



# International Waters Strategy

## BACKGROUND

Water is the lifeblood of our planet. Human life depends on freshwater, and the Earth's climate and its habitability depend not only on freshwater but also climate services from the ocean. Slowly, the world community is recognizing the severity of the global water crisis. Not only are Millennium Development Goals (MDGs) and Johannesburg World Summit (WSSD) targets being missed, but economic opportunities and community security are now diminished because of little priority on water. Once thought to be simply related to mismanagement and policy failure, degradation and depletion of our planet's surface, ground water, and oceans are also caused by complex global pressures of population growth and forced migration, changing climate, global financial and trade distortions, food shortages, and changing diets.

Freshwater, saltwater, and their living resources know no borders. With 70 percent of the Earth being ocean and 60 percent of the land lying in cross-border surface and groundwater basins, most water systems on Earth are transboundary – and thus are at the heart of the GEF International Waters (IW) mandate. These water systems, that know no boundaries, produce food for global trade and domestic use, power industry and economies, quench thirst, and nourish the ecosystems that support life. Globally, these systems are overused, over-polluted, and suffer from serious transboundary and national governance failures.

Demands for freshwater continue to rise, resulting in competition among key sectors and ultimately between countries that share transboundary freshwater systems. In parallel, the human demand for protein from marine waters and pollution releases place stress on both coastal and ocean systems. The results are all too apparent—depleted and degraded surface waters, aquifers, and marine ecosystems we see today with adverse impacts on human and ecosystem health, food

security, and social stability. In addition, changes in global hydrologic cycles driven by changes in climate and climatic variability deepen poverty, reduce food supplies, damage health and further threaten political and social stability. Collective action among states and negotiation of legal/institutional framework are now critical to address these multiple stresses, including climatic variability and change, before tension between States gets even worse.

## **EVOLUTION OF THE IW STRATEGY AT THE GEF**

The GEF International Waters (IW) focal area addresses these very complex sustainable development challenges faced by States sharing transboundary surface, groundwater, and marine systems. Challenges range from pollution, loss of habitat, and ship waste, to intensive and conflicting uses of surface and groundwater, over-harvesting of fisheries, and adaptation to climatic fluctuations. The GEF serves a unique role in building trust and confidence among States for catalyzing collective management of these large water systems while providing benefits for environment, food production, economic development, community health, and regional stability. Human well-being, livelihoods, and socio-economic considerations are at the center of on-the-ground pilot measures. The GEF IW focal area has shown that cooperation among States on water, fisheries, catchments, and environment serves as a new path to secure these benefits for multiple water users and that the demonstration of appropriate technologies can catalyze investments for on-the-ground results. The challenges of climate variability and change add an additional impetus to GEF work, particularly since transboundary cooperation can suffer when economic recession pulls resources out of international development assistance. States must act together to restore and protect the functioning of these systems before depletion and degradation lead to destabilization of communities, sub-national regions, and States.

Both the third and fourth Overall Performance Studies (OPS3 and OPS4) document GEF success in catalyzing impacts related to multi-country cooperation for shared waters. Outcomes have been robust, targets exceeded, and IW has proven to be an effective agent for policy, legal and institutional reforms and for enabling on-the-ground demonstrations. OPS 3 in 2005 concluded that the IW Focal Area was ready to move from a demonstration mode to scaling-up of full operations in support of reforms, investments, and collective management. This scaling up of on-the-ground actions was not possible during GEF 4 because funding was reduced.

While coping with small funding, GEF IW programming has focused on: (a) creating an enabling foundation in trust, confidence and capacity among States desiring to collaborate on sustainable use of their transboundary waters, (b) demonstrating simple GEF strategic approaches for scaling up impacts when larger funding levels become available, and (c) developing measures for groundwater protection and management to cope with increased use and more frequent droughts. To avoid irreversible economic and social impacts and while cost-effective measures are still feasible, the time for scaling up is now. A backlog of requests for action exists with GEF having built the capacity of 149 recipient countries to work together with 23 non-recipient countries on regional collective management for the particular transboundary water systems they share—22 river basins, 8 lake basins, 5 groundwater systems, and 19 Large Marine Ecosystems.

As recommended by OPS3 in 2005 and now OPS4, the time is at hand to scale-up funding in the GEF IW focal area to achieve results before conditions become irreversible. GEF5 presents a crucial opportunity to scale up collective action for freshwater basins, aquifers, and marine systems in support of multiple MDGs as well as protecting the capacity of “blue forests” to absorb carbon to reduce global warming. Through stakeholder participation and increased attention to gender issues and insight from indigenous communities, this scaling up can provide meaningful benefits in natural resource management. Beyond GEF4 priorities, new imperatives in International Waters relating to climatic variability and change and incorporation of groundwater concerns to produce community benefits. The capacity that has been built through previous GEF interventions means that many States are ready to move forward in scaling up impacts contributing to MDGs and WSSD targets while also incorporating climatic variability and change as a new transboundary concern for action.



Intensifying human exploitation is pushing the world's oceans to the limits of their ecological carrying capacity. According to the most recent food and agricultural organization (FAO) report more than 75 percent of world fish stocks are already fully exploited, overexploited, depleted, or recovering from depletion.



