

PLAN OF OPERATIONS
GLOBAL ENVIRONMENTAL FACILITY
CONCEPT PAPER AND PROPOSAL FOR PROJECT DEVELOPMENT FUNDS (PDF)
Block B Grant

PREPARATION:	
Project Name:	PDF-B: Integrated ecosystem management of the Gulf of Fonseca
Project Number:	RS-X1015
Countries:	El Salvador, Honduras, Nicaragua
Requesting Agencies:	Ministry of Environment of El Salvador, Ministry of Environment and Natural Resources of Honduras, Ministry of Environment and Natural Resources of Nicaragua
Executing Agency for PDF Block B:	Inter-American Development Bank (IDB)
PDF Block B Funds Requested:	US\$600,000
Country Endorsement:	Endorsement letters attached
Duration:	Execution: 12 months; Disbursement: 18 months

FULL PROGRAM:	
	The above PDF Block B is being requested for the preparation of a GEF Full program. The basic data for the Full program appears below. The concept and PDF B have been presented for review at the same GEF Council meeting.
Project Title:	Integrated ecosystem management of the Gulf of Fonseca
GEF focal areas:	International Waters
Operational Program:	Integrated Land and Water Multiple Focal Area (OP9)
Country Eligibility:	El Salvador, Honduras and Nicaragua are eligible to receive assistance from the GEF
Total Cost:	US\$10,000,000
GEF Contribution (including PDF B):	US\$5,600,000
Government Contribution:	US\$1,000,000
Executing Agency:	To be defined.
Project Duration:	5 years
Project Team:	Michele Lemay, Team Leader (RE2/EN2), Henrik Franklin (RE2/EN2), Rikke Olivera (RE2/EN2); Sybille Nuenninghoff

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I PROJECT LINKAGE TO NATIONAL AND REGIONAL PRIORITIES AND PROGRAMS

A. Overview and Priority Assigned to the Gulf

- 1.1 The Gulf of Fonseca is one of the most important features of Central America's Pacific Coast, both in terms of the ecological functions it performs and its biological diversity. Bordered by 409 km of coastline, the Gulf encompasses approximately 3,200 km² of marine and inter-tidal waters shared, from north to south, by El Salvador, Honduras and Nicaragua. Ringed by a complex of estuaries, mangroves, lagoons and salt flats, the Gulf of Fonseca has historically supported one of the most productive artisanal fisheries in the region and currently accounts for a significant proportion of Central America's farmed shrimp production. It also functions as critical nursery habitat for marine species of the Tropical Eastern Pacific ecoprovince. Along with the Gulf of Honduras on the Atlantic coast, the Gulf of Fonseca is one of only two trinational maritime bodies in Central America and, as such, requires particularly close international coordination to maintain the integrity of the ecosystem.
- 1.2 The ecological significance of the Gulf of Fonseca has been confirmed by several global and regional priority-setting initiatives. The Gulf of Fonseca is one of the 25 most highly ranked priorities for coastal and marine conservation in the Central Caribbean Ecoregion (Sealy and Bustamante, 1999). Reviews of the status of mangroves in Central America also designate the Gulf as one of the most important mangrove complexes in the region (Suman, 1994). The Gulf of Fonseca's estuarine ecosystem sustains the fisheries production not only in the Gulf itself, but also along the rest of the Central American coast by providing nursery habitat for commercially important species and nutrients. Recent diagnostics of the Gulf and its upstream watersheds confirm that enhanced regional cooperation among the three coastal states is key to maintaining the environmental quality of this international maritime body. In addition, the governments El Salvador, Honduras and Nicaragua have jointly designated the Gulf of Fonseca as a high priority for cooperation and have approached the IDB for support in developing a regional project to be presented for GEF financing.
- 1.3 In the early 1990's, the Central American Commission on Environment and Development (CCAD) began promoting an environmental initiative for the Gulf of Fonseca. In September 1996, the three governments signed an agreement for working in a coordinated manner in the Gulf of Fonseca. A project entitled "*Coastal Ecosystem Conservation in the Gulf of Fonseca*" (PROGOLFO) was approved in 1999 with financing from the Danish Agency for International Development (DANIDA) and with a regional coordination structure bringing together the Ministries of Environment of all three countries.
- 1.4 The activities of PROGOLFO have revolved around eight 'work platforms' for environmental management formulated through a participatory process and corresponding to the specific priorities and concerns of each country in managing the Gulf. Some of the central themes have included: (a) sustainable artisanal fisheries and shrimp mariculture; (b) protected areas; (c) conservation of coastal ecosystems, including

mangroves; (d) solid waste management; and (e) the inclusion of women in productive activities. In addition to technical studies and pilot projects, PROGOLFO supported a broad-based learning process on participatory management and conservation of coastal ecosystems, decentralized approaches to municipal and land use planning, stakeholder analysis and conflict management. PROGOLFO has also produced a comprehensive regional strategy for integrated management of coastal and marine resources of the Gulf of Fonseca, the contents of which have formed the basis of this proposal.

