

Global Environment Facility

Mohamed T. El-Ashry Chief Executive Officer and Chairman 1818 H Street, NW Washington, DC, 20433 USA Tel: 202.473.3202 Fax: 202.522.3240/3245 Email: metashry@worldbank.org

December 18, 2000

Dear Council Member:

UNEP, as the Implementing Agency for the project, Regional (Costa Rica, Nicaragua): Integrated Management and Sustainable Development of the San Juan River Basin and its Coastal Zone, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance UNEP procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by the Council in May 2000 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by the UNEP satisfactorily details how Council's comments and those of the STAP reviewer have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at <u>www.gefweb.org</u>. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to down load the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Adamid T. M-Pr Ch

cc: Alternates, Implementing Agencies, STAP



United Nations Environment Programme

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TELEFAX TRANSMISSION

| То: | Ken King Assistant CEO | Date: | 9 th November 2000 |
|-------|--|-------|-------------------------------|
| | Fax: 1 202 522 3240 | | |
| | Attn: GEF Programme Coordination | | |
| | Ramon C. Mesa Program Coordinator | | |
| From: | John Pernetta Deputy, Programme Coordinator UNEP/GEF Coordination Office | | |

Subject: Submission of internalised project brief on the San Juan River Basin

Please find attached the UNEP internalised project document for the "Formulation of a Strategic Action Program for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and its Coastal Zone," approved by the Council at its 2000 meeting. This is being submitted for final CEO clearance and endorsement.

Regards Johh ¹C. Pernetta

COMMENTS FROM FRANCE ON THE PROJECT "FORMULATION OF A STRATEGIC ACTION PROGRAMME FOR INTEGRATED MANAGEMENT OF WATER RESOURCES AND THE SUSTAINABLE DEVELOPMENT OF THE SAN JUAN RIVER BASIN AND ITS COASTAL ZONE" SUBMITTED TO MAY 2000

PDF B funds were used to carry out an initial transboundary diagnostic study and to identify the main causes of the region's environmental problems.

The project comprises seven components. The two major components are (i) formulation of a strategic action plan and (ii) establishment of a regional information system.

Although the project document indicates that the lack of integrated management at the national level is a major problem for both countries, it provides scant information on the situation in these countries. Transboundary management will prove an elusive goal unless serious attention is paid to management at the national level. We therefore believe that the project should create synergies with national water resource management policies.

Accordingly, the document should provide information regarding:

- National arrangements for managing water resources, and the role of national technical units in implementing these arrangements; and
- Efforts carried out at the national level (projects of other donors, government policies) to improve the management of water resources.

RESPONSE TO THE FRENCH COMMENTS ON THE PROJECT "FORMULATION OF A STRATEGIC ACTION PROGRAMME FOR INTEGRATED MANAGEMENT OF WATER RESOURCES AND THE SUSTAINABLE DEVELOPMENT OF THE SAN JUAN RIVER BASIN AND ITS COASTAL ZONE" SUBMITTED AT THE MAY 2000 COUNCIL.

The comments of the France are in general supportive of the Formulation of a Strategic Action Plan for the Integrated Management of the San Juan River and its Coastal Zone. The project design was carefully crafted to strengthen intergovernmental cooperation within the Basin, at all levels, and facilitate participation of citizens at the grass roots level through appropriate demonstration projects and participatory opportunities.

This new phase of the project, whose purpose is to prepare a SAP for the sustainable development of the SJRB, will continue to be executed by the governments of Costa Rica and Nicaragua, through MINAE ¹ and MARENA respectively. A series of well-defined activities will have to be implemented in each country and throughout the San Juan River Basin. The coordination of these activities will be carried out by the two technical units in the national executing ministries. Recognizing the importance of the incorporation of SAP findings and recommendations into national policies, a Consultative Committee (paragraph 48 ² of the project brief as originally submitted) is proposed during the formulation of the SAP. This committee allows for the participation and coordination within the countries of relevant stakeholders, including those engaged in on-going projects. The below attached Organizational Chart is outlining the institutional arrangements for the project.

In Nicaragua for example, the Law of Creation, Competence and Procedures of the President (Poder Ejecutivo), approved in March of 1998 by the National Assembly, establishes a National Commission on Water Resources as the inter-sectorial consultative and coordinating body for the integrated planning and management of water resources. This commission is coordinated by the Ministry of Finance, Industry and Commerce. MARENA along with other institutions with responsibilities over water resources is a member of the Commission.

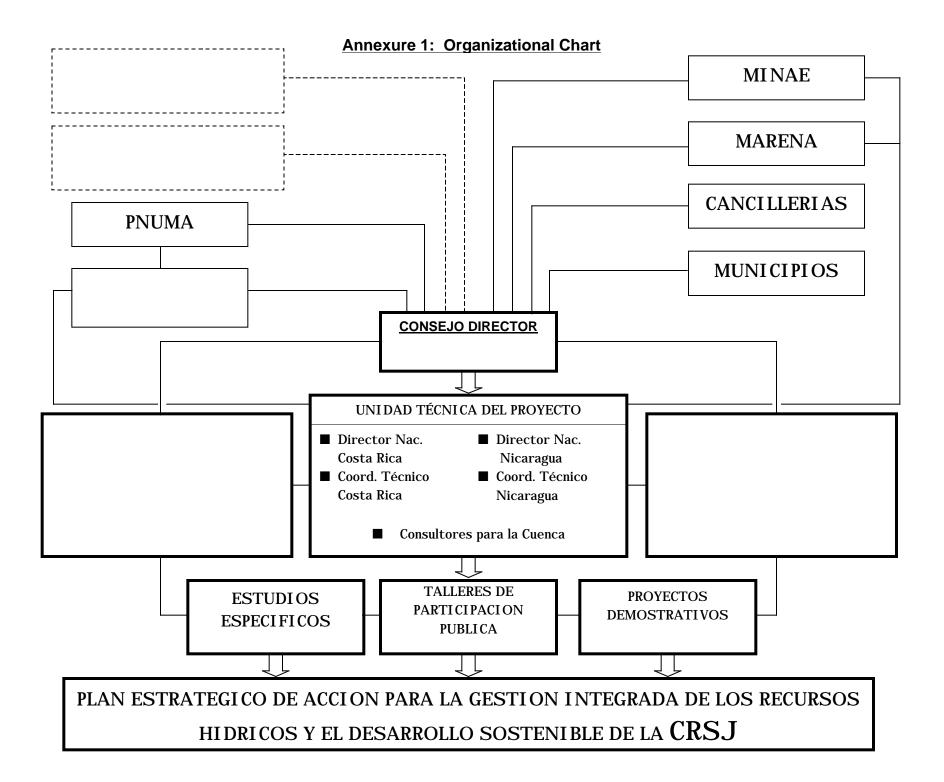
¹ MINAE: Ministry of Environment and Energy – MARENA : Ministry of Environment and Natural resources.