Climatic variability and change directly impacts transboundary rivers and river basin management, threatening its effectiveness. The Niger River, the principal river of West Africa and third longest river in Africa, begins in the Guinea Highlands, extends nearly 4180 km (2600 miles) in a unique boomerang shape through Mali, Niger, Benin and Nigeria and discharges into the marsh-filled Niger Delta into the Gulf of Guinea and Atlantic Ocean.<sup>20</sup> Since the 1970's, average annual West African river water flow and discharge has already reduced by 40 percent due to recent drought, population increase and perhaps climate change.

## **INTERNATIONAL WATERS STRATEGY, GOAL AND OBJECTIVES**

The long-term goal for the GEF International Waters focal area was included by the GEF Council in its 1995 Operational Strategy and remains relevant today for GEF5. With only slight updating for GEF-5, the goal serves as politically pragmatic and cost-effective guidance for GEF to tackle the highly complex concerns of transboundary freshwater and marine ecosystems.

**THE GOAL OF THE INTERNATIONAL WATERS FOCAL AREA IS THE PROMOTION OF COLLECTIVE MANAGEMENT FOR TRANSBOUNDARY WATER SYSTEMS AND SUBSEQUENT IMPLEMENTATION OF THE FULL RANGE OF POLICY, LEGAL, AND INSTITUTIONAL REFORMS AND INVESTMENTS CONTRIBUTING TO SUSTAINABLE USE AND MAINTENANCE OF ECOSYSTEM SERVICES.**

Since 1995, GEF has placed human needs at the center of transboundary water systems and based interventions on modifying human activities and institutions toward sustaining multiple uses of and human well-being for these sensitive waters. The GEF approach has provided opportunities for States wishing to address transboundary water-related disputes and resolve national development priorities across transboundary systems in a collective manner.

The GEF Council-approved Operational Strategy in 1995 recognized the sensitive international political dimensions of assisting states in collective management of transboundary water systems. The Council noted that global environmental benefits would accrue if countries worked together on priority concerns of these transboundary systems, which are the dominant waters on Earth, and that global environmental benefits relate to the interconnectedness of the global hydrologic cycle that dynamically links watersheds, aquifers, and coastal and marine ecosystems and their transboundary movement of water, pollutants, ships, and living resources.

Consistent with this approach, the goal for the IW area and GEF-5 objectives contribute to the GEF institutional goal of delivering agreed global environmental benefits. In particular, IW programming for 2010-2014 supports GEF-5 corporate goal #1 on global natural resources and #4 on building national and regional capacities and enabling conditions for addressing transboundary systems. Through its previously stated support of Agenda 21 Chapters 17 and 18 as well as the MDGs and WSD targets, the IW focal area also contributes to human well being and poverty eradication by sustaining water-related and dependent livelihoods, securing food sources, promoting equitable access to water, and reducing water-related health risks in addition to resolving and preventing water-related use conflicts in these large bodies of water.

## SUMMARY OF GEF5 IW STRATEGY

The GEF5 strategy for IW follows the successful approach described in the OPS4 review with progressive programming of GEF resources accompanying progressive multi-state commitments to collective action. This strategy builds on the foundational capacity built and pilot scale work accomplished in GEF 3 and 4 and proposes to scale-up national and local action given sufficient resources. GEF operations would help catalyze initial implementation of multi-State agreed Strategic Action Programmes with shared visions for specific transboundary surface and groundwater systems or Large Marine Ecosystems. GEF projects will incorporate capacity building and knowledge generation to address climatic variability and change.

Adding climatic variability and change as a key transboundary concern in GEF-5 is needed so that multiple priority stresses for individual waterbodies can be addressed together and collectively by States rather than by single themes or single States. Achieving cost effectiveness and producing benefits that contribute to MDGs and WSSD targets dictate that multiple stresses must be addressed and multiple uses must be balanced or at least reconciled. Pollution reduction or improved fisheries management will still fail to provide impact if the needed flow regime to protect the river ecosystem is diminished by intensive water use and drought.

Concerns of droughts and floods as extreme events will now be incorporated into transboundary surface and groundwater basin IW projects through Integrated Water Resources Management (IWRM) approaches that link aquifers and surface water basins. Likewise, for Large Marine Ecosystems (LMEs) and their coasts, concerns related to coastal climatic variability, sea-level rise, ocean warming, protection of coastal carbon sinks ("blue forests") as well as ecosystem resilience would be addressed through governance reforms at the LME level and through Integrated Coastal Management (ICM) at local levels. Previous GEF IW projects show that climatic variability and change must now be included as a priority transboundary concern along with the other multiple drivers that cause depletion and degradation. Additionally, for transboundary surface water basins, groundwater (accounting for perhaps 90% of our planet's unfrozen fresh water) will play an even larger role and must be properly managed.



Beyond this focus on implementation of agreed action programmes, the strategy continues to provide for support to States for foundational capacity building activities for new transboundary water systems proposed for GEF support. Limited funding would be provided for processes pioneered by GEF to build trust and confidence among States through third party facilitation of GEF agencies so that States may work together collectively on their transboundary water systems toward increased stability and water security. This includes dialogue, capacity building for legal reforms, and potential agreement for improved legal and governance matters at multiple levels from the transboundary to sub-basin, national, and local. For LMEs, similar efforts are needed at both the regional LME and local ICM scales. Additionally, a number of priority needs for targeted research as applied to management of cross-border waters must be addressed, and experience sharing and learning within the GEF IW portfolio will be enhanced based on successful pilots in this focal area (GEF IW:LEARN) as noted by OPS4. The cross-project learning and knowledge management already piloted in the IW focal area will be even more

critical in GEF 5 as new knowledge and techniques related to climate variability and forecasting will need to be absorbed by States collaborating on transboundary water systems.