- 1.5 The three countries signed a Memorandum of Understanding for the Mesoamerican Sustainable Development Initiative (IMDS) of the Plan Puebla Panamá (PPP) in July 2003. A priority of the IMDS is to promote sustainable development programs in transboundary areas, and at the Second Technical Meeting of the IMDS in Managua, Nicaragua in September 2004, the Gulf of Fonseca was selected as a priority area. The IDB has received a formal joint request from the three governments to proceed with the development of a regional project for the environmental protection of the Gulf of Fonseca for possible consideration for GEF financing. The Bank has also received letters of concurrence from the Governors of each corresponding country as well as letters of endorsement from the GEF focal points.

2. Resource Management Context

- 1.6 The Gulf stretches from Punta Cosiguina in Nicaragua to Punta de Amapala in El Salvador and is among the largest estuarine complexes of the Eastern Pacific region. As such, it is comprised of extensive, very shallow marine waters influenced by tides and freshwater inflows from tributary watersheds, including two bi-national watersheds. It has a relatively narrow opening to the Pacific that limits circulation and flushing and thereby increases its vulnerability to land-based and marine pollution.
- 1.7 Five major watersheds drain into the Gulf of Fonseca: the Choluteca, Nacaome, Goascaran, Rio Negro and Villanueva. The lower parts of these watersheds are encompass productive alluvial plains that support the production of non-traditional export crops (particularly melons). The upper parts of the watersheds are predominantly mountainous, partly covered by dryland forests and used for livestock production.
- 1.8 Portions of the Gulf region are under protected area status in all three countries, including the Gulf of Fonseca Archipelago Marine National Park in Honduras, the ecologically important Estero Real estuary in Nicaragua and Bahía La Unión in El Salvador, which serves as nursery habitat for resident and migratory bird species. In addition, 69,711 ha of the mangroves and lagoons in the Honduras portion of the Gulf and 81,700 ha of the Estero Leal in Nicaragua were declared Ramsar sites in 1999 and 2001 respectively, recognizing the international significance of the Gulf of Honduras' trinational wetland system.
- 1.9 Administratively, the land portions adjoining the Gulf of Fonseca fall within the Department of La Union in El Salvador, Valle and Choluteca in Honduras and Chinandega in Nicaragua. An estimated 1 million residents who live in the coastal area of the main watersheds that flow into the Gulf depend on the resources of the coast and estuaries for their livelihood. Although predominantly rural and despite extensive outmigration, the region is reported to be one of the most densely populated in Central America and with the highest levels of poverty. The appropriation of land for commercial agriculture, extensive livestock production or shrimp farming has relegated resource-poor

individuals to the most marginal areas of the Gulf, either the steep slopes of the foothills where maize and sorghum are grown in a shifting cultivation system or along the coastal mangroves where migrants depend on subsistence harvesting of shellfish, hunting and trapping.

II PROJECT RATIONALE AND OBJECTIVES

A. Sustainable baseline scenario

- 2.1 The physical, ecological and social conditions of the Gulf have set the stage for perceived and actual conflicts over resource use that are both local and tri-national in scale. A relatively large and poor local population has become relatively crowded in arid, rocky foothills, compressed between the land holdings for commercial agriculture and shrimp mariculture. Drastic reductions in forest cover in the last decades, both in mangrove areas and in lowland and upland dry forests have led to increased sedimentation of coastal lagoons and estuaries. Accelerated sedimentation, including during extreme weather events such as Hurricane Mitch, has also resulted in prolonged plumes and changes in the hydrology of the Gulf. In addition to direct removal of mangroves, shrimp farm construction and operation has also altered the hydrology of coastal waters, particularly highly productive seasonal lagoons that are critical to migratory birds and are traditionally harvested by artisanal fishers. Widespread use of agrochemicals combined with effluent discharges from shrimp ponds have contributed to the eutrophication of coastal waters as well as increased frequency of harmful algal blooms. Operational spills from the port of San Lorenzo (Honduras) and from projected increases in maritime traffic as a result of a US\$120 million investment for Port Cutuco (El Salvador) are of increasing concern as sources of marine pollution.
- 2.2 The Gulf has experienced severe declines in fisheries resources, most likely as a combined result of habitat degradation and overharvesting due to excess capacity in the artisanal fleet. Depleted stocks have affected some of the poorest segments of the population in all three countries and have contributed to persistent heated conflicts between artisanal fishers in all three countries and other users, particularly the shrimp farming industry.
- 2.3 Many of these problems are rooted in economic policies and incentives that have promoted the expansion non-sustainable agricultural and fisheries practices and the absence of mechanisms to value environmental services associated with the ecosystems of the Gulf Region. In addition, land use decisions of local governments and land holders have failed to recognize the linkages between these ecosystems, including, for example, the functions provided by the mangrove belt around the Gulf and the upland parts of watersheds draining into the Gulf.
- 2.4 With the possible exception of PROGOLFO, most of the initiatives financed in the Gulf of Fonseca are national rather than regional in scope. The World Bank is supporting several projects that are indirectly related to the Gulf of Fonseca. Both in Nicaragua (US\$36.7 M) and in El Salvador (US\$50.0 M), the World Bank finances land administration programs that provide support for land titling and regularization, as well as capacity building of municipalities in land-related activities. In the case of Nicaragua, the program also includes demarcation and consolidation of protected areas. Natural disaster mitigation projects are supported in both Honduras (US\$10.8M) and Nicaragua

(US\$13.5M), including studies in the changes of fluvial geomorphology in river basins affected by hurricane Mitch.

