. One of the major constraints to the effective management of transboundary waters is the lack of a systematic, periodic global comparative assessment of their changing conditions in response to changing stresses. A systematic aggregation and analysis of available data at the transboundary scale is needed to allow GEF and others to set priorities for funding allocations, and to document the results of their investments in relation to the changing state of these transboundary systems. This project is proposed to address this need for a global assessment of transboundary waters. Such assessment has never before been undertaken for all transboundary waters.

The required data, information, modelling results and expertise are presently scattered among different sources, including governments, regional organisations, academic networks funded by governments, research programmes, private sector, and local and indigenous communities. Systematic utilization of the enormous data and information base and expertise in an integrated manner would take advantage of potential synergies to produce the TWAP assessment in an efficient and cost effective manner. This would require formalizing partnerships with these diverse sources of data and expertise, as well as establishment of institutional arrangements, in order to provide a sustainable, cost-effective process for transboundary waters assessments. Many of these institutions were already involved in the MSP, and have indicated their interest in participating in the proposed project.

The proposed project will formalize these partnerships and institutional arrangement to establish a sustainable global process for transboundary waters assessment, and to add value to the array of ongoing initiatives to produce the first global assessment of transboundary waters.

In addition to the difficulties associated with scattered data and information, another problem is that, despite the existence of many global-scale water assessment programmes (run by UN and other international or regional organisations), they are not highlighting the transboundary issues, which require more attention from the riparian and littoral countries. These factor is an impediment to allow the cross-reference of water systems of the same type (river basins, lake basins, groundwater aquifers, etc.).

### ***The Baseline Projects***

The conduct of systematic and indicator based assessments for groundwater aquifers, lake basins, river basins, large marine ecosystems, and the open ocean around the globe, will build on the baseline further described in Annex 2. The added value of GEF incremental funding through the TWAP is transforming dispersed information into an assessment useful to underpin high-level management decisions that lead to enhanced sustainability of the ecosystem goods and services associated with Transboundary waters. Through the activities of this project, the GEF will add an integrated approach to baseline assessment programmes of relevant partners, thereby facilitating the acquisition and analysis of the obtained information and modeling results that are fundamental to producing the needed transboundary waters global assessment.

***Transboundary Aquifers.*** The programmatic baseline for the Transboundary Aquifers (TBAs) Assessment is largely based on the relevant work and activities of the four members of the TWAP groundwater coalition core group: UNESCO-IHP, IGRAC, UN WWAP, and FAO. UNESCO-IHP has 35 years of institutional experience at the global scale, and its ISARM and WHYMAP flagship programmes provide access to the most comprehensive data and knowledge on TBAs available. IGRAC commands the Global Groundwater Information System (GGIS), relevant TBA data sets special thematic projects, as well as mapping of TBAs. The UN's WWAP and World Water Development Reports I to III highlighted the most recent global-scale knowledge on freshwater



resources. FAO's AQUASTAT provides comprehensive data on water resources and water use, including the Global Map of Irrigation Areas (GMIA). The monetary value of these baseline programmes that contribute data, information and expertise to the TWAP assessment of Transboundary Aquifers is estimated at **3 million USD**. Incremental funding provided by the GEF will allow for addressing knowledge gaps, and advancing the knowledge on TBAs globally, by establishing a long-term partnership and pooling of data and information.

***Transboundary Lakes Basins.*** The Lake Basin assessment methodology builds on more than 25 years of intense, collaborative, international work on Integrated Lake Basin Management (ILBM) led by the International Lake Environment Committee (ILEC) Foundation (**\$25 million**), as well as monitoring and assessment activities carried out over recent decades in individual lake basins, as well as global-level datasets not developed specifically for lakes, but nevertheless directly applicable to the TWAP assessment (**\$500 million**). The value added by TWAP to this ongoing international work is to: (1) develop formal ILBM indicators applicable to transboundary lake basins, and (2) improve the integration of rivers, groundwater and Large Marine Ecosystems into the ILBM concept.

***Transboundary River Basins.*** The River Basins assessment methodology builds on ongoing baseline programmes of partners, worth **US\$ 30-40 million over the last 10 years**. This includes global modeling and assessments from the Universities of Kassel, Frankfurt, and New York, Center for International Earth Science Information Network (CIESIN), International Geosphere-Biosphere Programme (IGBP), and IUCN. This is complemented by projects and institutional experience in water governance associated with the UNEP-DHI Centre, Stockholm International Water Institute (SIWI), and Oregon State University. The assessment will utilize global datasets from the World Bank, FAO, UNICEF/WHO, and the Global Water System Project (GWSP), among other sources. Incremental funding provided by the GEF will allow for filling knowledge gaps and advancing the knowledge on transboundary river basins globally, by establishing a long-term partnership and pooling of data and information.

