

PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project

THE GEF TRUST FUND

Submission Date: 23 August 2007 **Re-submission Date**: December 24, 2007

PART I: PROJECT IDENTIFICATION

GEFSEC PROJECT ID¹: 3343 GEF AGENCY PROJECT ID: tbd

COUNTRY(IES): Global

PROJECT TITLE: Enhancing the use of science in International

Waters projects to improve project results **GEF AGENCY(IES):** UNEP, (select), (select) **OTHER EXECUTING PARTNER(S):** UNU-INWEH

GEF FOCAL AREA (S): International Waters, (select), (select)

GEF-4 STRATEGIC PROGRAM(S): IW SP1-4

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: N/A

INDICATIVE CALENDAR				
Milestones	Expected Dates			
Work Program (for FSP)				
CEO Endorsement/Approval	12/2007			
GEF Agency Approval	02/2008			
Implementation Start	03/2008			
Mid-term Review (if planned)	not planned			
Implementation Completion	09/2010			

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective: To improve transboundary waters systems by enhancing the impact of International Waters projects and to strengthen their ability to demonstrate results.

	Indicate whether Investment, TA, or STA** Expected Outcomes		Indicative GEF Financing*		Indicative Co- financing*		Total (\$)	
Project Components			(\$)	%	(\$)	%		
1. Development of a scientific knowledge base for IW projects and the establishment of a IW Science Learning Network	STA	Enhanced capacity in the GEF IW projects in the use of science in order to improve project results	Inventory of the science knowledge base and the use of science advisory bodies in current GEF IW projects The IW Science Learning Network designed and established to foster scientific capacity and knowledge-sharing within and beyond the GEF IW portfolio State-of-the-art science summaries by international waters-system type	645,000	46	765,000	54	1,410,000

Project ID number will be assigned initially by GEFSEC.

management in the IW focal area	2. Science support to results based management of the GEF IW portfolio	Strengthened scientific underpinnings for project design and good-practice guidance for results-based management across the GEF IW portfolio	in the IW	100,000	38	160,000	62	260,000
	management			1 000 000		1.005.000		2.005.000
	Total project costs			1 000 000		1.005.000		2.005.000

^{*} List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component.

B. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation*	Project	Agency Fee	Total
GEF	N/A	1,000,000	100,000	1,100,000
Co-financing	N/A	1,095,000		1,095,000
Total	N/A	2,095,000	100,000	2,195,000

^{*} Please include the previously approved PDFs and planned request for new PPG, if any. Indicate the amount already approved as footnote here and if the GEF funding is from GEF-3.

C. INDICATIVE <u>CO-FINANCING</u> FOR THE PROJECT (including project preparation amount) **BY SOURCE and BY NAME** (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Amount
Project Government Contribution	(select)	
GEF Agency(ies)	In-kind	100,000
Bilateral Aid Agency(ies)	Grant	200,000

^{**} TA = Technical Assistance; STA = Scientific & technical analysis.

Multilateral Agency(ies)	In-kind	410,000
Private Sector	(select)	
NGO	(select)	
Others	In-kind	385,000
Total co-financing		1,095,000

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES)*

GEF	GEF Country		(in \$)			
Agency	Focal Area	Global	Project Preparation	Project	Agency Fee	Total
(select)	(select)					
(select)	(select)					
(select)	(select)					
(select)	(select)					
(select)	(select)					
(select)	(select)					
Total GEI	F Resources				-	

^{*} No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

GEF International Waters (IW) projects aim at sustainable management of global transboundary water systems, including river basins, shared groundwater resources and marine ecosystems. IW projects are informed by science to help realize the objectives of a mosaic of regional and international water agreements. Scientific analysis of the environmental situation in shared water resources form the basis for strategic action programmes. It also provides the basis for monitoring project impacts and informs decision-making on project design and implementation. However, such science-based knowledge is currently only utilized by the partners in specific IW projects and not widely shared throughout the GEF portfolio, or with local and global water science networks.

With over US\$ 1 billion invested to date in approximately 130 International Waters projects, GEF IW projects have also contributed significantly to the generation of scientific information, knowledge and experiences of global importance. Through programme reviews and GEF International Waters Conferences, the importance of science for more effective implementation has been recognized, including the strengthening of Transboundary Diagnostic Analysis (TDA), project impact monitoring and the causal analysis of transboundary water system degradation. In addition, there have also been a few GEF "targeted research projects", which have generated new scientific knowledge.