- 2.5 The IDB is currently financing the following two investment programs that are directly relevant to the proposed GEF project, particularly for the component on pollution control and prevention in tributary watersheds: (a) Natural resources management in priority watersheds in Honduras (US\$25 M), which includes the Nacaome watershed which drains in the Gulf of Fonseca, and (b) Environmental pollution control in critical areas in El Salvador (US\$30 M), which focuses on water pollution control and solid waste management, in areas, among others, influencing the Gulf of Fonseca. As a complement to the above, the IDB's Multilateral Investment Fund (MIF) is currently financing projects both in Nicaragua and El Salvador that promote the adoption of cleaner production processes among small and medium-sized enterprises (SMEs). In addition, the IDB is currently preparing a US\$350,000 regional project to support sustainable fisheries in the coastal Pacific region of Central America.
- 2.6 In addition to the World Bank and the IDB, several other donors are supporting project that benefit the Gulf of Fonseca. In terms of bilateral donors, the Gulf of Fonseca has since 1996 been one of the priority areas for the USAID funded Regional Environmental Program for Central America (PROARCA). Examples of activities that are supported in the Gulf of Fonseca include the development of institutional arrangements, the promotion of best management practices in shrimp farming and other alternative productive activities, and enhancing the effectiveness of marine and coastal protected areas. USAID is also supporting a water resources management project that extends over the upper and middle reaches of the Choluteca watershed. Spain is funding a program to enhance the food security conditions in the Gulf of Fonseca (EUR240,000), including the strengthening of community-based artisanal fisheries management. Japan is funding watershed management projects in the tributary watersheds to the Gulf of Fonseca, including the demonstration of integrated agricultural community development models in Honduras and water and sanitation investments in El Salvador.
- 2.7 The European Commission is financing the following three projects related to the Gulf of Fonseca: (a) a program to develop the north Pacific coast of Nicaragua (EUR10.9 M) which focuses on poverty reduction, including support to small and medium sized producers, and strengthening municipal environmental management, (b) a program to strengthen the environmental management in El Salvador (EUR1.6 M) which will, among others, strengthen environmental management capacity in the country's municipalities and strengthen the management of water resources, (c) a binational development program between El Salvador and Honduras (EUR30.0 M) which includes watershed management in several departments of the Gulf of Honduras. The Central American Bank for Economic Integration (CABEI) has also demonstrated an interest in co-financing a sustainable development project in the Gulf of Fonseca, in the context of the IMDS-PPP.
- 2.8 All these programs will have a positive impact on the Gulf of Fonseca. It is recognized, however, that to solve the environmental problems of the Gulf of Fonseca it is necessary to promote management interventions that go beyond the boundaries of a single habitat type, conservation area, political or administrative unit, but rather focus on the ecosystem as a whole (including tributary watersheds, coastal and marine systems).

B. Alternative scenario (with GEF Project)

- 2.9 The development objective of the proposed project is to prevent the degradation and maintain the ecosystem integrity of the Gulf of Fonseca through an integrated approach to managing its land and water resources and promoting their sustainable use. The Program's global objective is to implement a regional cooperative framework for the management of the Gulf of Fonseca that will result in enhanced environmental protection of international waters and strengthen the conservation of globally significant coastal and marine habitats.
- 2.10 The specific objectives of the project are to:
- a. Develop the capacities and institutional mechanisms for integrated ecosystem management of the Gulf of Fonseca from the local level through to the regional level;
 - b. Promote the conservation and sustainable use of the Gulf's coastal and marine resources;
 - c. Control and prevent the principle sources of pollution from the contributing watersheds draining into the Gulf;
 - d. Generate environmental goods and services from integrated ecosystem management that can contribute to local economic development and improved livelihoods of local residents.
- 2.11 The project's objectives are fully consistent with the provisions of Operational Program 9 (OP9 - Integrated Land and Water Multiple Focal Area Operational Program and its strategic priorities (particularly IW-1 and IW-2). Its focus is on building regional capacity for an integrated management approach towards the conservation and sustainable use of the Gulf of Fonseca as an international maritime body. To this end, it combines the establishment of new coordination mechanisms, changes in policies and regulatory frameworks and on-site actions to prevent land-based pollution of the Gulf, protect the regional integrity and quality of globally significant coastal wetlands and other coastal ecosystems, and promote the sustainable use of shared marine resources including fisheries stocks. The project recognizes that the resolution of the Gulf of Fonseca's priority environmental problems requires management interventions that span international boundaries and link coastal and marine systems to watersheds. Finally, the project concept is also closely linked to the biodiversity focal area (OP2 - coastal, marine, wetlands) in that it stresses the conservation and sustainable use of highly diverse mangroves and lagoons that stretch across international boundaries and require coordinated regional action for their protection.