² Para 48: "A Consultative Committee will be set up in each country. It will include national institutions involved in the management of the SJRB, private organizations taking part in the project and academic institutions. Its role will be to promote the active participation of the institutions and to advise on the orientations of the project. It will be co-chaired by the national directors and will also serve as a mechanism for the coordination of national actions".

MARENA, is also responsible for the execution of the UNEP/GEF San Juan project, and, consequently project results will serve for the design and implementation of institutional arrangements for the management of water resources at a national level.

The Nicaraguan Government underlined the need for the establishment of a water authority. The UNEP/GEF San Juan project includes demonstration projects, within the Nicaraguan national territory, to test the feasibility of a Basin Committee at a local (municipal) level i.e.Morrito municipality. These experiences will serve as the institutional basis for the formulation of the Strategic Action Program for the San Juan Basin. The Technical Unit of the project is responsible for sharing the experience gained with the National Commission on Water Resources, through a series of inter-institutional workshops.

To ensure that national water resources management efforts are fully taken into consideration and integral part of the SAP formulation process, representatives of the various governmental entities as well as representatives of donor programmes currently having water related activities in the Basin are invited to participate in the project Steering Committee meetings which will provide the main platform for ensuring adequate synergies among all water activities taking place in the basin. These entities will also be invited at all of the six binational workshops and 12 national workshops planned to be organized over the duration of the project in order to promote exchange of information between all stakeholders.



Annexure 2: List of Steering Committee members

| OBSERVERS | |
|-----------|---|
| 01 | Finnish International Development Agency (FINNIDA) |
| 02 | Agencia Española de Cooperación Técnica |
| 03 | World Bank Agency for International Development |
| 04 | Japan International Cooperation Agency (JICA) |
| 05 | United States Agency for International Development (USAID) |
| 06 | Swedish International Development Agency (SIDA) |
| 07 | Swiss Agency for Development and Cooperation (SDC) |
| 08 | German Bank for Development |
| 09 | Banco Centroamericano de Integración Económica (BCIE) |
| 10 | Inter-American Development Bank (IDB) |
| 11 | CARE International |
| 12 | Centro Agronómico Tropical de Investigación y Enseñanza (CATIE) |
| 13 | Comisión Centroamericana de Ambiente y Desarrollo (CCAD) |
| 14 | Embassy of Finland in Nicaragua |
| 15 | Embassy of Norway in Nicaragua |
| 16 | Nordic Fund (NDF) |
| 17 | Technical Cooperation Service of the Netherlands |
| 18 | Sistema de la Integración Centroamericana (SICA) |
| 19 | European Union |

| FULL MEMBE | RS |
|------------|---|
| 01 | Minister of Environment and Energy (MINAE) of Costa Rica |
| 02 | Minister of Environment and the Natural Resources (MARENA) of Nicaragua |
| 03 | Representative of the Association of Municipalities Defenders of the Great Lake Nicaragua |
| 04 | Representative of the Association of Border Municipalities in Costa Rica |
| 05 | Representative of the Ministry of Foreign Affairs of Costa Rica |
| 06 | Representative of the Ministry of Foreign Affairs of Nicaragua |
| 07 | Representative of the United Nations Environment Program (UNEP) |
| 08 | Director of the Unit for Sustainable Development and Environment of the General Secretariat of the Organization of American States (USDE/OAS) |
| ASSOCIATES | |
| 01 | World Bank |
| 02 | United Nations Development Program (UNDP) |
| 03 | German Agency for Technical Cooperation (GTZ) |
| 04 | Danish International Development Agency (DANIDA) |
| 05 | Comité Regional de Recursos Hidráulicos (CRRH) |
| 06 | Embassy of the United States in Costa Rica, Environmental Hub for Central America and the Caribbean |
| 07 | World Bank Project "Biological Corridor of the Atlantic" |
| 08 | GEF/UNDP Project "Mesoamerican Biological Corridor" |

UNITED NATIONS ENVIRONMENT PROGRAMME

PROJECT DOCUMENT

| SECTION 1 - PROJECT IDENTIFICATION | | | | | | | | | | |
|------------------------------------|---|----------------------------|---------------------------------------|--|----------------|---------|-------|--|--|--|
| 1.1 Warnir | Title of Sub-Programme: | Sub-programm | e 2: | Environmental | Assessment | and | Early | | | |
| 1.2 | Title of Project: | INTEGRATED MA | NAGE | RATEGIC ACTION MENT OF WATER R PMENT OF THE SAU E | ESOURCES AND | THE | | | | |
| 1.3 | Project Number: | GF/8400-00- | | | | | | | | |
| 1.4 | Geographical Scope: | Latin America a | Latin America and the Caribbean (LAC) | | | | | | | |
| 1.5 | Implementing Organization: | General Secret (GS/OAS) | ariat o | of the Organizatio | on of the Amer | ican St | ates | | | |
| 1.6 | Duration of the Project: | Three years | | | | | | | | |
| | Commencing: | December 200 | 0 | | | | | | | |
| | Completion: | November 200 | 3 | | | | | | | |
| 1.7 | Cost of Project: | (Expre | ssed ir | n US \$) | | | | | | |
| | _ | | | US\$ | | % | | | | |
| Cost to | $_{\text{o}}$ the Environment Fund (in kind) ¹ | : | | 175,000 | 3.5 | | | | | |
| Cost to | o Trust Fund (GEF) ² : | | | 3,929,820 | 73 | | | | | |
| Cost to | o Counterpart Contribution (coun | tries) ³ : | | 984,990 | 18. | 5 | | | | |
| Cost to | the Implementing Organization | (in kind)⁴ : | | 175,000 | 3.5 | | | | | |
| Cost to | o the CRRH ³ : | | | 100,000 | 1.5 | | | | | |
| Total C | Cost of the Project: | | | 5,364,810 | 100 |) | | | | |
| | | <u>Signatur</u> | <u>es:</u> | | | | | | | |
| the Or | e General Secretariat of ganization of the American (GS/OAS): | | For t | he Environment F | Fund of UNEP | | | | | |
| | Gaviria ary General | | | undo Ortega f, Budget and Fu N | nd Manageme | nt Unit | ., | | | |