The draft GEF 5 IW strategy in 2009 presented options depending on level of Replenishment. With greater funding levels, more on-the-ground results would have been achieved with a greater likelihood of national and local governance reforms being enacted. With less funding, fewer results would be catalyzed and scaling-up for measureable impacts would be limited. The final allocation for international waters for GEF 5 was approved at a level less than all options included in the November 2009 Draft IW Strategy contained in GEF/R.5/Inf.21. Consequently, aspirations in this focal area strategy were reduced to be consistent with Replenishment levels included in the "Summary of Negotiations" adopted in May, 2010.



Coastal zones are a major source of food and raw materials, and more than one-third of the world's population lives within 100km of the coast or estuaries. Each year, roughly 50 million people move into these coastal zones, which are critical areas for trade and transport.

The following sections introduce GEF 5 objectives and expected outcomes along with narratives on each of the four strategic objectives. A detailed results framework describing specific outcomes is presented in Table 1.

### **The proposed GEF 5 IW Objectives are:**

- A) Catalyze multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins while considering climatic variability and change;
- B) Catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems while considering climatic variability and change;
- C) Support foundational capacity building, portfolio learning, and targeted research needs for ecosystem-based, joint management of transboundary water systems;
- D) Promote effective management of Marine Areas Beyond National Jurisdiction (ABNJ).

## INTERNATIONAL WATERS OBJECTIVE 1

# CATALYZE MULTI-STATE COOPERATION TO BALANCE CONFLICTING WATER USES IN TRANS-BOUNDARY SURFACE/GROUNDWATER BASINS WHILE CONSIDERING CLIMATIC VARIABILITY AND CHANGE

### RATIONALE

This objective relates to GEF assistance to States for implementing agreed Strategic Action Programmes (SAP) for interventions in cross-border surface and groundwater basins. GEF has previously supported such foundational capacity building in almost 30 transboundary freshwater systems. Patterns of intensive and conflicting uses of water resources in transboundary surface and groundwater basins are resulting in significant ecological and economic damage, reduced livelihoods for the poor, and increased political tensions among downstream States. These impacts become exacerbated with increasing climatic variability. Shallow groundwater over-extraction, saline intrusion, and pollution of groundwater supplies must now be factored into GEF projects, especially for many SIDS where water supply threats are major threats to their viability. Use of IWRM plans/policies at the basin level consistent with WSSD targets has been identified as an answer to balancing conflicting uses of water resources and to inform tradeoffs.

With the low Replenishment scenario that was approved, the focus would be on initiating basic implementation of agreed action programmes with work on legal and institutional issues for the transboundary cooperative frameworks, retrofitting understanding of climatic variability and change and groundwater considerations into water management frameworks, national reforms, and modest local demonstrations. If the high funding scenario had been chosen, the focal area would have been able to help States avoid more disputes over water use, prevent more water pollution, protect additional aquifers for use in droughts, and introduce more widespread national water sub-sector reforms through enhanced assistance in programmatic approaches for SAP implementation and cross-focal area GEF projects.

Considerations of floods and droughts will henceforth be incorporated through IWRM as will improved management of surface and groundwater, filling a gap with States that have not addressed the WSSD target for IWRM. Benefits of collaboration on transboundary basins and adoption by cooperating states of reforms in IWRM policies contribute to improved community livelihoods, increased crop yields, sustainable irrigation, improved environmental flows, and reduced health risks where pollutants create risks. These interventions contribute to regional integration, reduction of tensions among states, and increased stability while floodplain management and wetlands conservation help trap carbon.

### PROJECT SUPPORT

GEF will support further development and implementation of regional policies and measures identified in agreed SAPs, which through collaborative action would promote sustainable functioning of already existing joint legal and institutional frameworks or help establish new ones. GEF assistance to states includes development and enforcement of national policy, legislative and institutional reforms as well as demonstrating innovative measures/ approaches to water quantity and quality concerns. The projected impact will enable States to negotiate treaties and better balance conflicting uses of surface and ground water for hydropower, irrigation-food security, drinking water, and support of fisheries for protein in the face of multiple stresses, including climatic variability and change.



## OUTCOMES

SAP implementation will lead to application of IWRM policies and principles that include environmental considerations in better management of surface and groundwater. Outcomes include: movement toward balancing of conflicting water uses; enhanced functioning of joint management institutions; ground-water considerations systematically incorporated into surface water management; protected water supplies; enhanced recharge; improved freshwater fisheries management; and increased understanding leading to better resilience to fluctuating climate.

**Indicators** would vary, including: adoption/implementation of policy and legal reforms at national and local levels that show progress toward WSSD IWRM targets; evidence that national inter-ministry committees function properly; measureable pollution reduction, water use efficiency improvements, restored/protected wetlands, sustainable freshwater fisheries, protection of quality and level of aquifers, capacity enhancement for incorporating aquifers and climatic variability and change reflected in updated SAPs and legal frameworks.

The Guarani aquifer provides a model of how countries can collaborate in the management of shared groundwater systems.