III EXPECTED OUTCOMES

- 3.1 In order to achieve its objectives, the Program will produce four closely related outcomes along with the main outputs expected over the total 5-year period of execution:
- a. *The regional capacity and institutional mechanisms for integrated management of the Gulf of Fonseca are expanded and strengthened.* Building on existing conservation networks in the Gulf, the institutional capacity at the local, national and regional levels to implement, monitor and evaluate integrated ecosystem management policies and initiatives through joint efforts will be strengthened. The foundation for a permanent, self-sustaining, regional cooperation mechanism for environmental protection of the Gulf will be established.
 - b. *The effectiveness of measures for the conservation and sustainable use of the Gulf's coastal and marine resources is enhanced within a regional cooperation framework.* Management of the Gulf as an estuarine system intrinsically linked to its tributary watersheds will be strengthened through the harmonization of policies and regulatory frameworks for preventing land-based and marine sources of pollution; conserving mangroves and promoting sustainable use of shared coastal fisheries stocks, improved scientific basis for decision-making, cooperative monitoring, and the establishment of mechanisms for conflict management over resource use.
 - c. *Regional priorities agree upon and financial resources are mobilized for preventing the principle sources of pollution from the contributing watersheds draining into the Gulf.* A comprehensive action program to address critical trans-boundary pollution problems in the Gulf of Fonseca's originating from tributary watersheds will be formulated with active participation of major stakeholders in all three countries. Outputs include: (a) a trans-boundary diagnostic of water quality, corresponding sources of pollution and root causes; (b) regional information system and monitoring network established with the participation of the private sector; (c) regional priorities and action program agreed upon by all parties.
 - d. *Regional environmental goods and services that contribute to economic development and improved livelihoods of residents of the Gulf are generated.* A mechanism will be put in place for developing, evaluating and replicating sample projects for community-based investments in ecosystem management, particularly focusing on sustainable management of renewable resources within the buffer zones of the protected areas and/or vulnerable habitats within the Gulf of Fonseca ecosystem. The capacity of community-based organizations and small businesses to develop and market environmentally sustainable products and services will be strengthened.

IV PLANNED ACTIVITIES TO ACHIEVE THE OUTCOMES

4.1 In order to achieve its objectives, the GEF project will implement four components that build on a regional strategy endorsed by all three countries. The four components and their associated incremental activities are as follows:

A. Institutional strengthening for integrated ecosystem management

4.2 The regional framework for cooperation in the conservation and sustainable use of the Gulf will be strengthened by building the capacity of existing networks, promoting commitment to a permanent regional coordination mechanism that is also self-sustaining, providing tools for sharing information and experience, and building awareness and new partnerships. Possible activities for this component include:

- a. **Strengthening regional coordination and cooperation.** Technical assistance will be provided to identify priorities for harmonizing regulatory frameworks and norms to manage the Gulf as an integrated system. The project will also support a consensus building process (focus groups, workshops, surveys) aimed at identifying and selecting options for enhanced regional coordination as well as in-country coordination, with the emphasis on sustainability. This work would provide the basis for formalizing coordination arrangements through, for example, regional agreements and with a view to establishing a permanent, self-sustaining mechanism such as a maritime commission. Existing regional organizations and networks would also receive technical assistance in basic areas such as strategic planning, financial management, and human resources to enhance their overall effectiveness and capacity to work at the regional level. This would include strengthening organizations such as, for example, MUGOLFO (Association of Municipalities in the Gulf of Fonseca), CODDEFFAGOLF (civil society association) and other regional associations.
- b. **Building capacity for science-based integrated management.** This would include professional training of staff from local and national authorities as well as regional organizations in such areas as regional planning methods, strategic environmental assessment and the analysis of cumulative impacts on the estuarine system, data management, environmental and socio-economic monitoring, and stakeholder conflict resolution. Technical assistance and on-the-job training would also be provided for regionally coordinated contingency planning and response.
- c. **Information management and sharing.** This will include: (a) the establishment of an regional information system that consolidates existing GIS for the Gulf and is easily accessible to the general public and user groups (incl. environmental monitoring data, risk information, information related to the marketing of environmentally sustainable products and services etc), (b) the compilation and consolidation of available documents, studies and maps relating to the management of coastal and marine resources, and (c) a project monitoring and evaluation system.
- d. **Public awareness and the promotion of new partnerships for conservation.** Information dissemination and awareness raising activities would be supported that increase the public knowledge on a range of environmental issues such as the link between habitat destruction and poverty cycles, the benefits that could be derived

from the conservation of ecosystem services, the need for integrated planning within the context of sustainable development, and the role of civil society and stakeholder involvement in the integrated management of the Gulf of Fonseca ecosystems. A system of incentives would be introduced to promote private/public sector partnerships in priority areas for conservation of the Gulf. This activity would also support exchanges with other IW projects in Latin America, thus enabling the three participating countries to gain exposure to coordination mechanisms in place for managing other estuarine (land and water) systems.