Date: _____

Date:

^{1.}

²

UNEP's contribution is provided under project FP/1000-00-01 as institutional support to this project covering staff time, and communication costs. It includes US\$ 25,000 already disbursed under the PDF-B phase GEF funds cover; (1) US\$ 3,233,220 for project per se, (2) US\$283,000 of PDF-B funds already disbursed under project GF/1100-98-17, and (3) US\$413,600 of project support costs for the OAS. Funds not administered by UNEP corresponding to the contribution of the Cemtral American Committee for Water Resources. Funds not administered by UNEP corresponding to GS/OAS institutional support to this project. It also includes US\$ 25,000 already disbursed under the PDF-B phase. 4

Box 1: Identifiers of project brief as approved by the GEF

| 1. Identifiers | | |
|--------------------------------|---|--|
| PROJECT NUMBER | Project number not yet assigned (GF/840 | 0-00-#) |
| PROJECT NAME | FORMULATION OF A STRATEGIC ACTION PR | OGRAM FOR THE INTEGRATED MANAGEMENT OF WATER RESOURCES AND THE |
| SUSTAINA | ABLE DEVELOPMENT OF THE SAN JUAN RIVER | BASIN AND ITS COASTAL ZONE |
| DURATION 3 years | | |
| IMPLEMENTING AGENCY | UNEP | |
| EXECUTING AGENCY | GS/OAS | |
| | | ente y Recursos Naturales (Ministry of Environment and Natural Resources) |
| | MINAE - Ministerio de Ambient | te y Energía (Ministry of Environment and Energy) |
| REQUESTING COUNTRIES | Costa Rica and Nicaragua | |
| ELIGIBILITY | Eligible under paragraph 9(b) of the Instru | iment |
| GEF FOCAL AREA | International waters | |
| GEF Programming Framewor | k: Operational Program Number 8, Water E | Body-based |
| | | |
| 2. SUMMARY | | |
| The San Juan River Basin an | d its coastal zone⁵, encompassing the su | bbasins of Lake Nicaragua and the San Juan River, extends through southeastern |
| | | osystems that are particularly valuable for their biodiversity and economic potential. |
| | | pontribute to the conservation of natural ecosystems and to social and economic |
| | | ng water conflicts. The major components of the SAP formulation include: i) the |
| | | nanisms for gathering and dissemination of data adequate to the needs of decision- |
| | | well-coordinated bilateral planning process for the SJRB; iii) the implementation of a |
| | | d private organizations; and v) the formulation and implementation of environmental |
| | | al benefits, such as conservation of the water cycle, the preservation of major water |
| | | rbon sinks. This proposal is based on the conclusions and recommendations of the |
| | alysis (TDA) carried out under the PDF-B. | |
| | | |
| 3. COSTS AND FINANCING (MILL | | |
| | ION 03 \$) | |
| GEF | | |
| Project | | US\$ 3,233,220 |
| Administrative costs | | US\$ 413,600 |
| PDF Block B | | US\$ 283,000 |
| Sub-Total GEF | | US\$ 3,929,820 |
| | | |
| UNEP | | US\$ 175.000 |
| OAS | | US\$ 175,000 |
| CRRH | | US\$ 100,000 |
| Governments of Costa Rica ar | d Nicaragua | US\$ 984,990 |
| Sub-Total GEF | lu Nicalagua | US\$ 1,434,990 |
| Sub-Total GEF | | 0391,434,330 |
| TOTAL COST OF THE PROJECT | | US\$5,364,810 |
| | | |
| | | |
| 4. ASSOCIATED FINANCIN | <u>3</u> | |
| GEF/ UNDP (Mesoamerican | Corridor) | US\$ 320,000 |
| DANIDA (Mesoamerican Cor | | US\$ 180,000 |
| GTZ (Mesoamerican Corrido | | U\$\$ 80,000 |
| World Bank (Atlantic Biologica | | US\$ 350,000 |
| | | |
| | | |
| 5. FOCAL OPERATIONAL P | | |
| | as, Executive Director, FUNDECOOPERAC | CIUN, |
| Date: 07/02/00 | | |
| | tarero D, Adviser to the Minister and Proje | ct Coordinator for PROTIERRA, Ministry of Environment and Natural Resources |
| (MARENA), Date: 25/10/99 | | |
| | ••••••••••••••••••••••••••••••••••••••• | |
| | | |
| 6. IA CONTACT: | | |
| | | |

Mr Ahmed Djoghlaf, Executive Co-ordinator, UNEP/GEF Co-ordination Office, UNEP, Nairobi, Tel: 254 2 624153; Fax: 254 2 520825; Email: ahmed.djoghlaf@unep.org

SECTION 2 - BACKGROUND AND PROJECT CONTRIBUTION TO OVERALL

⁵ Hereinafter SJRB.