The capacity of projects to use science to improve project results varies amongst GEF IW projects. Some projects make excellent use of science advisory bodies and local science institutions, whereas others merely rely on expertise in the project coordinating team and available literature. While projects have tested different science-linkages and approaches, GEF is now changing to a results-based management system. There is a need for science to support and underpin such a system and to strengthen the ability of projects to demonstrate results and contribute to the results-base management framework. Lessons and experiences in integrating science and measuring results in projects need to be shared with the entire portfolio and GEF guidance developed on using science in results-based management, especially with respect to the use of indicators. Additionally, improved integration of science networks and GEF projects enables the portfolio to be aware of new technical advances/approaches and emerging scientific concerns, that can assist in identifying priority areas for targeted research.

In response to the current situation, the proposed MSP aims to develop a learning mechanism for the integration, exchange and dissemination of scientific information and findings from GEF IW projects. This mechanism would build upon the work done in the GEF IW:LEARN project and provide the link to the global water science networks. In this way, the science-based outputs of GEF IW projects will be improved and emerging scientific concerns better utilized to identify programme gaps and future priority actions. The project has the following expected outcomes:

- a. Enhanced capacity in the GEF IW projects in use of science in order to improve project results
- b. Strengthened scientific underpinning for project design and good practice guidance² for results based management across the GEF IW portfolio

In addition to the science learning mechanism, the project will generate scientific synthesis reports for all transboundary water body types, as well as develop thematic syntheses on cross-cutting issues such as global linkages, temporal and spatial scales and multiple causality. These reports will inform the GEF IW portfolio and provide input to a guidance document on results based management for GEF International Waters projects, with a particular focus on the development and use of indictors.

The overall objective or goal of the project is to improve transboundary waters systems by enhancing the impact of International Waters projects and strengthening their ability to demonstrate results. The proposed scientific synthesis is a powerful contribution to portfolio-wide dialogue on the use of science and scientific advisory bodies for project design, implementation, monitoring and evaluation. It will build capacity in the portfolio on science aspects in projects to improve management. In particular, the analysis included in the Transboundary Diagnostic Analysis for IW projects will be improved. These are critical to identify and reach consensus on the nature of the core transboundary challenges within projects and their causal relationship with human activities. The synthesized knowledge from this project will inform and improve the science analysis processes in future projects, so that the environmental and socio-economic realities in transboundary systems are more explicitly diagnosed and on the basis of this appropriate action can be taken.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

The proposed project is global in scope and primarily for the benefit of developing countries, countries in transition, and Small Island Developing States. All the beneficiary countries are GEF-eligible countries under the GEF IW focal area. The project can potentially support all existing and future GEF IW projects - most of which are country-driven by providing guidance on emerging scientific concerns and scientific good practices. These include the use of scientific advisory bodies, and the development of indicators to support results-based management, thereby enhancing the capacity of countries to monitor progress and identify national priorities for targeted research. While the proposed project is global in scope, it directly involves GEF IW projects which have been endorsed by country operational Focal Points and approved by the GEF Council. The proposed project will involve current GEF IW projects and build upon their experiences, synthesise these and link GEF projects to the wider global water science networks. During the 4th International Waters Conference in Cape Town in August 2007, a number of countries attended a participantsdesigned workshop on expanding the scientific basis for GEF IW projects, which was organized by UNEP in collaboration with STAP and UNU-INWEH. Participants acknowledged that increased capacity to use science could strengthen project design and implementation, and that mechanisms to tap into state-of-the-art science or share scientific findings with other projects highly varied depending on the nature of projects and efforts undertaken by individual Project Coordination Units. Support was expressed for strengthening the use and exchange of science and scientific results across the GEF portfolio.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

THIS MSP CONTRIBUTES TO THE STRATEGIC PROGRAMMES 1-4 OF THE INTERNATIONAL WATERS STRATEGY FOR GEF-IV. WITH ITS STRONG FOCUS ON SCIENCE-BASED LEARNING ACROSS PROJECTS, THE PROPOSAL IS FULLY CONSISTENT WITH THE SECTION IN THE GEF-IV INTERNATIONAL WATERS STRATEGY STATING THAT "EXPERIENCE-SHARING AND LEARNING PROJECTS FOR THE IW PORTFOLIO WILL BE UTILIZED TO SUPPORT THE FOUR STRATEGIC PROGRAMMES TO BUILD CAPACITY AND ENCOURAGE REPLICATION OF GOOD PRACTICES IN A SPIRIT OF ADAPTIVE MANAGEMENT. THESE RANGE FROM INSTITUTIONAL AND SCIENCE-BASED LEARNING TO THEMATIC AND REGIONAL EXPERIENCE SHARING SUCH AS INITIATIVES FOR THE AFRICA IW PORTFOLIO AND BUILDING ON ALMOST COMPLETED WORK IN EASTERN EUROPE." FURTHERMORE, THIS PROPOSAL CONTRIBUTES TO THE NEW GEF IW RESULTS-BASED MANAGEMENT FRAMEWORK. SCIENCE IS AN ESSENTIAL, HITHERTO UNADDRESSED ASPECT OF PORTFOLIO LEARNING, TO WHICH THIS PROJECT SPECIFICALLY RESPONDS BY CONTRIBUTING TO THE TRANSFER OF KNOWLEDGE, GOOD PRACTICES AND SCIENCE STRATEGIES TO GEF IW