## INTERNATIONAL WATERS OBJECTIVE 2

# CATALYZE MULTI-STATE COOPERATION TO REBUILD MARINE FISHERIES AND REDUCE POLLUTION OF COASTS AND LARGE MARINE ECOSYSTEMS (LMEs) WHILE CONSIDERING CLIMATIC VARIABILITY AND CHANGE

### RATIONALE

This objective relates to GEF assistance to States for implementing agreed Strategic Action Programs for LMEs and coasts. Coasts and oceans are experiencing increasing threats to their functioning. Especially serious are reductions in ability to provide protein for food security, livelihoods, and foreign exchange as well as diminished capacity to absorb carbon as part of the ocean's role in sequestering carbon dioxide. Depletion of marine waters through over-fishing and use of destructive gear and degradation by coastal pollution is accelerating with almost two-thirds of global fish stocks in trouble and in need of management measures. Surveys show at least \$50 billion dollars lost annually (much of it to developing country economies) when illegal, unreported and unregulated fishing depletes stocks or when factory fleets endorsed by governments, are allowed to deplete fisheries in competition with poor fishing communities. There is a strong economic, poverty reduction, and food security argument for needed reforms. Oceans are degrading rapidly and scant little attention is being paid to them.

Loss of coastal habitat has multiple impacts on marine ecosystems, community livelihoods, food security and reduced capacity to sequester carbon. Recent studies suggest that these marine-related carbon sinks are at least as important as terrestrial forests in the global carbon cycle, but they are reportedly being lost 4 times more rapidly than rainforests while the majority of funding goes to rainforest protection. Further, these highly threatened "blue forests" of our coasts (kelp, sea-grass beds, mangroves, salt marshes, etc) are hotspots for carbon assimilation, representing only 1% of coastal/marine areas. When coupled with the expansion of "Dead Zones" from increasing nutrient pollution from agriculture and sewage, habitat loss poses a grave threat to living resources that cross borders. And now, new multiple risks related to climatic variability and change are becoming clear such as coastal flooding with sea-level rise, storm vulnerability, warming oceans, ocean acidification, food chain disruption, and salt water intrusion into groundwater supplies. Before our planet's ocean ecosystems lose more of their capacity to provide protein, livelihoods, and services, such as sinks for excessive emissions of carbon, further degradation must be prevented now before irreversible conditions develop.

GEF has made globally significant progress the last decade in foundational capacity building for States choosing to address the multiple stresses on their shared Large Marine Ecosystems (LMEs)

and coasts. GEF has responded to requests from some 130 States that have chosen to work with neighbors on building trust and confidence in working together through GEF foundational capacity building projects for 18 LMEs, more than one-half of the planet's total that developing countries share. Additionally, the GEF IW area has been at the forefront globally in demonstrating the practical application of spatial planning and management of coastal areas and sometimes adjacent freshwater basins through Integrated Coastal Management (ICM) principles and in mangrove restoration and coastal habitat conservation. The GEF foundational capacity building projects are being rapidly completed as noted by OPS4, and a demand has been created for GEF to assist in implementation of agreed, multi-state action programs. The popularity illustrates recognition by many States of the economic, social, and political importance of keeping LMEs and coasts functioning to provide the many trillions of dollars in estimated free goods and services to human communities that are now being reduced and degraded.

GEF's focus on results-based management means that the multiple stresses on coastal and marine systems must be addressed collectively with States acting together if communities are to benefit with on-the-ground results in terms of livelihoods, access to safe water sources, and improved socio-economic status. Thematic initiatives addressing one issue, such as sustainable fisheries, will fail to produce community results if excessive pollution from agriculture or human sewage results in a "Dead Zone" that impairs sustainable fisheries or if the increase in sea surface temperatures causes the fish stocks to move elsewhere. In order to minimize the vulnerability from sea-level rise, displaced fisheries, and other concerns from climatic variability and change, GEF support for ICM and LMEs will begin to consider risks related to these issues as future Action Programmes are implemented and new ones formulated.

With the low Replenishment scenario for the IW area, implementation of agreed Action Programmes will not be able to include very many investment-scale demonstrations funded by GEF. Instead, GEF must rely on multilateral lending operations and OECD members, through their participation in partnerships with GEF eligible States, to reduce influence of their distant fleets on depletion of living resources and provide co-financing to prevent conversion of "blue forests", reduce pollution, and support essential ICM programs. Local ICM reforms supported by national governments

have been shown in GEF IW projects to achieve cost-effective outcomes as have limited use designations for important habitat such as sea-grass beds and coral reefs that GEF terms “fish refugia”. Stakeholder engagement is mandatory and gender issues must be addressed. Reduction of land-based sources of marine pollution will continue to demand GEF attention, particularly nutrients from sewage and agriculture that contribute to the alarming spread of coastal “Dead Zones” and adverse effects on coral reefs. Support to the GPA (Global Programme of Action for the Protection of the Marine Environment from Land-based Activities) can only be at a limited level given limited Replenishment funding to help address the disruption to the global nitrogen cycle. GEF will stress avoiding further depletion of fish stocks and loss of “blue forests” through habitat restoration/conservation associated with ICM and ecosystem-based approaches to LME management. ICM would be incorporated into LME SAP implementation to help secure the planet’s “blue forests” for multiple benefits (protecting an important carbon sink, securing habitat for biodiversity, protecting community livelihoods and food security, and reducing storm/coastal flooding).