SUB-PROGRAMME IMPLEMENTATION

BACKGROUND

- The San Juan River Basin project area covers some 38,500 km² in the basin itself, plus its associated coastal zone on the Caribbean Sea. Of the land area, 64% is in southern Nicaragua and 36% in northern Costa Rica. The planning area covers the subbasins of Lake Nicaragua and of the San Juan River, plus four smaller but nevertheless significant subbasins with natural links to this system--the Indio and Maiz river basins in Nicaragua and the Colorado and Tortuguero river basins in Costa Rica (see Annex VI, Project Area Map).
- 2. The waters of the Lake Nicaragua-San Juan River watershed flow through at least eight distinct terrestrial ecosystems: i) dry tropical forest to the east, north, and west of Lake Nicaragua; ii) cloud forest in the high areas of the Central Volcanic Cordillera of Costa Rica; iii) moist tropical forest to the south and southwest of Lake Nicaragua and in the eastern foothills; iv) very moist tropical forest in the San Juan Valley and on the coastal plains; v) gallery forest along river banks; vi) wetlands to the south of Lake Nicaragua and at the confluences of the Colorado and Tortuguero rivers with the San Juan; vii) second-growth forest, meadows, and agricultural land in extensive areas of the basin; and viii) coastal forest and mangrove swamps on the Caribbean coast. The Indio and Maiz river basins are basically covered by moist and very moist tropical forest.
- 3. Because of this range of ecosystems and associated habitats, the SJRB has a wealth of biodiversity. Its location in the natural biological corridor running the length of Central America has made it a meeting ground for species from the subarctic areas of North America and others from the subtropics of South America. To a great extent, its natural history is unique. The low population density in many parts of the SJRB has kept it relatively pristine, although there is little information on the potential future impact of human migration trends and the spread of agriculture in the basin.
- 4. Regional studies now being carried out by the Central American Committee on Water Resources, with international cooperation, lead to the conclusion that the fresh water in the San Juan Basin is the only source capable of meeting the foreseeable development needs of the semiarid Pacific slope of Central America, the region's most populated area. Thus, there is every likelihood that this system will come under increasing pressure of human exploitation. In addition, because the SJRB is also a common westward passageway for anticyclones from the Atlantic to the Pacific, the threat of hurricanes and tropical storms, on top of the threats posed by volcanic activity and seismic pressures that already make this fresh water supply specially vulnerable, further exacerbates the human pressures likely to be experienced within this hydrologic system.
- 5. Although not included in the project area, Lake Managua at times has been temporarily connected with the SJRB and thus will be taken into consideration during the formulation of the SAP for the basin. For example, the torrential rainfall associated with Hurricane Mitch in October 1998 caused Lake Managua to overflow its banks, flooding the surrounding areas and sending water into Lake Nicaragua. To prevent such flooding in the future, the Government of Nicaragua now intends to regulate the waters of Lake Managua, which will make transfers to Lake Nicaragua more frequent. Various studies, in particular those undertaken by the Inter-American Development Bank (IDB) and the German Technical Cooperation Agency (GTZ), have shown that Lake Managua is extremely polluted. Thus Lake Nicaragua faces the threat of an influx of heavy metals, agrochemical waste associated with pesticides and fertilizers, and industrial and urban effluents, all of which would diminish the quality of its waters. With this in mind, the SJRB project will work in close coordination with any initiatives or plans to regulate the level of Lake Managua. Close co-operation with the UNEP/GEF project "Reducing Pesticide Runoff to the Caribbean" executed by the office of the Regional Seas Programme for the Caribbean (CAR-RCU) is anticipated.
- 6. Currently, the two countries lack adequate technical and institutional capacity to collect comprehensive data on the SJRB and to implement the efficient policies for watershed planning and integrated management that are needed to protect and rehabilitate water resources and ecosystems. Paucity of resources, poor transportation infrastructure, the lack of attention to women in natural resource management, and weak local institutions are common on both sides of the border. Given this situation, the governments of Costa Rica and Nicaragua have proposed

a joint approach to best manage this complex hydrologic system, within the constraints imposed by demography and geography.

CONTEXT

- 7. National and Regional programming context. Support for a regional approach in the management of the SJRB was forthcoming as early as the XIII Summit of Central American Presidents, held in Panama in December of 1992. The Central American Action Plan for the Development of Border Zones, in which the San Juan River Basin was named as a priority area led to the 1994 request, by the governments of Costa Rica and Nicaragua to UNEP and the OAS, to undertake a diagnostic study on the state of the SJRB environment. That study was carried out during 1995-1996 by MINAE and MARENA, and published in 1997 as the "Diagnostic Study of the San Juan River Basin and Guidelines for an Action Plan". The proposed SAP formulation program reflects the prioritized view of the countries. Policy and programmatic limitation imposed by the GEF as well as community- and country-level priorities, govern the emphases placed on the various activities included in the SAP formulation program.
- 8. The execution of the SJRB project also contributed to the implementation of the priorities set under the Central American Alliance for Sustainable Development, agreed by the Central American Presidents in October 1994. These priorities include a variety of economic goals, such as development of border areas, conservation of natural resources, and protection of biodiversity; and specifically reference strengthening the Meso-American biological corridor, achieving sustainable use of water resources, and protecting the integrity of drainage basins. The Joint Declaration of the XXX Meeting of Central American Vice-Presidents, agreed in Managua on May 7, 1999, further noted the "desire to continue supporting the sustainable development of all border areas in the region." The currently proposed project to develop a Strategic Action Program (SAP) for the SJRB will further contribute to this regional initiative, as well as to the development of an Action Plan for Integrated Water Resources Management on the Central American Isthmus, being prepared by the Central American Commission of Environment and Development (CCAD) and the Secretariat of the Central American Integration System (SICA) -- in response to the devastation caused by Hurricane Mitch. This latter plan aims to build national and regional capacities in the field of integrated water resources management on a foundation of watershed planning, a stronger legal framework, and better institutional and organizational capabilities. The present project would allow Nicaragua and Costa Rica to proceed with a vanguard action in the region and to gain experience and technical capabilities that could later be shared with the other countries of the isthmus in the framework of the Plan.
- 9. To this end, both countries have given great importance to assuring that local governments become aware of the need to work together on environmental problems and to use natural resources in a sustainable fashion. In Nicaragua, municipal associations have been created to promote the protection of the San Juan River and Lake Nicaragua. In Costa Rica, municipalities in the basin have come together to form an association. Recently a federation of border municipalities from both countries was set up to pursue various goals, including environmental management. It should be said, however, that these organizations are still young and weak, and have not yet clearly delineated their work by basins and subbasins.
- 10. Finally, while the SJRB project calls for the identification of strategies for the resolution of environmental problems shared by the two countries, all jurisdictional aspects related to the management of the coastal zone and nearshore marine area are beyond the scope of this project and will be addressed in other ways by the basin governments.
- 11. **GEF Programming Context**. Both countries are eligible for GEF assistance under paragraph 9b of the Instrument for the Restructured GEF. This Project conforms with the GEF Operational Strategy and Operational Programs, in particular the Water-body based Operational Program #8. It will illustrate how freshwater basin and coastal management can be integrated to resolve transboundary issues and will also serve as a demonstration project for the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) in Latin America.
- 12. **GPA Programming Context.** The goal of the GPA (adopted by 109 governments at the Washington Conference in November 1995) is to prevent degradation of the marine environment from land-based activities by assisting States in preventing and reducing major threats to the health, productivity and biodiversity of the marine environment resulting from human activities on

land and in coastal areas. Thus, the GPA is designed to be a source of conceptual and practical guidance to assist States in taking action, individually or jointly within their respective policies, priorities and resources, that will lead to the prevention, reduction, control and/or elimination of degradation of the marine environment, as well as to its recovery from the impacts of land-based activities.

13. Implementing Agency Programming Context. The proposed actions are consistent with the UNEP Environmentally Sound Management of Inland Waters (EMINWA) integrated watershed management planning process and related, regional seas programme. The proposed actions are also consistent with UNEP's role under the GPA/LBA.