***Large Marine Ecosystems.*** The TWAP LME assessments will build on a substantial programmatic baseline, consisting of a wide array of global, regional and national monitoring/observing and assessment programmes and datasets relevant to key indicators for assessing LMEs. These sources include satellite remote sensing information, empirical observations and mathematical modeling from organizations such as IOC-UNESCO, NOAA, UNEP, UNEP-WCMC, University of British Columbia 'Sea Around Us' project, IGBP, CERMES, GESAMP and FAO. Similarly, baseline assessments can build on the State of the Marine Environment conducted periodically by the Regional Seas Conventions and Action Plans. The value of this programmatic baseline collectively amounts to about **US\$ 10.5 million**. However, this baseline has not previously been harnessed in an integrated, coordinated manner for a comprehensive global assessment of LMEs. The GEF increment will catalyze a partnership among these and other key organizations to enable such a global assessment.

***Open Ocean.*** The Open Ocean methodology builds on natural science observations and research coordinated globally by the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO)'s Global Ocean Observing System (GOOS). **The IOC coordination effort of \$1 M/year leverages about \$2 billion/year of national investment in global ocean observations.** A specific grant to IOC-UNESCO from the European Commission (GEOWOW) will underpin the information management and mapping in the assessment. Thematic partner programmes in climate (the World Climate Research Programme WCRP), ocean ecosystems and biodiversity (CMAP, UNEP-WCMC), fisheries ('Sea Around Us,' FAO), pollution (GESAMP), and marine governance (CERMES, Dalhousie University) have elements essential to the TWAP Open Ocean assessment. The scientific community is active in

research on the link between human well-being and the management of the human impact on the open ocean, and a desk review of this literature will add to the assessment of potentially high-uncertainty but high-risk issues. The GEF increment will transform this extensive, but disperse, knowledge base into information of relevance to stakeholders, catalyzing political action and sounder policy and management.

***UNEP's baseline – a cross cutting contribution.*** Consistent with its mandate to keep the state of the global environment under review, and to promote scientific assessments of current and emerging issues for policy and decision making purposes, UNEP is providing the world community with improved access to, and better understanding of, meaningful environmental data and information. In doing so, it also is helping to increase the capacity of governments to use environmental information for decision-making and action-planning for sustainable human development. UNEP also works closely with many partners and collaborating centres in all regions of the world, and has over time established functional networks for data, information, assessments and capacity development. Further, in carrying out its mission, primarily through its Division of Early Warning and Assessment (DEWA), UNEP is implementing or participating in several ongoing global and regional environmental assessments, as well as the planned UNGA 60/30 regular process for Global Reporting and Assessment on the State of the Marine Environment, including the socio-economic aspects. UNEP's role in incorporating science into multi-national water projects has continuously been demonstrated through its oversight functions and its participation within in the framework of its Regional Seas Programme. This role includes development of a comprehensive framework for the study of various water systems, with the main objective of identifying, assessing and proposing best management options directed to fresh, coastal and marine waters. Under its Marine and Coastal Ecosystems Branch, UNEP coordinates the 18 Regional Seas Conventions and Action Plans representing 143 member countries. These legally-binding frameworks provide valuable entry points for conducting regular assessments at the national and regional level, including over 30 years of experience in developing State-of-the-Marine Environment reports. Similarly, UNEP also participates in the freshwater agenda at the international and national level, promoting scientific assessment and access to scientifically-credible environmental data and information, and supporting capacity building through its Freshwater Programme and Strategy, the GPA, GEMS/Water Programme, GEO water cluster, etc.

The UNEP DEWA and UNEP Regional Seas programmes baseline contribution from its global and regional assessment programmes and datasets is valued at \$2.5 million to support the TWAP (Rivers-LMEs-OO)

The assessments will build on existing assessments, with access to scientifically-credible data and information being made available through UNEP's programmes, and its long-term partnerships and networks. The GEF increment will facilitate the solidification of long-term coordinated partnerships in support of a periodic assessment process, the results of which will be of interest and value to scientists, decision-makers and the public. It will also promote and facilitate the incorporation of transboundary concerns into regular assessment programmes. Likewise as described above on a systemic basis, the assessments within the proposed TWAP effort will capitalize on those extensive, but disperse, knowledge base and assessment programmes, and water body-based studies, as a means of catalyzing sound policy and management at the GEF, regional and local levels.