## PROJECT SUPPORT

Where capacity is built and collective action programmes agreed by States significantly contributing to a transboundary concern, GEF will support implementation of SAPs with reforms and investments that produce results. Policy, legal, institutional reforms and multi-agency strategic partnerships that contribute to WSSD targets for recovering and sustaining fish stocks would be a priority, including regional and national-level reforms in legal frameworks and governance, access rights, and enforcement in LMEs. GEF would also support in a limited way: investments in sustainable alternative livelihoods (such as sustainable mariculture), habitat restoration and limited use designations such as fish refugia, technical assistance, promotion of less destructive gear to reduce stress on wild fish stocks, and support to implementation of the 1995 International Code of Conduct for Responsible Fisheries in ICM and in LMEs.

GEF pilot successes in support for the GPA and nitrogen pollution reduction will be continued to reduce land-based nutrient pollution of shared LMEs and their coasts. This is aimed at catalyzing global attention to disruption of the nitrogen cycle and to limit expansion of “Dead Zones” that interfere with food security and livelihoods. National and local policy, legal, institutional reforms to reduce land-based inputs of nitrogen and other pollutants will be pursued. Incorporation of nutrient reduction into ICM policies and plans would have been systematic in the higher scenarios as would have been innovative partnerships to complement the IW platforms in the Earth Fund such as “Rebuilding Ocean Fish Stocks” to achieve broader scale and global impact of the platforms with the business community. These will now be limited.



Depletion of marine waters through over-fishing and use of destructive gear and degradation by coastal pollution is accelerating with almost two-thirds of global fish stocks in trouble and in need of management measures.

## OUTCOMES

In the two larger Replenishment scenarios, GEF intended to work toward a global impact on the rebuilding of fish stocks as well as catalyzing global action on reduction of nutrient pollution creating “Dead Zones” and new interest in restoring and protecting the little known but significant carbon sinks of coastal and marine “blue forests”. With limitations, more modest SAP implementation will focus on catalyzing the application of policies and principles related to sustainable fisheries and ICM as well as a limited start on few investments. Sustainable joint management institutions and mechanisms for ecosystem-based approaches to managing LMEs as well as functioning national inter-ministry committees would represent political commitments to ecosystem-based joint action and national mainstreaming. National and local policy, legal and institutional reforms and increased enforcement would reduce land-based pollution, over-fishing, and secure coastal/marine habitat, especially the “blue forests” that need protection as carbon sinks. Stakeholder and Parliamentary Dialogues and gender mainstreaming will help promote more widespread adoption of reforms and a focus on enforcement of legal regimes.

Another expected outcome would be multi-agency partnerships in strategic approaches that foster replication after GEF assistance is ended by incorporating them into UN frameworks and country assistance strategies of agencies and partners. Increased coverage of Marine Protected Areas (MPAs) would also be expected from cross-focal area projects with the Biodiversity area, and pilot support for improved management of multi-country LMEs with their fragile changing environment will hopefully catalyze management institutions to prevent decline. **Indicators** would vary in different projects, including: land-based nutrient pollution reduction; rights-based and sustainable fisheries policies reducing over-fishing and fostering gear changes; community income benefits; improved enforcement; conserved/restored coastal “Blue forests”; reduction in overcapacity of boats; and policy/legal/institutional reforms at national and local levels helping States move toward the WSSD 2010/2015 marine targets. Climatic variability and change and ICM would be reflected in updated SAPs for LMEs. Partnership indicators would be captured by incorporation into country assistance frameworks and agency priorities.

## INTERNATIONAL WATERS OBJECTIVE 3

# SUPPORT FOUNDATIONAL CAPACITY BUILDING, PORTFOLIO LEARNING, AND TARGETED RESEARCH NEEDS FOR ECOSYSTEM-BASED, JOINT MANAGEMENT OF TRANSBOUNDARY WATER SYSTEMS

### RATIONALE

A decade of GEF experience shows that interventions in multiple countries with regional projects are more cost-effective than individual country IW projects in catalyzing commitments to collective action. OPS4 clearly highlights the impact on collaboration among States by using these GEF processes that build trust and confidence for their working together on shared visions for water-related concerns. An additional benefit involves avoiding political conflicts among neighboring States and pursuing joint development benefits and regional integration. This strategy of using foundational processes to leverage political commitment to collective action and then scaling up with innovative policy, legal and institutional reforms and pilot demonstrations may take 10 years and successive projects to achieve. During GEF-5, climatic variability and change, consideration of aquifers, and gender mainstreaming will be integrated into these foundational, capacity building processes.

Where capacity and agreement among States is not yet built for collectively addressing transboundary concerns or where climatic variability and change are not yet incorporated into adaptive management frameworks, an enabling environment for action will be created through GEF supported foundational processes. These processes include: establishment of national inter-ministry committees for project participation, development of Transboundary Diagnostic Analyses, third-party facilitation, stakeholder participation, and formulation of Strategic Action Programs (SAPs) with shared visions and agreed reforms and investments. These enabling activities also focus on capacity building and technical assistance for legal and institutional aspects of multi-level governance reforms for transboundary water systems so desperately needed not only at the transboundary level but also at the sub-basin, national, and local levels.

Under the low Replenishment scenario, which would only include marginal funding over the GEF 3 allocation to the IW focal area, this objective would necessarily be limited to initiating support for only a limited number of new starts requested by States desiring to work together on their transboundary water systems. There would also be limited targeted research to fill gaps in understanding and a few projects to develop techniques and measures to help meet the new GEF 5 IW requirements. Despite limitations, the intention is to keep an emphasis on active learning and South-to-South experience sharing for the GEF IW portfolio through new “Communities of Practice” and foster engagement with the private sector.