PRESENT AND EMERGING ENVIRONMENTAL PROBLEMS

- 14. The GEF Operational Strategy lists four major areas of concern relating to international waters: i) degradation of the quality of water resources; ii) physical habitat degradation of coastal and near-shore marine areas, lakes and watercourses; iii) the introduction of exotic species that disrupt aquatic and land ecosystems and iv) excessive and/or inappropriate exploitation of resources due to inadequate management and control measures. All these problems were identified in the SJRB during the Transboundary Diagnostic Analysis (TDA), which was carried out with PDF Block B funds. The analysis was carried out with the active participation of key stakeholders, and based upon an earlier study, carried out jointly by UNEP and the OAS, that pointed to a number of current and emerging problems that threaten the sustainability of development in the San Juan River Basin and ultimately the quality of life of the people who live there. These transboundary environmental problems often have common roots (see Annex IV) and manifest themselves both individually and collectively. They are closely interrelated, but in the interest of seeking solutions they have been broken down as follows:
 - (a) The accelerating degradation of transboundary ecosystems. In the traditional uses of the main ecosystems of the area, human activities have exerted pressures on the environment and resulted in conflicts among the various groups involved, with negative consequences for the quality of water resources. These consequences include inadequate urban, industrial, and agroindustrial wastewater treatment systems; migratory agriculture, extensive grazing and the consequent extension of the agricultural frontier; widespread cutting of trees for timber, unregulated ecotourism, non-conservationist farming practices, the introduction of aggressive exotic species such as *Tilapia mossambica*; and uncontrolled fires in the drier forests and of grassland. An emerging problem is the growing use of small and very small hydropower plants to tap the considerable hydroelectric potential of the region.
 - (b) Overexploitation of valuable natural resources. The problems here are related to poor land use, especially the farming of hillside areas and wetlands, the construction of poorly designed roads, unregulated fishing, and excessive exploitation of valuable moist tropical forest species and the destruction of plant cover in fragile areas, causing erosion and land degradation. The result is a loss of potential income from agriculture, fishing and tourism, a threat to biodiversity and the natural productivity of the ecosystem, and a change in coastal and inland waterway dynamics. There are signs that three marine and freshwater species are being over exploited: *Carcharhinus leucas*, locally called "bull shark" or "freshwater shark" because of its unique behavior of migrating between the Caribbean Sea and Lake Nicaragua; *Macrobrachium carminus* or freshwater shrimp; and *Panalirus argus* or spiny lobster.
 - (c) Soil degradation and increasing sedimentation. Part of the sedimentation of the San Juan River and its coastal zone is produced as a result of natural processes, according to historic documents.⁶ Nevertheless, road construction, the advancing agricultural frontier, and hillside farming without adequate soil-conservation techniques exacerbate sedimentation problems, as well the emerging problems arising from open-pit mining and the extraction of construction materials.

⁶. SQUIER (Ephraim George), <u>Nicaragua, it's People, Scenery, Monuments and the Proposed Inter</u> <u>Oceanic Canal.</u> New York, D. Appleton and Co., 1852, Vol. 2, p. 221.

Report to the Commission composed by captains and second officers of the vessels Diadem, Valorous and César to Captain Charles Frederick, chief of the Britain fleet in San Juan del Norte, dated on February 1 of 1859. Public Record Office, London. Microfilm FO-53, rollo 17, #43, p. 7.

- (d) Pollution of water bodies. The main causes of water pollution are the indiscriminate use of pesticides and fertilizers, especially where intensive farming practices are used, and urban, industrial, and agroindustrial waste discharges. The water bodies being affected in Nicaragua are Lake Nicaragua, the San Juan River and its coastal zone, the wetlands to the south of Lake Nicaragua. In Costa Rica the Caño Negro wetlands, the Colorado River, and the Tortuguero canals are suffering the consequences of degraded water quality. Sporadic dieoffs of aquatic fauna and flora give evidence of such degradation, as do small-scale and occasional studies of water quality that have been carried out in some parts of the SJRB.
- (e) High vulnerability to natural hazards. This is apparent in the devastating impact of hurricanes and tropical storms on the region's ill-housed populations, on its infrastructure, and on crops grown in areas where the forest has been cleared and the soil is fragile--areas exposed to landslides caused by hurricanes, tropical storms, and seismic or volcanic activity. Natural hazards can have a drastic -- and dramatic -- effect on the watercourses of the region.
- 15. The principal root causes of these major environmental problems are set forth in the Annex E and summarized below as follows:
 - (a) Inadequate Planning and Management. Although MINAE and MARENA are both trying to promote integrated watershed management using the legal mechanisms provided within each country through their own environmental legislation, there is no watershed planning and administration capacity in place. There have been no mechanisms for coordinating management and control across the international border and, thus, no ongoing institutional approach to water resources management in the SJRB. The lack of comprehensive up-todate data on the SJRB-how it is structured, how it works, what its socioeconomic dynamics are, how information is managed at the local level-makes it impossible to proceed with the minimum certainty needed.
 - (b) **Weak institutions.** Although both countries have quite comprehensive legislation on environmental management and the sustainable use of natural resources that could be implemented locally, a paucity of financial and human resources on the local level and the poverty in which most of the population lives makes compliance difficult.
 - (c) **Insufficient human and institutional capacity.** Natural resource management is inefficient and it will not be possible to strengthen environmental command-and-control mechanisms without first creating local economic foundations and training people.
 - (d) Limited stakeholder participation. There is currently limited participation by stakeholders in sustainable development due to centralization of decision-making, which the governments are currently trying to change. This situation, added to reductions in the size of government, has hampered local action. This project recognizes the need to promote and strengthen civil society organizations, increase the participation of women, and involve more people in decision-making on the sustainable development of the SJRB. The initial steps toward enhancing stakeholder participation have been already taken during the execution of the Block B program and through other actions of MINAE and MARENA. These steps now need to be reinforced and further developed through programs to educate people about sustainable development and adopting sustainable production practices and lifestyles within a comprehensive watershed management approach that does not yet exist.
 - (e) Extreme poverty. Extreme poverty, combined with high population growth, low incomes and a subsistence economy, poor sanitation conditions, and a relative imbalance in employment and income-generating opportunities between the two countries, characterizes the current level of economic development in the SJRB. Uncontrolled migration exacerbates the situation, by exceeding the capacity of existing institutions to meet all the sanitation, health, and educational needs created. The economic conditions force the inhabitants to move to the mountainsides and practice slash-and-burn agriculture just to survive. These reactions contribute to the environmental degradation being experienced in the SJRB, but can be addressed, in part, through building institutional capacities and creating economic instruments, neither now existing, to address such problems.