² Guidance = good practice TDA; monitoring strategies to support M&E; science advisory bodies; possible indicators and support to results based management to include emerging issues

PROJECTS GLOBALLY. AS THE PROPOSED PROJECT IS DESIGNED TO IMPROVE PROJECT RESULTS BY ENHANCING THE USE OF SCIENCE, THE GLOBAL ENVIRONMENTAL BENEFITS AIMED AT IN THE GEF INTERNATIONAL WATERS PORTFOLIO WILL BE FURTHERED.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The structure of the project and institutional mechanisms put in place through the various working groups and oversight body will ensure coordination with all relevant Agencies and related initiatives in order to avoid overlap and look for synergies. Because of the strong corporate character of this MSP, other Implementing Agencies (UNDP, the World Bank), the GEF Secretariat and STAP will be involved at Steering Committee level. GEF project representatives will be invited to the process and institutional linkages will also be developed with the related initiatives listed below. Representatives of these initiatives will participate in the work of the Working Group as appropriate.

TWAP: Close linkages will be developed with the GEF project "Development of the Methodology and Arrangements for the GEF Transboundary Waters Assessment Programme". The TWAP project is developing feasible methodologies for assessment of four categories of transboundary water systems (river/lake basins, groundwater systems, LMEs and ocean areas) and preparing framework arrangements for carrying out (regular) assessments. The science synthesis and perspectives on indicators from this project will be important inputs to TWAP and, conversely, the data and scientific expertise from TWAP partners will be valuable contributions to this IW science synthesis. Reciprocal membership on the two Steering Committees is expected and UNEP/DEWA, Executing Agency for TWAP, has also confirmed its participation as core partner in the science MSP proposed here.

IW:LEARN: This existing IW knowledge management project, mainly focuses on project management issues and experience sharing, rather than on scientific and technical knowledge, as will this present initiative. However, synergies will be pursued by using the infrastructure for knowledge management created by IW:LEARN as the starting point for the development of the Science Learning Network. Taking into account lessons learned from IW:LEARN, UNEP will develop a web-based platform or "community of practice" (CoP) for the project to facilitate science-based learning, share project outputs and interact with the IW portfolio. The IW science knowledge base will be incorporated into the IW:LEARN web-portal as well as the virtual working space for project partners.

KM:Land: This GEF project, "Knowledge Management for Land Degradation", has similar goals to the present project with regard to indicators, but with a focus on land degradation. Its overall objective is to contribute to the mitigation of land degradation through development of a framework for performance and impact indicators in the GEF Land Degradation Focal Area. It will also create a Learning Network for the diffusion of best practices, crossfertilization of ideas, enhancement of learning and capacity building, and promotion of innovation. The proposed project can benefit from the indicator framework that emerges under this project and from the design and learning architecture of their Learning Network. UNU-INWEH is also the Executing Agency for KM:Land.

LOICZ: This long-standing and successful global science program of the IGBP on "Land-Ocean Interactions in the Coastal Zone" has developed scientific knowledge and tools that address global change in the coastal zone, one of the five key ecosystems to be examined in this project. Their current phase of work focuses on three important crosscutting themes that need to be addressed: linking social and ecological systems, assessing and predicting impacts of environmental change, and linking governance and science in coastal regions. Each of these themes requires a broad mix of scientific disciplines and includes a strong element of experiential learning; hence the LOICZ input will be of particular value in guiding the Working Group and Scientific Synthesis Group deliberations.

Global science institutions: In addition to LOICZ, a number of other global scientific organizations will be invited to to contribute to the MSP and for their members to participate as Working Group members. These include, for example, the Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP), Scientific Committee of Problems of the Environment (SCOPE), the International Water Management Institute (IWMI), the Stockholm International Water Institute (SIWI) and the International Association of Hydrological Scientists (IAHS).

UNU-INWEH: The United Nations University's International Network for Water Environment and Health (UNU-INWEH), the Executing Agency for this initiative, is a global water research and capacity-development institution with specific expertise in knowledge management and in science and science/policy synthesis. It has a broad experience working in threatened river-basin, coastal zone and drylands ecosystems, as well as a programme on safe water and sanitation. It also has strong freshwater network partnerships and will together with UNEP serve as a bridge to UN-Water and its many agencies engaged in water science and assessment. In addition to its leadership of

the KM:Land project, it is a partner in the GEF/WB "Coral Reef Targeted Research and Capacity-Building" project and operates the "UN Virtual Learning Center for Water" (WVLC), its flagship distance education programme with 5 regional centers around the world. It also has research and capacity-development projects on: persistent organic pollutants (POPs) in Caribbean coastal ecosystems and coastal zone management in the Arabian Gulf.