With limitations, a smaller number of requests for foundational capacity building and capacity enhancement for climatic variability and change and incorporating groundwater considerations will be supported. Each project will be more expensive to meet the new GEF 5 IW requirements. For shared LMEs and coasts, adaptive management institutions would become better enabled to build resilience to fluctuating fisheries, coral reef bleaching, sea-level rise, coastal storm vulnerability, and coastal hypoxia (‘Dead Zones’) through their incorporation into strategies for LME governance improvements and ICM. More States would be in position to meet the 2010/2015 WSSD marine-related targets as a priority for GEF 5.

### PROJECT SUPPORT

For transboundary surface and groundwater systems, groundwater concerns and opportunities would be integrated into management of surface water systems (and surface water concerns into transboundary groundwater) so that basins or aquifers serve as management units. National inter-ministry committees would contribute to development of Strategic Action Programmes, which would include commitments to establish or strengthen institutions for multi-state, collective management and subsequent action. An enabling environment for adopting Integrated Water Resources Management (IWRM) plans and policies per WSSD targets will be pursued in States sharing transboundary surface and groundwater systems; and climatic variability and change will be integrated into the GEF supported processes. For coastal and marine ecosystems, GEF will utilize similar foundational capacity building as States adopt ecosystem-based approaches at the LME and local ICM scales. Shifting currents and changes in distribution, abundance, and life cycles of marine resources as well as coastal storm vulnerability and sea-level rise may be included in the GEF-supported new efforts. Limited pilot projects will be utilized, including some with the private sector to supplement Earth Fund platforms such as “Save the Source”. These pilots will help foster approaches to IWRM and ICM.



## OUTCOMES

Outcomes would relate to agreement on key transboundary concerns for waterbodies and political agreements on commitments for joint, ecosystem-based actions and cooperation mechanisms (including legal/institutional frameworks at different levels from the transboundary to the local). Commitments to incorporate transboundary water management priorities into national and local institutions would be accompanied by local pilot demonstrations associated with priority transboundary concerns and groundwater management with community benefits also resulting. GEF IW experiences show these local demonstrations help provide pilot scale community benefits toward MDGs and WSSD targets while also engaging stakeholders in needed actions and helping States better understand potential benefits of collective action. Better understanding of climatic variability and change and groundwater considerations will result in enabling States and waterbody/ocean institutions to build resilience into their base programs.

The expected outcomes for learning/experience sharing would not only be capacity enhancement or best practices identification and sharing among agencies and States, but projected adoption in and improvement in IW portfolio performance. Communities of Practice will harness South-to-South learning among States and agencies. The GEF IW Tracking Tool will be used to compare GEF 4 project performance with that from GEF 5 projects. **Indicators** include: evidence of functioning national inter-ministry committees; agreed SAPs adopted with shared visions of future action and commitments to reforms/investments and reflecting climatic variability and change; and benefits demonstrated from water quality, quantity, habitat, and fisheries pilot projects.

For transboundary surface and groundwater systems, groundwater concerns and opportunities would be integrated into management of surface water systems (and surface water concerns into transboundary groundwater) so that basins or aquifers serve as management units. National inter-ministry committees would contribute to development of Strategic Action Programmes, which would include commitments to establish or strengthen institutions for multi-state, collective management and subsequent action.

## INTERNATIONAL WATERS OBJECTIVE 4

# PROMOTE EFFECTIVE MANAGEMENT OF MARINE AREAS BEYOND NATIONAL JURISDICTION (ABNJ)

### RATIONALE

Since 1982 when the UN Convention on the Law of the Sea defined (among other things) areas under national maritime jurisdictions, Areas Beyond National Jurisdiction (ABNJ) have remained an important management challenge. Despite covering 40% of the planet, they lack comprehensive legal instruments and normal management options and are threatened by: increasing pelagic fishing for highly migratory species and bottom trawling for deep-sea species on seamounts, ridges, and other features, maritime navigation, extraction of hydrocarbons and mineral exploration, and other emerging activities such as ocean fertilization, which affects the marine environment. Solutions to the legal and management challenges are emerging under a number of conventions and international legal instruments. Recent developments at the international level (UN, CBD, FAO) demonstrate growing interest in high seas issues, which have been eligible for GEF IW funding since the 1995 GEF Strategy. For the purposes of this objective, ABNJ, deep seas, and open oceans would all be eligible for GEF assistance.

### PROJECT SUPPORT

This objective was originally included only in the higher IW Replenishment scenarios. However, new information shows accelerated depletion of these systems as well as changing conditions from climate and reduced productivity that actually threatens protein and international trade from the oceans, so reallocations were made. Fisheries, especially those related to highly migratory species such as tuna and bottom trawling for deep-sea species are likely to remain the primary and most widespread threat to ecosystems in ABNJ/open oceans. Tuna fishing by purse seiners and long-liners can impact non-target species such as sea birds, marine mammals and sea turtles. Solutions have been found to prevent and reduce by-catch and projects dealing with these are sought. For example: in the eastern Pacific marine mammal by-catch has been reduced by changes in fishing practices; in the Southern Ocean bird mortality from long liners has been reduced by gear alterations; and turtle by-catch can be reduced by use of circle hooks on long lines. Regional fisheries organizations (RFMOs) responsible for managing migratory species are increasingly collaborating in these initiatives, and the fisheries industry and conservation groups are collaborating more closely with RFMOs, offering platforms to leverage private-public partnerships and international legal

innovations. GEF would work with these organizations.