**B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:**

**Baseline activities**

The TWAP methodologies for the five transboundary water systems are largely based on years of work by numerous world renowned institutions on various aspects of water systems analysis, monitoring, and management. The GEF International Waters focal area has also spent considerable funds to address issues of transboundary concerns identified by countries based on system-specific analyses of the transboundary waters and the root causes for degradation of their living resources environment.

**Business as usual scenario**

One of the major constraints to the effective management of transboundary waters at the present is the lack of a systematic, periodic assessment of their changing conditions, and their subsequent impacts on human wellbeing. This hinders the GEF and other agencies from setting priorities for funding allocations, and for documenting the results of its investments in relation to the changing state of these transboundary systems. Without the assessment framework proposed by this project, the ability of the GEF and international communities to prioritize their interventions would remain limited. Under the business as usual scenario, the efforts to assess transboundary water systems around the world are likely to continue in an unsystematic and inefficient manner. In the absence of GEF resources, and in the absence of a comprehensive governance framework, such as a Convention to guide international waters investments, little attention would be given to such a process that all for a robust science-based foundation, in the form of a global assessment of transboundary systems to support informed interventions in key strategic systems. Further, a lack of systematic utilization of available data, information and expertise around the world, results in a lack of synergistic effects regarding the use of the existing enormous, but scattered, data and knowledge base.

**Incremental reasoning**

GEF has invested over a billion dollars to date to address transboundary water concerns identified by countries, based on site-specific analyses of transboundary waters, which include assessment of the root causes of their environmental degradation. As described above, however, there currently is no global assessment specifically focusing on transboundary water systems, although there are a number of global/regional assessment programmes that are more sectoral in nature (e.g. fisheries assessment), or which assess both transboundary and domestic issues in a restricted and generic manner. Without a global comparative baseline system assessment to determine priority transboundary concerns, and priorities for investments, and to track the status of these water systems over time in order to determine whether they are exhibiting improvement or continuing degradation, the GEF and the international community risk spending their scarce financial resources in a manner that is not cost-effective. Such a global, comprehensive assessment has not yet been undertaken, since the existing assessment situation is quite complex, with many agencies collecting some relevant information, and global science organizations undertaking modelling and making projections based on the data collected. Additionally, there is no GEF programme for capturing and analysing the time series of data collected by GEF IW projects, the latter being a valuable addition to a global assessment. The MSP upon which this proposed project expands, has developed and validated system and indicator-based assessment methodologies, and has established a consortium of partners ready to collaborate and share information toward such a global assessment.

The proposed project will provide GEF, with tools for effective allocation and management of GEF financial resources for priority water bodies. It will also facilitate incorporation of “transboundary” aspects in ongoing and regular global water assessment programmes, as summarised above in “Baseline Projects” and presented in Annex 2. The proposed projections of the states of the assessed transboundary waters for 2030 and 2050 will be used for policy applications. Through pilot efforts on a smaller subset of groundwater aquifers, rivers, lakes, and LMEs, and a specific land area and population impacted by global open ocean conditions,

in-depth assessments of the root causes of environmental degradation will be conducted. The project will also contribute to addressing specific data gaps identified during the MSP that are of critical importance for assessing the five water systems at the global level.

The project, as appropriate, will identify “high risk” transboundary groundwater aquifers, lake basins, river basins, and LMEs, as well as “high risk” issues related to the open ocean that will allow the most cost-effective use of available funds. While seeking to minimize costs, the project will also add value by utilizing: (i) GEF IW projects, ongoing assessment processes, current datasets and information, and (ii) a consortium of partners established during the MSP, and effective coordination among agencies carrying out regular assessments, which will result in a significant cost-effective system assessment of transboundary waters, as well as helping to secure long-term sustainability of the assessment. Thus, the GEF contribution to this project is both catalytic and incremental. Given that the project will focus on assessing transboundary water concerns, it is wholly incremental to the baseline efforts. The proposed global assessment of transboundary water systems in identifying the most urgent problems, and therefore priorities, and the most cost-effective investments will help maximise global environment benefits.

This project is designed with the perspective that, by understanding the existing situation regarding transboundary water systems, it may have at least a catalytic, and hopefully a transformational impact on global political discussions directly to finally addressing transboundary waters. This would occur through project partners and their intergovernmental and political processes, as well as through global political processes related to oceans and water.