E. DISCUSS THE VOLUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH <u>INCREMENTAL</u> REASONING:

In the absence of this MSP, projects would continue to struggle in developing their own scientific capacity to address transboundary water issues and to realize project results. Meeting this need is often not easy for projects on their own due to limited access to scientific capacity, globally or locally. Also, in absence of scientific underpinning and guidance for results-based management, projects might be unable to demonstrate project results. As a result, good science practices that have emerged within the GEF IW portfolio will not be replicated, scientific findings not shared, and a disconnect remaining between the GEF IW portfolio and global science networks. Efficiency gains through portfolio-wide guidance on the use of sound science, including the use of indicators for results-based management, will be limited. In some regions, well-developed capacity may exist, but not identified or utilized to support sound project decisions. Thus, in the absence of this MSP, projects will continue to make limited use of the scientific understanding that is locally and globally available and water science findings resulting from TDAs, targeted research activities and assessments, and the overall effectiveness of the IW focal area will remain below its potential.

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MEASURES THAT WILL BE TAKEN:

Several risks are noted: (1) The project's success depends on attracting sufficient funding and commitment from key partners to effectively and efficiently engage the scientific community for the synthesis process. This risk has been mitigated by prior outreach, consultation and project preparation meetings with potential donors and partners in the freshwater and marine science communities. (2) The project is ambitious in terms of its engagement, primarily on a volunteer basis, of scientists and water experts from IW projects who are knowledgeable of the critical challenges in water science and can reflect on the IW science results from a contemporary, cutting edge perspective. To manage this risk, initial contact about the project has been established with a number of scientific associations, networks and organizations. (3)Work Group chairs are needed for the Scientific Synthesis Group who can bridge the differences in science approaches, methodology and core assumptions of their respective scientific communities to achieve the expected cross-cutting, forward-looking synthesis reports. This challenge will be minimized by carefully selecting lead scientists who are experienced working in a multi-disciplinary international environment. (4) The timeframe for some expected impacts of the MSP in terms of uptake of the science synthesis, indicator application in the design and implementation of projects and portfolio-wide operation of the Science Learning Network is beyond the duration of the project. However, the core science-based knowledge outputs will be available for immediate future use and a mechanism for future scientific learning continuity will be created through the SLN community of practice.(5) Because it is an analytical project, without a field component, there is no direct climate change risk associated with this project. However, climate change is one of the global drivers that will be focused on in the Working Groups and synthesis process. As a result, IW projects will have an improved capacity to evaluate the significance of climate change in the genesis or exacerbation of transboundary water problems.

G. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

The project is highly cost-effective as it is not implemented by a single Agency but by a strong science partnership, that will bring in co-financing, scientific expertise and networks, access to the latest science developments and an important aspect of sustainability as partnerships between the GEF portfolio and global science networks will be established. Cost-effectiveness is greatly enhanced by the voluntary expert contributions of approximately 120 IW scientists and global water experts comprising the Working Groups. This is a very large "informal" in-kind contribution, in the form of individual professional time, over and above the formal input of partner organizations. Further cost savings will be obtained through co-scheduling of project meetings with other conferences, symposia etc., building upon the work done in other GEF projects, such as IW:LEARN, and harnessing the activities taking place in water science networks. At the IW portfolio level, this proposal incorporates several important elements ensuring greater future cost-effectiveness. First, it will provide guidance to IW projects on effective science and scientific learning processes; this will help to ensure that project cost effectiveness as a whole is maximized. Secondly, the project's multi-project, multi-agency mode of participation ensures cross-disciplinary learning. Over

time this will increase cost-effectiveness by establishing portfolio-wide excellence in science, research, monitoring and adaptive, results-based management. Thirdly, the MSP contributes to the underpinnings of a results-based management framework for the IW portfolio. The deployment of results-based management frameworks, and in particular the use of indicators for tracking progress or impacts and to support adaptive management, are considered successful approaches for improving cost-effectiveness.

H. JUSTIFY THE **COMPARATIVE ADVANTAGE** OF GEF AGENCY:

This project is within the comparative advantage of UNEP as stated in the Council paper.

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 country endorsement letter(s) or regional endorsement letter(s) with this template).

(Enter Name, Position, Ministry)	Date: (Month, day, year)
(Enter Name, Position, Ministry)	Date: (Month, day, year)

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance criteria for project identification and preparat	e with GEF policies and procedures and meets the GEF ion.
Maryam Niamir-Fuller, Director, UNEP Division of GEF Coordination GEF Agency Coordinator	Dr. Tessa Goverse Project Contact Person
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Date: (Month, Day, Year)	Tel. and Eman.