B. Coastal and Marine Ecosystem Management

4.3 This component would finance a combination of focused regional diagnostics, the design and implementation of regional monitoring networks and other measures aimed at improving integrated management of the Gulf's coastal and marine resources. This would include activities in the following thematic areas:

- a. **Mangrove ecosystem management.** Building on the inventories completed through previous projects such as PROGOLFO, mangrove ecosystem vulnerability assessments will be conducted to identify areas that may require special management attention. Based on these studies, management plans (incl. land-use planning and zoning, exploitation and extraction regulations) will be developed and put in place that reconcile the interest between economic development (salt production, shrimp farming, artisanal fisheries) and the maintenance of ecological structure and integrity. Mangrove ecosystem rehabilitation strategies (natural regeneration and active restoration) will be identified and demonstrated by way of pilot projects aimed at, for example, the sustainable harvest of mangrove fire wood and the generation of alternative sources of energy, mangrove rehabilitation projects (see Activity 4).
- b. **Sustainable fisheries management.** A bio-socio-economic assessment will be conducted to assist in the formulation of a regional sustainable fisheries strategy for the Gulf. This will include, among others, investigations on the spatial and temporal recruitment patterns, the population structure and dynamics, as well as the sustainable yields for commercially important species. The current trends, practices and economic impact of fisheries in the Gulf (methods, scale, location, gender aspects, costs, revenues etc) will be evaluated. Based on the results of this assessment, a strategy encompassing a sustainable fisheries policy for the Gulf and harmonized fisheries management regulations will be formulated and validated at the regional and national levels. This could include, for example, regional procedures for agreeing on closed seasons, quota systems, and the establishment of specially regulated fisheries zones and no-take zones. Fisheries management plans will be formulated with the participation of local fishers as a means of promoting the transformation of the fisheries sector towards more sustainable practices. Options such as fish-aggregating devices (FADs) and artificial reefs (incl. methods, locations etc), as well as pilot activities on, for example, catch and release sport fishery would receive support from the program (see Activity 4). Particular attention will be paid to the following areas: Bahía de La Unión and El Tamarindo estuary in El Salvador; Bahía Chismuyo and San Lorenzo in Honduras; and Estero Real and Padre Ramos in Nicaragua, as well as island complexes in the Gulf.

- c. **Sustainable aquaculture.** Regionally harmonized standards and best practice guidelines for the management and regulation of environmentally sustainable shrimp aquaculture will be developed and validated at the regional and national levels. The project will also support the formulation of a regional land-use zoning scheme, based on the potential to carry out environmentally sustainable shrimp aquaculture within a context of integrated ecosystem management that strikes a balance between economic development, poverty alleviation and the conservation of ecosystem services (eg. regulation of hydrological processes, biodiversity conservation).. The project will also support pilot projects that demonstrate environmentally sustainable shrimp farming technologies, as well as diversified alternatives, such as mollusk, conch and oyster farming (see Activity 4).
- d. **Protected Area Management.** A network of terrestrial and marine protected areas will be consolidated in the Gulf of Fonseca and the adjacent tributary watersheds. The existing regional network of protected areas (and buffer zones) will be assessed in terms of: (a) the environmental goods and services generated, (c) the viability and functionality of protected area corridors, and (d) management effectiveness. Protected area management plans will be updated and improved through an iterative process involving the local communities, the private sector and other relevant stakeholders, including the development of municipal bylaws for sustainable public use of the protected areas, as well as the appropriate financial mechanisms for their long-term support. .

C. Management of tributary watersheds for pollution control and prevention

- 4.4 A comprehensive action program to address some of the most critical water pollution problems in the Gulf of Fonseca's tributary watersheds that threaten the integrity and the production capacity of the ecosystems in the Gulf will be developed, endorsed regionally and used to leverage financial resources for implementation. This component would be co-financed with JICA. The tributary watersheds to be included in the program are: Goascorán (shared between El Salvador and Honduras), Nacaome and Choluteca, Río Negro (shared between Honduras and Nicaragua) and Villanueva (Nicaragua). To this end, this component would finance activities such as:

- a. **Regional hydrological and water quality baseline:** This activity will first entail the establishment of a simple regional hydrological model that links flows from tributary watersheds with circulation and tidal regimes in the Gulf. The model would be used in regional settings to analyze trends in water quality and sedimentation. Building on the trans-boundary analysis to be undertaken during preparation activities financed by the PDF-B grant, an inventory and characterization of pollution sources in the tributary watersheds will be conducted as a basis for the formulation of an effective regional pollution control and prevention program. The most polluting and polluted watersheds will be identified, and the point and non-point sources of pollution (eg. industries, agricultural production, urban areas) will be determined. As part of the assessment, the relative contribution of watersheds (including the two bi-national watersheds) to the sedimentation problems of the Gulf will be evaluated. The baseline assessment will also encompass an evaluation of existing capacity within the Gulf region for field monitoring and water quality analysis, reporting and enforcement.