#### Project Description

The proposed project will be structured as follows:

***Component 1: Transboundary Aquifers.*** The objectives of the transboundary aquifers (TBAs) component of TWAP are to (i) Provide a description of the present conditions of transboundary aquifers, and aquifers in small island developing states (SIDS), that will enable the GEF IW Focal Area to determine priority aquifers/regions for resources allocation; and (ii) bring to global attention the major issues, concerns and hotspots of these transboundary aquifer systems and SIDS aquifers, and to catalyze actions. The results of the TBA component (global assessment of transboundary aquifers, including socio-economic and governance aspects) will assist GEF and other TWAP users in addressing the following key questions: (i) what human and ecosystem uses of these water resources are currently affected or impaired; (ii) how will water conditions and uses develop during the next decades; and (iii) where will these problems be occurring. It will also include provisional outlook projections to 2030 and 2050 for a limited number of indicators.

***Component 2: Lake Basins.*** The objective of the Lakes component is to provide the GEF with a stakeholder-validated assessment of selected lake basins and ‘lakes in peril, and linked lentic and lotic water systems, including socio-economic and governance aspects, for setting science-based priorities for stakeholder attention. Such objectives include (i) identifying selected transboundary lake basins and linked lentic-lotic water systems; (ii) developing a set of relevant lake-basin indicators and data sources; and (iii) creating an evaluation framework to identify high-risk transboundary lake basins. In addition to being useful to the GEF, it is expected lake basin managers, stakeholders and national governments will be able to use the results in establishing lentic-lotic programmatic priorities. Local basin-level stakeholders are also expected to benefit from the catalytic value provided by this stakeholder-based analysis. Based on available data, provisional outlook projections for a limited number of indicators also will be considered.

**Component 3: River Basins.** The TWAP river basins component will carry out a global comparison of all transboundary river basins, in order to enable the prioritisation of funds for basins including selected delta and lakes ‘at-risk’ from a variety of issues, covering water quantity, water quality, ecosystems, governance and socio-economics. The assessment will be indicator-based, and will allow for an analysis of basins based on risks to societies and ecosystems. It will also include provisional outlook projections to 2030 and 2050 for a limited number of indicators. The TWAP will provide input to the development of the GEF Transboundary Diagnostic Analysis (TDA) and subsequent Strategic Action Programme (SAP) processes. Although the main end-user will be the GEF, other stakeholders, including donors, national governments, international agencies, and transboundary institutions of specific water systems (e.g., river basin organisations), will be encouraged to use the results to obtain an overview of global issues threatening human populations and ecosystems through the water system.

**Component 4: LME.** The LME assessment will be a global comparative assessment of the current state, including for supporting biodiversity and ecosystem services, of all LMEs and the Pacific Warm Pool, using a set of core indicators (stress, status, socio-economic and governance/response indicators) for which data are available globally. This will be a baseline assessment of current ecosystem state, trends, and stressors (drivers), with future projections and likely impacts to the years 2030 and 2050 where possible. The UNEP Regional Seas programme and its network, and other regional (and national bodies where appropriate) will also be engaged for verification of the global assessment, based on the regionally-available data and information, combined with some capacity building effort.

**Component 5: Open Ocean.** The open ocean assessment will address the identified challenges through a globally-scoped assessment that directly addresses four broad themes: climate, ocean ecosystems, fisheries, and pollution. The assessment will take guidance from the human system side and the global governance arrangements already in place for the high seas, and focus on a global thematic assessment. A conceptual framework links human and natural systems, putting human well-beings at the centre of concerns, but also allowing a focus where data is available, particularly on indicators of human-related stress on ocean systems. A global mapping approach will focus on indicators of natural and human system vulnerability, including projections where available. Individual expert assessments will complement the mapped indicators in identifying threats related to issues of high uncertainty, but also high potential impacts. The assessment will be done through a set of core and thematic partners. The socio-economic and governance aspects will be covered in an examination and scenarios of human impact on ocean ecosystem services. This assessment will also include projections to 2030 and 2050 for a limited number of indicators that are key inputs for river and aquifer water systems.

### ***General description of the assessment***

This global assessment of the five types of transboundary water systems will utilize networks and globally-available information and data sets. Newly-collected information (from observation networks and modeling) will complement the assessment where needed to address crucial data gaps. The will include evaluation of existing environmental and natural resource status of transboundary waters, human and natural drivers and related stress, human dependency and vulnerability to the extent possible, and the current status of governance arrangements. Predicted stresses (to years 2030 and 2050) and resulting changes in state also will be assessed. In this way, the assessment will establish a baseline environmental, governance, socio-economic and natural resource overview of the five types of transboundary water systems. Without a proper baseline for monitoring of the stresses and environmental status, GEF and other international organisations cannot identify and track the impacts of their

interventions on the status of transboundary water systems. Issues related to interlinkages between the five water systems will also be addressed by the assessment. Assessment of risk areas, such as transboundary deltas/estuaries and lakes also will be carried out.