Protection of deep-sea species, marine biodiversity, and seamount habitat can be greatly improved through enhanced capacity of RFMOs to manage according to ecosystem-based approaches and application of conservation tools such as MPAs and spatial management tools. Pilot initiatives with resources and expertise from both the Biodiversity and IW areas have the potential to holistically address sustainable fisheries and conservation with Marine Protected Areas (MPAs), Benthic Protected Areas (BPAs), spatial management, cooperative frameworks, and improved flag-state fisheries compliance.

Projects that develop and test technology and management arrangements for both pelagic and deep-sea environments and seamounts or help reduce tuna/other by-catch would be supported in limited pilots that reflect limited resources of Replenishment. These projects may apply the criteria issued in CBD/COP9 Decision IX/20 or under the FAO International Guidelines on the Management of Deep-sea Fisheries in the High Seas. Use of existing legal instruments such as Regional Seas Agreements, RFMOs, and other arrangements such as IMO Special Areas or PSSAs and International Seabed Authority protected area measures may be tested along with market and industry approaches. NGOs and other stakeholders with capacity to contribute to the testing of measures and management options would be supported to contribute to urgent need to reverse depletion and habitat degradation occurring in these sensitive environments that represent the “global commons” of our planet.



## OUTCOMES

GEF intended to have a global institutional impact under the \$660 million IW scenario by testing management approaches in a joint programmatic approach with the Biodiversity focal area. With less funding, only a limited set of pilots can be supported with less global catalytic impact than in higher scenarios. Outcomes include: sustainable fisheries mechanisms and institutions, promotion and capacity building on the use of improved gears, improved flag-state and port-state monitoring and control of fishing practices; and protection of vulnerable marine ecosystems—including seamounts. Partnerships with NGOs/foundations/ States/ agencies/ industries are expected. **Indicators** include: establishment of BPAs, improved flag and port state enforcement; demonstration plans under implementation for incorporation of these concerns into work of RFMOs and other institutions, and establishment of new, pilot institutions and management systems for certain ABNJ, deep-sea fisheries, and open oceans.

Outcomes include sustainable fisheries mechanisms and institutions.

## TABLE 3: INTERNATIONAL WATERS RESULTS FRAMEWORK

Long-Term IW

**Goal:** Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services.

**Impacts:** Multi-state cooperation catalyzed to address concerns of transboundary water systems for most every continent and ocean with special impact on rebuilding marine fish stocks and protecting “blue forests” coastal habitat globally

Objectives	Key Expected Outcomes	Key Targets for \$4.23 billion Target	Core Outputs
		Total Focal Area Allocation	
		\$440 million	
<p><b>Objective 1:</b> Catalyze multi-state cooperation to balance conflicting water uses in trans-boundary surface and groundwater basins while considering climatic variability and change</p>	<p><b>Outcome 1.1:</b> Implementation of agreed Strategic Action Programmes (SAPs) incorporates transboundary IWRM principles (including environment and groundwater) and policy/ legal/institutional reforms into national/local plans</p> <ul style="list-style-type: none"> <li><b>Indicator 1.1:</b> Implementation of national/local reforms; functioning of national inter-ministry committees</li> </ul> <p><b>Outcome 1.2:</b> Transboundary institutions for joint ecosystem-based and adaptive management demonstrate sustainability</p> <ul style="list-style-type: none"> <li><b>Indicator 1.2:</b> Cooperation frameworks adopted and states contribute to financial sustainability</li> </ul> <p><b>Outcome 1.3:</b> Innovative solutions implemented for reduced pollution, improved water use efficiency, sustainable fisheries with rights-based management, IWRM, water supply protection in SIDS, and aquifer and catchment protection</p> <ul style="list-style-type: none"> <li><b>Indicator 1.3:</b> Measurable water-related results from local demonstrations</li> </ul> <p><b>Outcome 1.4:</b> Climatic variability and change as well as groundwater capacity incorporated into updated SAP to reflect adaptive management</p> <ul style="list-style-type: none"> <li><b>Indicator 1.4:</b> Updated SAP and capacity development surveys</li> </ul>	<p>\$130 million</p> <p>Co-financing ratio of 1:2</p> <p>Multi-state- cooperation results in: adoption/ implementation of national/ local reforms in 50% of States and successful demonstration results in at least 50 % of States in 6-7 transboundary water systems</p> <p>Earth Fund Platform on “Save the Source”</p>	<ul style="list-style-type: none"> <li>National and local policy and legal reforms adopted/</li> <li>Cooperation frameworks agreed with sustainable financing identified</li> <li>Types of technologies and measures implemented in local demonstrations and investments</li> <li>Enhanced capacity for issues of climatic variability and change and groundwater management</li> </ul>