- b. **Development and initial implementation of a regional action program:** Based on the assessment, effective strategies to prevent and control the most significant sources of pollution will be identified, discussed, evaluated and selected through a participatory process involving both the private and public sectors in all three countries. In addition to investments in pollution control technology, the regional action program could include regulatory measures, the adoption of economic incentive structures, the establishment of participatory and cost-effective monitoring, control and enforcement schemes and the development and validation of municipal bylaws to regulate pollution. Preparation of the regional action plan could be accompanied by a Regional Strategic Environmental Assessment (SEA), an instrument being promoted by CCAD and other regional organizations for Central America.

D. Support for the generation of regional environmental goods and services

- 4.5 Opportunities for the generation of regional environmental goods and services that can contribute to local economic development and improved livelihoods of local residents will be identified. A mechanism will be put in place for developing, evaluating and replicating sample projects for community-based investments in ecosystem management. This component could finance for example:
 - a. Technical assistance to identify, develop and assess the feasibility of targeted and replicable sample projects in ecosystem management that generate environmental goods and services (e.g., sustainable alternatives in fisheries and aquaculture, community management of mangroves).
 - b. Design and initial implementation of a financing mechanism for projects developed and prioritized by the local communities. This activity would also entail the promotion of community organizations and small businesses for the marketing of environmentally sustainable products and services.

V STAKEHOLDER INVOLVEMENT/INTENDED BENEFICIARIES

- 5.1 The stakeholders for this project encompass a broad spectrum of public sector, private sector and community-based organizations as well as civil society and the scientific research community.
- 5.2 Among the various stakeholders, the following entities are expected to play active roles in project execution:
 - a. Ministries of Environment and Natural Resources (ES, HO, NI), including the units responsible for protected areas;
 - b. Ministries of Tourism from the three countries (ES; HO, NI)
 - c. Ministries of Agriculture from the three countries, including the departments responsible for aquaculture and fisheries (ES, HO, NI)
 - d. Ministries of Foreign Affairs (ES, HO, NI);
 - e. Academic and training institutions;
 - f. The Central American Commission for Environment and Development (CCAD);

- g. Municipal authorities and multi-municipal associations (eg. MUGOLFO), including the municipal environmental units;
- h. Private sector associations (eg. shrimp farming);
- i. Community-based organizations (eg. artisanal fisheries associations) and civil society (eg. CODDEFFAGOLF).

5.3 The project concept is based on the strategy developed by the PROGOLFO project, which has provided support for the Gulf of Fonseca for more than ten years. This strategy was formulated with broad stakeholder involvement, including national ministries, municipal and local authorities, community groups and other user groups. The Gulf of Fonseca already has a track record of regional collaboration on topics related to the environmental management of the Gulf of Fonseca, including at the national level (between Ministries), municipal level (MUGOLFO) and civil society (eg. CODDEFFAGOLF). The request is also supported by the Central American Commission for Environment and Development (CCAD), which promotes a multi-national focus in the context of the Mesoamerican Sustainable Development Initiative (IMDS) of the Plan Puebla Panamá. The activities proposed in the project all aim at enhancing the involvement of relevant stakeholders and user groups. The project will aim at developing mechanisms for increasing private sector funding and revenue from, for example eco-tourism activities, so as to ensure a more sustainable source of financing for the various initiatives envisioned in the project, in particular for the operation of the regional management frameworks to be developed. The project will also enable the capacity building of local project management capacity.

VI IMPLEMENTATION ARRANGEMENTS

6.1 Options for the implementation of the Full-sized Project will have to be identified and selected with the close participation of the Ministries of Environment of the governments of El Salvador, Honduras and Nicaragua. The governments have indicated their interest in ensuring that the CCAD play a coordination role with specific responsibilities to be defined during project preparation. An ad hoc Advisory Committee will be established to participate in the workshops to be held during project preparation, to review progress, discuss and agree on proposals for the Full-Sized Project.

VII ESTIMATED BUDGET FOR THE FULL SIZED PROGRAM (FSP)

7.1 The preliminary estimate for the total cost of the project is US\$10 million of which US\$5 million would be financed by a GEF Full-Sized Project grant.

7.2 Total co-financing is estimated at US\$5 million, of which US\$2 million would be from JICA and CABEL projects currently under consideration, US\$2 million would be from IDB projects in execution and preparation and US\$1 million would be from the three participating countries. Additional opportunities for co-financing from bi-lateral organizations (e.g., USAID) exist. These as well as the national contributions will be confirmed during the preparation process financed by the PDF B grant. A PDF B grant of US\$600,000 is being requested. Co-financing for approximately US\$400,000 for the PDF-B is expected from the three Governments, as well as CABEL and JICA.