### ***Governance***

Governance will be addressed as a common issue for all transboundary water system categories. The approach will be to undertake the governance assessments in two phases, which will be referred to as stage 1 and stage 2 governance assessments. The purpose of the stage 1 assessment is to provide a holistic picture of governance arrangements for individual water systems, as a basis for discussion on how to improve governance at the system level. It will also provide a baseline for future assessments. The stage 2 assessment will use a common approach to evaluating governance arrangements across selected systems in all five transboundary water system categories, in order to facilitate a global picture, as well as allocation of financial resources to systems within IW categories.

### ***Socio-economic Approaches***

While embracing the unique geo-morphological and human-environment interactions that characterize each of the five transboundary water systems, the cross-cutting social and economic features of these interactions provide a basis for a comparative, synthetic approach for examining common issues across them. Human population distribution, its growth and level of development along the rims of transboundary waters, the water-based livelihoods and the vulnerabilities of human communities to ecological changes and climate-related natural disasters, are critical core cross-cutting indicators for determining the dependences of humans on transboundary waters, and the impacts of environmental degradation on human communities. When complemented with transboundary water system-specific metrics, these core socioeconomic indicators provide key elements for a thorough, integrated evaluation of human well-being and ecosystem health.

### ***Component 6: Data and information management, networking and monitoring.***

A common data and information management portal /clearing house mechanism building on existing infrastructures where possible such as e.g. GOOS, GEOSS, etc will be established to organize and present data and indicators used in the assessment in a consistent way, tailored for use by the TWAP stakeholders. Common and cross-cutting data sets, authoritative data sources, and key indicators will be identified and made easily accessible, in order to strengthen the science base and transparency of the assessment work, consolidate and archive the data used, and present the assessment results in a meaningful, appealing manner. Suites of indicators for environmental state and trends, as well as anthropogenic and natural driving forces of changes in these systems, will be presented to highlight the initial baseline conditions and allow quantitative evaluation of the changing states of ecosystems and associated pressures. The data management component will make use of relevant regional and global databases and indicators to the extent possible, and of available systems and tools connecting other GEF projects and knowledge management system, such as IW:LEARN.

### ***Institutional Arrangements for the Proposed Project***

The proposed project will build on the many partnerships developed in the MSP with institutions already engaged in observations and assessment efforts. Two cross-cutting Expert Working Groups (EWGs) will be established on: (i) Interlinkages and Cross-cutting Issues; and (ii) Data and Information Management. For particular issues identified during the implementation of the proposed project, additional *ad hoc* EWGs might also be established. Overall guidance will be provided by the Project Steering Committee, comprised of UNEP, key agencies for each transboundary water component, and the GEF Secretariat. All partner organisations for each of the five water systems are presented in **Annex 3**.

The details of the execution modalities and arrangements will be developed in the course of the PPG.

**B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#):**

Transboundary water systems support the socioeconomic development and wellbeing of a significant part of the world's population. The GEF IW focal area addresses the very complex sustainable development challenges faced by States sharing transboundary water systems that continue to be degraded by multiple human-induced stresses, including global climate change. The sustainability of resource exploitation and environment management of many of these water systems seems questionable. The proposed project, which will undertake a global assessment of transboundary water systems, will primarily support the efforts of GEF, UNEP and other UN and international organizations to better assist developing countries, and countries in transition, to develop and implement improved resource management and efficient socio-economic development strategies. Many agencies are collecting a variety of assessment information, and global science organizations are undertaking modelling activities and making projections based on the collected data. UNEP has the responsibility and comparative advantage for undertaking assessments for the GEF, including globally through its various programmes such as the Global Environment Outlook (GEO), UNGA 60/30 Regular Process, and its Regional Seas Conventions and Action Plans. Implementation of the proposed project would address the problem of fragmentation in the mandates and responsibilities of the various involved agencies, and maximize global environmental benefits. Gender and social issues will be addressed in this project, as they are important drivers and incentives for achieving global environmental benefits, as well as the overall success of the project. Gender accountability is a cross-cutting issue at both the project level and component level. Special attention will be paid to gender issues in developing socioeconomic indicators, and in the capacity-building component of each component.

**B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:**

There is a risk the five transboundary water system assessment methodologies developed in the GEF TWAP MSP might not be implemented, due to gaps in critical information and data necessary for undertaking the assessment. Data and information, including those involving all five transboundary water systems, as well as climate change effects, which are available through existing assessment activities undertaken by UN and other organisations, are nevertheless scattered among a large number of sources. This significant problem will be mitigated in the proposed project through establishment of strong partnerships with relevant UN and other organisations possessing such data and information. Initial agreements with relevant organisations and institutions were developed in the GEF TWAP MSP, and such agreements will be formalised during the proposed project, as a means of facilitating the global assessment of transboundary water systems, and for establishing sustainable assessment process at the global level. Possible risks and ratings, as well as the management strategy for dealing with each of them, are highlighted in the following table.