- 16. **GEF Programming Context**. Both countries are eligible for GEF assistance under paragraph 9b of the Instrument for the Restructured GEF. This Project conforms with the GEF Operational Strategy and Operational Programs, in particular the Water-body based Operational Program #8. It will illustrate how freshwater basin and coastal management can be integrated to resolve transboundary issues and will also serve as a demonstration project for the implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) in Latin America.
- 17. **UNEP programming Context.** The proposed actions are consistent with the UNEP Environmentally Sound Management of Inland Waters (EMINWA) integrated watershed management planning process and related, regional seas programme. The proposed actions are also consistent with UNEP's role under the GPA/LBA.
- 18. **GPA Programming Context.** The goal of the GPA (adopted by 109 governments at the Washington Conference in November 1995) is to prevent degradation of the marine environment from land-based activities by assisting States in preventing and reducing major threats to the health, productivity and biodiversity of the marine environment resulting from human activities on land and in coastal areas. Thus, the GPA is designed to be a source of conceptual and practical guidance to assist States in taking action, individually or jointly within their respective policies, priorities and resources, that will lead to the prevention, reduction, control and/or elimination of degradation of the marine environment, as well as to its recovery from the impacts of land-based activities.

SECTION 3 - NEEDS AND RESULTS

3.1 <u>Needs:</u>

Urgent need for improved management of the SJRB to mitigate the unsustainable and poorly regulated economic activities damaging the basin and its coastal zone through the formulation of a Strategic Action Programme for the Basin that would address priority environmental issues and encourages community-based land management as well as strengthens relevant institutions in order to satisfy present and future demands minimizing water conflicts.

3.2 <u>Results:</u>

Key results will include:

- Improved environmental functioning of SJRB through preservation and protection of the river system and its coastal zone, by implementation of strategic activities addressing the root causes of the current degradation;
- Improved individual capacities for economically sustainable development, and environmental protection, conservation and management through sustainable economic development in SJRB;
- Improved public awareness, stakeholder participation, and organizational development
- Reduced conflict over transboundary waters.

3.3 <u>Assumptions to achieve results:</u>

It is assumed that the Governments of Costa Rica and Nicaragua will provide support for the parallel local actions that will complement and facilitate project development objectives.

SECTION 4 - OUTPUTS, ACTIVITIES, WORKPLAN AND TIMETABLE, BUDGET, FOLLOW-UP

4.1 <u>Project activities and outputs:</u>

- 19. The purpose of this project is the formulation of a Strategic Action Program for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and its Coastal Zone. The ultimate objective of the SAP is to ensure the availability of the goods and services provided by water resources for conserving natural ecosystems and social and economic development in order to satisfy present and future demands as agreed by all parties involved. In this way conflicts related to the use of the goods and services generated by SJRB ecosystems will be minimized through a coordinated program of action conducted jointly by the two countries. The major components of the SAP formulation include: i) the strengthening of a basin-wide information system that provides the mechanisms for gathering and dissemination of data adequate to the needs of decision-making for the integrated management of the basin; ii) the creation of a well-coordinated bilateral planning process for the SJRB; iii) the implementation of a gender oriented public participation process; iv) the strengthening of public institutions and private organizations; and v) the formulation and implementation of environmental education activities.
- 20. Coordination between the two countries is an important mechanism that can help to improve the quality of life of the inhabitants and protect the ecosystem. This cooperation will support the coordination of research and transboundary management. It will permit the interaction of government institutions and NGOs, strengthening both and making possible a more integrated and thus more sustainable development.
- 21. The SAP will create a framework for future action and a timetable of activities for the protection and use of the numerous goods and services offered by the water resources and ecosystems of the SJRB. It will thus promote the sustainable development of the region. The SAP will lay out a series of measures to reduce and/or eliminate current and emerging problems affecting the conservation and development of the SJRB. It will enhance the transboundary and global benefits obtained when development is both integrated and participatory, and when environmental education, technology transfer, and institutional strengthening are key elements of a program.
- 22. The SAP will address priority transboundary needs and focus on long-term solutions to the current and emerging problems facing the SJRB. Furthermore, it will propose a series of projects based on experience gathered from demonstrations of new technologies, taking into account their real costs and the capacity of the institutions and organizations involved to execute them.

COMPONENTS AND EXPECTED RESULTS

- 23. To achieve the foregoing objectives, the SAP will be developed on the basis of the seven components identified below—the specific activities comprising these components being set forth in the detailed work program appended hereto as Annex VIII.
- 24. **Component 1: Formulation of the SAP**. Development of the SAP is the core task to be completed by the Technical Units in close consultation with UNEP and the GS/OAS pursuant to the implementation arrangements set forth in paragraph 45 and following. The outcome of the SAP can not be determined a priori, however, strategic actions were anticipated based upon the findings of the information previously gathered during the PDF-B phase of the program and that derived from the TDA. Components 2 through 7 will provide the knowledge base upon which the SAP will be formulated. Thus, the Technical Units will (1) assemble the results of the work of components 2 through 7--the cost assessments and feasibility studies conducted at specific locations within the SJRB over the 36-month project period--, (2) collate and integrate these outputs with the information previously assembled during the PDF-B phase of the program using as well information deriving from the TDA, and (3) synthesize a strategic program of action to implement specific management measures within the San Juan River Basin following the completion of this project. Integrated management entails the coordinated management of land and water resources at the local or community level within the context of the cumulative impacts and effects of those actions on the basin as a whole, including the coastal zone.
- 25. Specific detailed Terms of Reference will be prepared by the Technical Units in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component element is anticipated to be initiated according to the timetable presented in Table 1 of Section 4.3 below. A detailed preliminary workprogram is presented in Annex VIII of this document. The total cost of

drafting the SAP will be US\$1,314,140 of which US\$702,000 is the cost to GEF, and US\$612,140 is the co-financing.