VIII DESCRIPTION OF PROPOSED PDF ACTIVITIES

- 8.1 PDF Block B funding is needed to prepare the Full GEF Program. These resources are needed to consolidate the regional consensus for integrated management of the Gulf reached under PROGOLFO and to develop a complete Project Proposal eligible for GEF financing. The consensus building process provides the opportunity for the three countries to move forward in implementing a more permanent regional coordination mechanism, a potentially significant advancement given the recent history of political and resource use conflicts in the project area. In addition, the PDF Block B resources are particularly crucial in mapping out the process that will result in an informed program of action for preventing pollution from land-based sources and more effective management of the Gulf's coastal and marine resources. The amount of PDF Block B grant resources being requested is US\$600,000 for the following activities that will be carried out during project preparation:

1. Transboundary diagnostic analysis (TDA)

- 8.2 The objective of the TDA will be to validate and assess the threats as well as sources of stress on different parts of the Gulf of Fonseca system, including those associated with land-based sources of pollution, depletion of fisheries stocks and habitat loss. Significant amounts of both environmental and socio-economic information was produced and consolidated by the PROGOLFO project. This existing information will be used to prioritize the environmental and socio-economic problems and understand the transboundary character of these problems. Special emphasis will be placed on documenting the linkages between the Gulf, its physical functioning, and tributary watersheds. The socio-economic information to be assessed will include issues related to resource use conflicts (e.g., over fisheries stocks, coastal lands) to assist in the design of conflict management measures (particularly at the regional level) and incentives for integrated ecosystem management. Possible information gaps will be identified and complementary research and studies will be recommended for financing by the Full GEF Project.

2. Legal and Institutional Assessment

- 8.3 A legal and institutional assessment of the existing national frameworks will be undertaken as a basis for recommendations on how the Full GEF Project can strengthen existing frameworks and/or support the development of alternative regional coordination mechanisms for integrated ecosystem management. This will encompass a review of the capacity and needs of most relevant institutions (incl. national authorities, municipal authorities, protected area authorities, municipal associations, private sector associations, community organizations, civil society etc) that should participate in the regional cooperative framework and be involved in the Full-Sized GEF Project as well as an evaluation of compliance with existing laws and regulations. The assessment will be complemented by an in-depth 'mapping' of local and civil society organizations involved in conservation efforts across the project area. The institutional assessment will also include an analysis of the long-term financial needs and potential mechanisms for sustainable financing. This analysis will entail examining recurrent costs, potential sources of revenues (fees for services, tariffs and fines), design of economic instruments, and establishment of partnership arrangements between relevant stakeholders and user

groups. Finally, the assessment would identify and recommend institutional arrangements for the implementation of the Full-Sized GEF project.

3. Stakeholder consultations and outreach

- 8.4 An Advisory Committee will be established to accompany project preparation and ensure adequate representation of key stakeholders. Members of this Committee will be selected during a first regional workshop organized to launch the project preparation process. The Advisory Committee will be convened on a regular basis during four subsequent regional workshops (one in each country and a final closing workshop). The workshops will also offer an opportunity to disseminate lessons learned from other IW projects in Latin America (such as the recently approved Gulf of Honduras Environmental Protection and Marine Pollution Control project), with a view to promoting exchanges during project implementation. In addition to these formal regional consultations, the PDF Block B will finance a few focus group meetings to promote regional interchanges between local governments, fishers associations and other stakeholders. The purpose of these focus group meetings will be to develop in participatory manner proposals for reinforcing regional networks for conservation and sustainable use of the Gulf. Finally, the PDF B will finance the set up and maintenance of a project web site to help keep the public at large informed of progress in developing the Full-Sized Project.

4. Project Design and Formulation of the Full GEF Project

- 8.5 Resources from the PDF Block B will be used to mobilize the multi-disciplinary team of experts required to design the four components of the project (Institutional strengthening for integrated ecosystem management; Coastal and marine resources management; Management of tributary watersheds for pollution control and prevention; Support for the generation of regional environmental goods and services). In addition to the activities described above, the design process will include a complete analysis of baseline vs. incremental cost activities, an analysis of lessons learned from other IW projects, an in-depth inventory of capacity building needs, equipment needs, and identification possible pilot activities as well as the design of the monitoring and evaluation system. Process, stress reduction and environment status indicators will be selected and agreed upon with all three participating countries. Close coordination and regular consultations with other donors (in particular USAID for PROARCA) will be ensured.
- 8.6 For each component, the work will entail the identification of options; technical justification of the approach recommended; preparation of specifications, terms of reference, budgets, schedules, execution mechanisms, and other documentation needed for implementation of the Full GEF Project. The appropriate monitoring and evaluation mechanisms will be designed.

IX PDF BLOCK B OUTPUTS

- 9.1 The expected outputs of the PDF Block B grant will be: (a) a full GEF Project Document, reflecting stakeholder consultations and including detailed component designs (for incremental activities) and a proposal for the financial sustainability of the project. An updated information baseline (inc; root threat analysis) will be consolidated, as well as a legal and institutional assessment. In addition, the consultation process will help promote

awareness of the Gulf of Fonseca as strategic IW for Central America and reinforce regional networks for its integrated management and sustainable use.

X BUDGET FOR THE PDF BLOCK B

The budget of the PDF Block B is presented below:

Transboundary diagnostic analysis	215,000	215,000
Legal and institutional assessment	100,000	100,000
Stakeholder participation and outreach	75,000	75,000
Full GEF project design	200,000	200,000
External evaluation	10,000	10,000

Co-financing Sources				
Name of co-financer (Source)	Classification	Type	Amount (US\$)	Status
BCIE	Multilateral agency	Grants	200,000	In preparation
JICA	Bilateral donor	Grants	100,000	In preparation
Subtotal Co-financing			300,000	

XI EXECUTION OF THE PDF BLOCK B

- 11.1 The IDB will be responsible for the administration of the PDF Block B grant, including the contracting of all consulting services. Basic and technical responsibility will rest with the Environment and Natural Resources Management Division of Region II at IDB Headquarters in Washington D.C., in close collaboration with the IDB's Country Offices in El Salvador, Honduras and Nicaragua. RE2/EN2 will carry out administration missions and participate in the project preparation workshops and meetings.