Risk	Rating	Risk management strategy
1. A lack of adequate data/information for some transboundary water bodies might hinder proper assessment of those water bodies.	Medium	Through formalized partnerships with relevant organizations and resulting cooperative/joint work, all available data/information will be assessed and existing data gaps minimized. Basing the assessment on indicators for which data are available.  Applying a modeling approach also might help resolve some data gaps.
2. Methodologies to be applied in the assessments do not clearly show benefits to major partners (inter-governmental organizations, regional organizations, governments and private sector) for their participation in the assessments.	Low	The partnerships arrangements to be formalized should clearly identify the role of each participant in such a manner that the benefits for each partner/stakeholder in the project will be highlighted.
3. Given the reduced scope of the project from its original intent and conception throughout the preparation MSP, the outcome might not be as meaningful to allow the GEF to position its future investments and will certainly require stronger commitment from partners and quality inputs. The assessment might be too rapid and succinct and unevenly assessing the 5 five systems.	Medium	It is critical that the details of the project design be well thought of during the PPG. Committed partners, and a strong project coordination mechanism as to best harness the work done by GEF and non GEF projects and programmes are also paramount to ensure a meaningful comprehensive assesement.
3. Participating partners insist on using their own assessment methodologies, without trying to achieve the overall objectives of the proposed project.	Low	Active involvement of partners from the design phase and the beginning of the project implementation.  Linking to ongoing assessment work of: (a) relevant assessment programmes of UN and other international agencies, including other GEF projects; (b) river and lake basin organizations; and (c) Regional Seas Conventions and Action Plans.
4. Limited influence of national and regional stakeholders in promoting and sustaining transboundary waters assessment.	Medium	Cooperation with regional and national NGOs to support sustainable transboundary waters assessment.  Engagement with regional stakeholders in conducting/validating the assessment to promote their buy-in of the project.  Capacity building of influential stakeholders for water system management.  Use of media and targeted political messages to encourage the engagement of influential stakeholders.
5. Limited capacity of stakeholders to implement the results of the assessment of transboundary water systems in order to improve water systems management.	Low	Capacity building of stakeholders for implementing the results of the assessments.
6. Discontinuation of involvement of partners, withdrawal of support by key partners (financial support, data and information, etc.	Low	Continuous contact, interaction and consultation with partners.
7. Difficulty in securing the multilateral national engagement required to ensure long-term periodic	High	A successful project that demonstrates benefits to donors and countries, as well as engaging these parties throughtout the project.



assessments.		
8. Difficulty in securing long-term incremental funding for periodic assessments.	Medium	A successful project that demonstrates benefits to donors and countries, as well as engaging with these parties throughout the project.

**B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:**

The proposed project will formalize partnerships and institutional arrangements with various UN agencies, regional organisations (including governments participating in such regional organisations), international/regional NGOs and scientific organizations established during the MSP, in order to carry out the global assessment of the five categories of transboundary water systems, including interlinkages and cross-cutting issues. Periodic, sustainable, global assessment processes will be established through such partnerships, and involve a wide range of stakeholders. It would include data collected by GEF IW projects, river and lake basin organizations, and Regional Seas Conventions and Action Plans that would be useful to all partners. The data, modelling results, and information sources are disparate, being located in many different places, including regional organisations, governments, academic networks funded by governments, research programmes, private sector, and local and indigenous communities. Through partnerships to be formalized during the project, detailed process and procedures for collecting and sharing data and information available for all partners and stakeholders will be established, as well as application of modelling approaches and data and information management. UNEP, other UN organisations and all participating partners will use the results to contribute to the regional and global assessments carried out by their organizations, such as the Global Environment Outlook and the Marine Biodiversity Assessment and Outlooks of UNEP, UNGA led Regular Process and UN-wide World Water Development Report coordinated by UNESCO. Regional organizations might serve as platforms for implementation of assessments, and may use the assessment results as a baseline to track improvement of the environmental and water resources conditions. National governments would use the results to set national programmatic priorities between transboundary and domestic water issues, and will be engaged as key stakeholders through UNEP, UNESCO-IHP and UNESCO-IOC. The project will provide a robust scientific basis to demonstrate results to donors, as well as presenting a common understanding of the issues and concerns in transboundary waters. Principles of transparency, and inclusiveness of national and regional stakeholders and civil society, will be encouraged throughout this project.