- 26. Component 2: SJRB information system. The objective of this Component is to enhance the capabilities of existing infrastructure in the decision-making process at all levels of government, and to encourage technical cooperation at the national level, by contributing and disseminating information among stakeholders, while, in the first instance, specifically facilitate data acquisition and sharing through an improved system. The PDF-B activities identified specific and serious gaps in the availability of information needed to quantify, assess, and address priority transboundary problems and issues of concern (comprised both scientific data and institutional capacity including human capacity to collect, analyze and interpret such data) necessary to formulate an SAP. Acquisition of data is vital to the successful preparation of an effective SAP. Creation of the institutional and human capacities to obtain and use these data is also critical to the long-term success of the SAP. Thus, as part of the SAP formulation, studies will be conducted to measure the region's vulnerability to erosion, sedimentation and its effects on the dynamics of the river system and the coastal zone, and natural disasters. One key area is lack of comprehensive knowledge of physical information across the entire basin on rainfall and runoff, water quality, and erosion and sedimentation. Recognizing the difficulty in extrapolation from short time-series, the study will initially evaluate alternative strategies for data collection in order to optimize the amount and minimize the cost of useful and reliable data that are available for SAP formulation. An outcome will be a quantitative evaluation of the region's vulnerability to erosion, sedimentation and its effects on the dynamics of the river system and the coastal zone and linkage to natural disasters, and on water quality so that appropriate measures for point and nonpoint source mitigation can be identified in the SAP. Another major gap is information on the physical, chemical and biological characteristics of Lake Nicaragua and how these will respond to increases in human impacts. Because one aspect of the SAP will focus on future management of Lake Nicaragua, there will be a targeted set of activities focusing on physico-chemical data that will be essential for formulating those specific actions that will be recommended in the SAP that pertain to lake basin carrying capacity and eutrophication, contamination, and ecological functions. Critical areas within the SJRB will be identified and ecosystem deterioration will be described on the basis of agreed-upon objectives for water and land use and basic data on aquatic biodiversity, specially, but not exclusively, in the coastal zone. Other specific studies will include socioeconomic research, particularly on migration patterns, eco-tourism, and job creation, and also research into the natural history and the distribution, structure, and functions of the major ecosystems within the SJRB, in order to elucidate and compile the types of information required in these various sectoral activities. As part of these activities, attention will be given to cost-effective and sustainable methods for capturing, storing, analyzing and disseminating the data from these various activities within the framework of an environmental information system(s). This will include existing components such as GIS, plus other functionalities within a systems and communications architecture that will be sustainable beyond this project. The design of the information system will include mechanisms for institutionalizing it after the SAP is completed.
- 27. The execution of these activities will be undertaken by the relevant national institutions and organizations such as MARENA, MINAE, SINAC, INETER, and academic institutions and research centers. The coordination and supervision will be ensured by the Technical Units at MINAE and MARENA. Specific detailed Terms of Reference will be prepared by the Technical Coordinators in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component is anticipated to be initiated according to the timetable presented in Table 1 of Section 4.3 below. A preliminary detailed workprogram is presented in Annex VIII of this document. The total cost of this component will be US\$ 1,395,570 of which US\$ 1,083,000 is the cost to the GEF and US\$\$ 212,570 is co-funding.
- 28. Each of the following Component of the SAP formulation, relates to specific data or experiential needs necessary to identify, quantify and refine strategic actions necessary to sustainably manage the San Juan River Basin. The activities within the Components relate directly to recommendations contained within the Transboundary Diagnostic Analysis (TDA), supported by stakeholder initiatives. Together with existing information, gathered during the PDF-B phase, this information will allow formulation of an SAP consistent with current scientific and technical principals for integrated watershed management.
- 29. Component 3: Strategic actions with stakeholder involvement. Strategic planning and management will depend on integrating basic research with a series of activities and investment projects carried out within the identified geographic and subject areas to be targeted for

development. Historically, such projects have lacked effective stakeholder involvement as a result of the institutional and human resource issues identified above. As an integral part of the process of formulating the SAP for the SJRB, a series of demonstration activities illustrative of ways and means for promoting sustainable agriculture production and the conservation restoration of land and water ecosystems will be conducted, providing both an assessment of cost and feasibility, and specific examples to local communities of alternative means of production and land and water resource management. Economic mechanisms contributing to the sustainable management of natural resources and to meeting the demand of the inhabitants for improved living conditions, and to solve the conflicts that can arise over plans and decisions affecting resource use will be specifically identified and developed. The cost to the GEF of conducting four demonstration projects in various economic sectors to establish effective mechanisms for the inclusion of stakeholders and sectoral concerns in the environmental management of the SJRB, and including specific public and stakeholder participation opportunities in defined areas within the SJRB (see Component 4, below), will be US\$337,000. This component will facilitate interaction between the GEF-funded activities and those of ongoing development projects, totaling approximately US\$25 million of which approximately 75% are being funded by other agencies.

- 30. The execution of these activities will be undertaken by the relevant national institutions and organizations such as MARENA, MINAE, SINAC, municipal organizations and NGOs such as Productores Unidos para el Desarollo. The coordination and supervision will be ensured by the Technical Units at MINAE and MARENA. Specific detailed Terms of Reference will be prepared by the Technical Coordinators in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component is anticipated to be initiated according to the timetable presented in Table 1 of Section 4.3 below. A preliminary detailed workprogram is presented in Annex VIII of this document. The total cost of this activity will be US\$ 401,070 of which US\$ 337,000 is the cost to the GEF and US\$64,070 represents the co-funding.
- 31. Component 4: Public Participation. This component will foster and support the participation of all stakeholders, including the general public, in the development and implementation of the activities carried out under the SJRB project, and complement the activities proposed under Component 3 (above). Success is dependent on identifying and motivating stakeholders and giving them an opportunity to participate, including, where necessary, through financial contributions. National and binational workshops will be organized to give stakeholders the opportunity to become involved, to engage their commitment and facilitate SAP implementation. The project team will strive to assure gender balance in these activities. To establish a broad base of participation and learn the capacity of organizations to carry out actions, the four demonstration projects in various natural areas within the SJRB are envisioned. These activities are to be more broadly-based and inclusive of the general public and public-at-large than those to be conducted under Component 3 (above), and will contribute to inclusion of public inputs beyond those considered from an economic perspective.
- 32. The execution of these activities will be undertaken by the relevant national institutions and organizations such as MARENA, and MINAE, municipal organizations such as ASCOMAFOR and NGOs such as Fundación del Rio. The coordination and supervision will be ensured by the Technical Units at MINAE and MARENA. Specific detailed Terms of Reference will be prepared by the Technical Coordinators in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component is anticipated to be initiated according to the timetable presented in Table 1 of section 4.3 below. A preliminary detailed workprogram is presented in Annex VIII of this document. The total cost of this component is US\$594,070 of which US\$484,500 is the cost to the GEF and US\$109,570 is co-funding.
- 33. **Component 5: Local, national and bi-national level institutional arrangements.** This component is designed to correct problems identified in the TDA regarding the shortcomings in institutions working at the local and national levels, and to encourage enhancement of binational coordination between institutions within the SJRB as well as to ensure that the prescribed actions of the SAP are incorporated into national policies. Technical meetings bringing together MINAE and MARENA personnel and cooperative research efforts between universities and other institutions of both countries will be promoted. Current institutional arrangements and the role they play in the management of the San Juan River Basin will be reviewed. This component is complementary to component 6.