**TABLE 3: INTERNATIONAL WATERS RESULTS FRAMEWORK** (CONTINUED)

Objectives	Key Expected Outcomes	Key Targets for \$4.23 billion Target	Core Outputs
<p><b>Objective 2:</b> Catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change</p>	<p><b>Outcome 2.1:</b> Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/ institutional reforms into national/local plans</p> <ul style="list-style-type: none"> <li><b>Indicator 2.1:</b> Implementation of national/local reforms; functioning of national inter-ministry committees;</li> </ul> <p><b>Outcome 2.2:</b> Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability</p> <ul style="list-style-type: none"> <li><b>Indicator 2.2:</b> Cooperation frameworks adopted &amp; include sustainable financing</li> </ul> <p><b>Outcome 2.3:</b> Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results (</p> <ul style="list-style-type: none"> <li><b>Indicator 2.3:</b> Measurable results for reducing land-based pollution, habitat, and sustainable fisheries from local demonstrations</li> </ul> <p><b>Outcome 2.4:</b> 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”)</p> <ul style="list-style-type: none"> <li><b>Indicator 2.4:</b> Updated SAPs and capacity development surveys</li> </ul>	<p>\$180 million</p> <p>1:2 co-financing ratio</p> <p>Multi-state cooperation results in: adoption/ implementation of national/local reforms in 50% of States and successful demonstrations results for at least 50 % of States in 5-6 LMEs</p> <p>Earth Fund platform “Rebuilding Ocean Fish Stocks”</p>	<ul style="list-style-type: none"> <li>National and local policy/legal/institutional reforms adopted/</li> <li>Agreed commitments to sustainable ICM and LME cooperation frameworks</li> <li>Types of technologies and measures implemented in local demonstrations and investments</li> <li>Enhanced capacity for issues of climatic variability and change</li> <li>Industry partnerships with Earth Fund</li> </ul>

**TABLE 3: INTERNATIONAL WATERS RESULTS FRAMEWORK** (CONTINUED)

Objectives	Key Expected Outcomes	Key Targets for \$4.23 billion Target	Core Outputs
<p><b>Objective 3:</b> Support foundational capacity building, portfolio learning, and targeted research needs for joint, ecosystem-based management of trans-boundary water systems</p>	<p><b>Outcome 3.1:</b> Political commitment, shared vision, and institutional capacity demonstrated for joint, ecosystem-based management of waterbodies and local ICM principles</p> <ul style="list-style-type: none"> <li><b>Indicators 3.1:</b> Agreed SAPs at ministerial level with considerations for climatic variability and change; functioning national inter-ministry committees; agreed ICM plans</li> </ul> <p><b>Outcome 3.2:</b> On-the-ground modest actions implemented in water quality, quantity (including basins draining areas of melting ice), fisheries, and coastal habitat demonstrations for “blue forests” to protect carbon</p> <ul style="list-style-type: none"> <li><b>Indicator 3.2:</b> Measurable results contributed at demo scale</li> </ul> <p><b>Outcome 3.3:</b> IW portfolio capacity and performance enhanced from active learning/KM/experience sharing</p> <ul style="list-style-type: none"> <li><b>Indicator 3.3:</b> GEF 5 performance improved over GEF 4 per data from IW Tracking Tool; capacity surveys.</li> </ul> <p><b>Outcome 3.4:</b> Targeted research networks fill gaps</p> <ul style="list-style-type: none"> <li><b>Indicator 3.4:</b> Coral reef and nutrient reduction research results incorporated into new agency and GEF IW projects</li> </ul> <p><b>Outcome 3.5:</b> Political agreements on Arctic LMEs help contribute to prevention of further depletion/degradation.</p> <ul style="list-style-type: none"> <li><b>Indicator 3.5:</b> agreements signed; AMAP monitoring shows no further depletion/ degradation of the Arctic LMEs supported by GEF</li> </ul>	<p>\$100 million</p> <p>Multi-state agreement on commitments to joint, ecosystem-based action in Strategic Action Programmes for 7-8 new transboundary water bodies with modest demonstrations</p> <p>85% IW projects demonstrate active GEF portfolio experience sharing/learning</p>	<ul style="list-style-type: none"> <li>National inter-ministry committees established; Transboundary Diagnostic Analyses &amp; Strategic Action Programmes; local IWRM or ICM plans</li> <li>Demo-scale local action implemented, including in basins with melting ice and to restore/protect coastal “blue forests”</li> <li>Active experience /sharing/ learning practiced in the IW portfolio</li> <li>Arctic LMEs addressed with partners</li> </ul>

**TABLE 3: INTERNATIONAL WATERS RESULTS FRAMEWORK** (CONTINUED)

Objectives	Key Expected Outcomes	Key Targets for \$4.23 billion Target	Core Outputs
<p><b>Objective 4:</b> Promote effective management of Marine Areas Beyond National Jurisdiction (ABNJ)</p>	<p><b>Outcome 4.1:</b> ABNJ (including deep-sea fisheries, oceans areas, and seamounts) under sustainable management and protection (including MPAs)</p> <ul style="list-style-type: none"> <li>• <b>Indicator 4.1:</b> ABNJ demo plans implemented; improved flag and port state enforcement of practices</li> </ul> <p><b>Outcome 4.2:</b> Plans and institutional frameworks for pilot cases of ABNJ have catalytic effect on global discussions</p> <ul style="list-style-type: none"> <li>• <b>Indicator 4.2:</b> Increased emphasis on ABNJ in agencies/ organizations compared to GEF 4</li> </ul>	<p>\$ 30 million</p> <p>50 % of demonstrations sustainable within institutions</p>	<ul style="list-style-type: none"> <li>• Demonstrations for management measures in ABNJ, (including deep-sea fisheries, ocean areas) with institutions;</li> </ul>