The main stakeholder or client for the proposed project is nevertheless the GEF. Indeed, the GEF has invested over a billion dollars to date in addressing transboundary water concerns in multi-country water systems, without a global assessment comparable to those of the Intergovernmental Panel on Climate Change, the Global Biodiversity Assessment, or the Stratospheric Ozone Assessment. This situation has proven to be a unique and serious impediment to the International Waters focal area. Further, the GEF needs to document the results of its investments through periodic global assessments. Thus, it is expected that, because of the proposed global baseline system assessment to facilitate the identification of priority transboundary concerns, and hence priorities for investments, the GEF will be able to invest its scarce financial resources in a cost-effective manner.

Execution modalities and arrangements will be further refined in the course of the PPG.

**B.6. Outline the coordination with other related initiatives:**

One of the main objectives of the proposed project is to bring together partners, and synthesise work done through GEF and non-GEF projects and programmes. To this end, his proposed

project will involve the work of more than 130 institutions and agencies (see Annex 3).

The GEF IW projects, particularly country-driven projects on improving transboundary management of groundwater aquifers, lake and river basins, LMEs and open ocean, will provide information and data for the proposed project. The proposed project also will enhance GEF IW projects through provision of information and assessment methodologies. For the more in-depth assessments of a small subset of each of the five types of transboundary water systems, the proposed project will utilise information and data gathered in existing Transboundary Diagnostic Analysis (TDA) Studies and Strategic Action Programmes (SAPs), with the results providing valuable input into the enhancement of the TDA and SAP methodologies. Development of the assessment, through an approach involving indicators, indices and interlinkages, will enable GEF and other international and regional organisations to assess the results of interventions in transboundary waters. The UNEP, in keeping with its mandate to keep under review the state of the global environment, is implementing, or participating in and keeping close linkages with, several ongoing global and regional environmental assessments, including UNGA 60/30 Regular Process, GEO, Marine Biodiversity Assessments and Outlooks, State of the Marine Environment assessments by the Regional Seas Conventions and Action Plans and other regional-based programmes, and the GPA. In addition to UNEP-DEWA, the UNEP-DEPI, UNEP-DHI-Centre, UNEP-GRID, UNEP-WCMC, and GEMS-Water programme will support various aspects of the project.

Other international agencies/organisations with activities and programmes particularly relevant to the project include: (i) FAO: through Aquastat and FishStat, plus its involvement in various activities worldwide related to monitoring of freshwater and fisheries resources; (ii) IOC: Engaged in several pertinent activities and programmes in the marine area, with the Global Oceans Observing System (GOOS) being particularly important; (iii) UNESCO: Two programmes with particularly close project linkages are the International Hydrological Programme (IHP), which coordinates the global ISARM (International Shared Aquifer Resources Management) Initiative and the WHYMAP (World-wide Hydrogeological Mapping and Assessment Programme), and the World Water Assessment Programme (WWAP); (iv) Other participating Institutions/programmes: IGBP and IGBP/LOICZ (Land-Ocean Interaction in the Coastal Zone); ILEC (International Lake Environment Committee); ILBM-G (ILBM Regional Centres of Excellence); GESAMP (Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection); SAHFOS (Sir Alister Hardy Foundation for Ocean Science); NOAA (National Oceanic and Atmospheric Agency); UBC's 'Sea around Us' Project, and the PEW Foundation, with its support to UBC for fisheries data and indicators; UNEP-WCMC; CERMES; University of Miami; Center for Marine Assessment and Planning (University of California/Santa Barbara); IGRAC (International Groundwater Resources Assessment Centre); BGR (Federal Institute for Geosciences and Natural Resources); ETHZ (Eidgenössische Technische Hochschule Zurich); University of Western Cape; SIWI (Stockholm International Water Institute); IUCN (International Union for Conservation of Nature); International Geosphere Biosphere Programme; Oregon State University; University of Kassel; University of Frankfurt; City University of New York; CIESIN; Oak Ridge National Laboratory. Coordination of work with those organisations will be achieved through formalised partnership arrangements, including consultations and meetings at the project level, and at the level of Expert Working Groups.

#### **C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:**

UNEP's overall mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations. This includes providing the world community with improved access to meaningful environmental data and information, and

helping to increase the capacity of governments to use environmental information for decision-making and action-planning for sustainable human development. In carrying out this mission, and consistent with its mandate to keep the state of the global environment under review, UNEP's Division of Early Warning and Assessment (DEWA), is implementing or participating in several ongoing global and regional environmental assessments, as well as the planned UNGA 60/30 regular process. Within its GEF role, UNEP's mandate includes *inter alia* promoting scientific assessments. To this end, UNEP is implementing or participating in several ongoing global and regional environmental assessments through its DEWA, Division of Environmental Policy Implementation (DEPI) and other programmes, as well as the UNGA Regular Process for Global Reporting and Assessment on the State of the Marine Environment, including socio-economic aspects.