XII EXPECTED DATE OF COMPLETION OF PREPARATION ACTIVITIES

- 12.1 The studies to be financed by the PDF-B grant are expected to start in April 2005, with an expected duration of 12 months. The disbursement period will be 18 months. Work Program inclusion of the Full Sized Project is expected in January 2006.

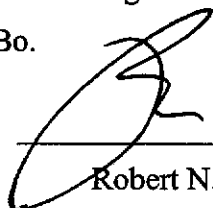
XIII RESPONSIBILITY IN THE BANK

- 13.1 The team leader of the project is Michele Lemay (RE2/EN2) (Tel. (202) 6231838, Fax (202) 6231304, email: michelel@iadb.org). The other members of the team are Henrik Franklin (RE2/EN2), Sybille Nuenninghoff (COF/CES), Hernan Romero (COF/CES), Edwin Mateo Molina (COF/CHO), Jaime Cofre (COF/CNI); Rikke Olivera (RE2/EN2); Miguel Coronado (LEG/OPR).

XIV CERTIFICATION

- 14.1 This operation was approved for financing by the donor of the Global Environment Facility Fund on March 18, 2005, as confirmed through an electronic mail dated March 18, 2005 and signed by Ramesh Ramankutty, Head of Operations & Business Strategy, Global Environment Facility Secretariat. The Global Environment Facility Trust Fund has certified that there are funds available for up to three hundred and fifty thousand U.S. Dollars (US\$600,000) in order to finance the activities described and budgeted in this document. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this Plan of Operations. Amounts greater than the certified amount may rise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

Vo. Bo.



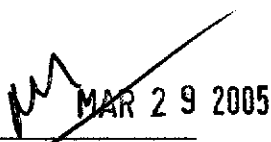
Robert N. Kaplan, EN2/CHF



Lionel Y. Nicol, RE2/DEP

XV APPROVAL

MAR 28 2005



MAR 29 2005

Miguel E. Martínez, RE2/MGR



Global Environment Facility

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Internet: www.gefweb.org

March 18, 2005

Ms. Janine Ferretti
Environment Division Chief
Inter-American Development Bank
1300 New York Avenue, NW W0500
Washington DC 20577
USA

Dear Ms. Ferretti:

I am pleased to inform you that the CEO has approved entry into the GEF Pipeline of the project ***Regional (El Salvador, Honduras, Nicaragua): Integrated Ecosystem Management of the Gulf of Fonseca***, on March 17, 2005. Pipeline entry was discussed at the scheduled Project Review Meeting between the GEF Secretariat and the IADB on March 1, 2005.

It is understood (i) that during preparation, the comments of GEF Secretariat, Implementing Agencies, and other organizations will be taken into account to address technical issues and to ensure coordination of activities, and (ii) that when the project is submitted for Work Program inclusion it will be well advanced in preparation and responsive to the general project review criteria as well as to specific comments in the Secretariat's Project Review Sheet.

I am also pleased to inform you that the request for PDF resources for \$600,000 has been approved by the CEO on March 17, 2005.

Please find attached a copy of the project tracking sheet for your records.

Sincerely,

Ramesh Ramankutty
Head, Operations and Business Strategy

**Regional (El Salvador, Honduras, Nicaragua) : Integrated Ecosystem
Management of the Gulf of Fonseca**

Authority	GEF Contribution (\$ million)	Total Cost (\$ million)	Requested Action	Signature	Date
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Pipeline Entry

Program Manager

Recommendation

Sara Graslund
Sara Graslund 3/16/2005

Team leader

Clearance

Moctar Toure
Moctar Toure 3/16/05

CEO

Approval

Leonard Good
Leonard Good 3/17/05

PDF B

\$0.600

\$0.630

Program Manager

Recommendation

Sara Graslund
Sara Graslund 3/16/2005

Team leader

Clearance

Moctar Toure
Moctar Toure 3/16/05

CEO

Approval

Leonard Good
Leonard Good 3/17/05

Work Program Inclusion

Program Manager

Recommendation

Sara Graslund

Team leader

Clearance

Moctar Toure

CEO

Approval

Leonard Good

Council Approval

Need to circulate to Council for

>second review prior to CEO endorsement (4 weeks review period)

☐ Yes

>CEO endorsement (second review waived)

☐ Yes

Program Manager

Recommendation

Sara Graslund

Team leader

Clearance

Moctar Toure

Endorsement w/o PDF

Program Manager

Recommendation

Sara Graslund

Team leader

Clearance

Moctar Toure

CEO

Approval

Leonard Good

Final Approval

Implementing Agency

Approval

Cummulative GEF Contribution