UNEP's role in incorporating science into multi-national water projects has been demonstrated through its oversight function and participation within in the framework of its Regional Seas Programme. This includes development of a comprehensive framework for the study of various water systems, with the main objective of assessing and proposing best management options directed to fresh, coastal and marine waters. Under its Marine and Coastal Ecosystems Branch, UNEP coordinates the 18 Regional Seas Conventions and Action Plans representing 143 member countries. These legally-binding frameworks provide valuable entry points for the conduct of regular assessments at the national and regional level, including over 30 years of experience in developing State-of-the-Marine Environment reports. Elements contributing to achievement of this goal include UNEP's Freshwater Programme, Regional Seas Programme, GPA, GEMS/Water Programme, GEO water cluster, GEF-IW Science Programme, and GRAME, among others.

UNEP also has extensive experience within the framework of the GEF International Waters portfolio as an implementing partner for a range of GEF IW projects, including the TWAP MSP. Building on such activities, UNEP-DEWA provides timely, scientifically-credible, policy-relevant environmental analyses, data and information for decision-making and action planning for sustainable development. It monitors, analyzes and reports on the state of the global environment, assesses global and regional environmental trends and provides early warning of emerging environmental threats. The Division also works closely with many partners and collaborating centres in all regions of the world, and has established functional networks for data, information, assessments and capacity development.

This proposed international waters assessment project will have appropriate linkages with all the above-noted activities and programmes, through sharing of data and experiences. Further, the UNEP Water Policy and Strategy provides an integrated water assessment approach that will facilitate the identification, assessment and mitigation of significant freshwater and coastal/marine water issues.

### **C.1 Indicate the co-financing amount the GEF agency is bringing to the project:**

A breakdown of the co-financing from UNEP is attached in annex 1A & B.

UNEP co-financing is realized through its management support, staff time to project monitoring and evaluation and the data and information management of the TWAP estimated at USD 1,290,500. In addition to this, UNEP will mobilize about USD 2,500,000 in-kind support from its baseline programmes and networks including the Regional seas programme, the Regular Process for global reporting and assessment of the state of the marine environment including socio-economic aspects, with such amount forming part of the Rivers, LME and OO systems budgets.

**C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:**

This Project fits well into the GEF Agency's programme, particularly through the UN Development Assistance Framework (UNDAF), which could assist countries participating in the proposed project, including capacity building activities.

The project fits into UNEP's sub-programmes 1 (Climate Change) and 3 (Ecosystem Management) of UNEP's Programme of Work, through the following UNEP-expected accomplishments:

- (1) Adaptation, planning, financing and cost-effective preventive actions will be increasingly incorporated into national development processes, supported by scientific information, integrated climate impact assessments and local climate data;
- (2) The capacity of countries and regions to realign their environmental programmes and financing to address degradation of selected priority ecosystem services will be strengthened.

The TWAP objectives also are well-aligned with the following expected outcome of the UNEP Marine and Coastal Strategy; namely 'Enhanced understanding and awareness of the role of marine and coastal ecosystem services for human well-being and climate change regulation. The UNEP Marine and Coastal Ecosystems Branch recognizes Ecosystem Management and Climate Change and cross-cutting issues as priorities to be addressed, with this project focusing on the intersection of these two priorities.

The objectives of this project also are well-aligned with the overall UNEP water policy and strategy goals of contributing substantively to environmental sustainability within the management of all water resources; utilizing integrated ecosystems approaches as a contribution to internationally-agreed targets and goals relevant to water and socio-economic development.


They also will work to facilitate the targets of improved assessment and awareness of water issues, and improved environmental management of basins, coastal and marine waters, including the identification of linkages with ongoing international processes and improved cooperation in the water sector.

**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

- A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

**B. GEF AGENCY(IES) CERTIFICATION**

<b>This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.</b>					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Maryam Niamir-Fuller, Director, GEF Coordination Office, UNEP		December 09, 2011	Isabelle Van der Beck	+1-202-974-1314	Isabelle.vanderbeck@unep.org

**List of Annexes  
(in a separate document)**

- Annex 1:** Detailed budget sheets per system and component including co-financing  
**Annex 2:** Baseline Projects/Programmes for each of the five water systems  
**Annex 3:** Partner organizations for each of the five water systems  
**Annex 4:** List of Acronyms