- 34. The execution of these activities will be undertaken by the relevant national institutions and organizations such as MARENA, and MINAE, and academic institutions and research centers. The coordination and supervision will be ensured by the Technical Units at MINAE and MARENA. Specific detailed Terms of Reference will be prepared by the Technical Coordinators in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component is anticipated to be initiated according to the timetable presented in Table 1 of Section 4.3 below. A preliminary detailed workprogram is presented in Annex VIII of this document. The cost total cost of developing an enhanced level of coordination among institutions at all levels within the SJRB will be US\$174,080 of which the cost to the GEF is US\$158,720 and US\$15,360 represents the co-funding.
- 35. **Component 6: Capacity building and institutional strengthening.** This component will foster the formation of basin councils in critical subbasins and encourage the participation of such councils within the municipal sustainable development councils existing within the SJRB. The Federation of Local Border Governments will be strengthened through specific activities with clearly defined goals in order to promote the strengthening and further development of coordination mechanisms at the local level. A proposal to strengthen institutions will be drafted with measures for: i) building sustainable development planning and management capacities; ii) improving infrastructure; iii) equipping institutions; and iv) designing mechanisms to increase the incomes of local and regional institutions. These activities will be supported by two demonstration projects establishing costs and feasibility of achieving integrated management as well as assessment of specific sparadigms to be developed at specific sites within the SJRB.
- 36. The execution of these activities will be undertaken by the relevant national institutions and organizations such as MARENA, and MINAE, and municipal organizations such as AMURS. The coordination and supervision will be ensured by the Technical Units at MINAE and MARENA. Specific detailed Terms of Reference will be prepared by the Technical Coordinators in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component is anticipated to be initiated according to the timetable presented in Table 1 of Section 4.3 below. A preliminary detailed workprogram is presented in Annex VIII of this document. The total cost of this component will be US\$253,710 of which US\$214,000 is the cost to the GEF, and US\$39,710 represents co-funding.
- 37. Component 7: Education and training in conservation and the sustainable use of natural resources. This component has been designed to provide the building blocks of an education and training Program that will make the inhabitants of the SJRB more aware of the important role that water resources play in society, in the economy, and in nature. It will be especially geared to students and young people, who generally are more willing to change their habits and production practices, and who have been shown to be effective conduits by which such habits and practices can be transferred into individual households to the benefit of entire communities. Best sustainable production practices will be identified. The information will be disseminated in both countries and knowledge will be furthered through training for various kinds of local organizations working in the fields of development and environmental conservation. Workshops, seminars, and technical meetings will be held in conjunction with the preparation of the SAP. Materials for environmental education will be collected, designed, and implemented in three demonstration projects, which will be evaluated to aid in the design of the implementation Program. These programs will be used to define costs and feasibility of specific educational measures in the management of the SJRB. The cost to the GEF of this component will be US\$254,000.
- 38. The execution of these activities will be undertaken by the relevant national institutions and organizations such as MARENA, and MINAE, municipal organizations and NGOs. The coordination and supervision will be ensured by the Technical Units at MINAE and MARENA. Specific detailed Terms of Reference will be prepared by the Technical Coordinators in close consultation with UNEP and GS/OAS, during the first quarter of the project period. This component is anticipated to be initiated according to the timetable presented in Table 1 of Section 4.3 below. A preliminary detailed workprogram is presented in Annex VIII of this document. The total cost of this component is US\$320,570 of which the cost to the GEF will be US\$254,000 and US\$66,570 represents co-funding.
- 39. The result of these actions will be the formulation of a SAP that will set forth strategic actions for the sustainable development of the SJRB, including domestic and transboundary investment projects, and result in a request for GEF financing to implement activities important to the global environment, and other investment needed to be covered by funds from other agencies or from

domestic sources. The actions will be organized according to the basins and subbasins of the SJRB. A public participation program developed during the PDF-B process will enable stakeholders to take part in activities and decisions regarding the planning and implementation of an active and continuous policy, programs, and projects for the integrated management of the SJRB, with emphasis on the involvement of women and young people. Mechanisms for coordinated participatory action at the basin and sub-basin level will be incorporated by means of basin councils or similar organizations.

40. A minimum of thirty copies of each of the above mentioned published outputs i.e. ten copies for the GS/OAS, ten copies for UNEP and ten copies for distribution by UNEP to the GEF Secretariat will have to be produced in English. It is assumed that the countries will keep a sufficient number of copies of the above mentioned outputs in Spanish language.

4.2. Risk and Sustainability

- 41. In order to formulate a SAP for the sustainable development of the SJRB by bringing the people of Costa Rica and Nicaragua together in a participatory and coordinated fashion, several assumptions with certain inherent risks have been made. They are described below.
- 42. Since there is no bilateral legal and institutional framework for the well-ordered management of the SJRB or for common administrative actions to be taken on its behalf, the governments of Costa Rica and Nicaragua have each studied this request for financing in accordance with their internal procedures and will each submit it to UNEP/GEF for consideration. This is the same procedure they followed previously in applying for and receiving PDF Block B funds.
- 43. The governments have decided to use this project as an instrument of cooperation and mutual understanding for the benefit of their natural ecosystems, the environment and sustainable development of both countries, of Central America, and of the international community as a whole. The just completed phase is testimony to this desire. Thus, while all issues related to jurisdictional concerns remain to be resolved outside of the context of this project, a satisfactory resolution is presupposed.
- 44. Further, it is assumed that work already done in the SJRB has led to the correct identification of problems. In this regard, the TDA is and will continue to be of great significance, and will have to be continually updated.
- 45. It has also been assumed that the governments, local organizations, and universities want to cooperate and coordinate activities in the SJRB. Since these proposals were formulated with the widespread participation of all interested groups, including both national governments, it would seem that this assumption is grounded in reality. Nevertheless, a constant effort by the Technical Units will be necessary to assure coordination on the part of the institutions and organizations of both countries.
- 46. Another major assumption is that financing and other resources are available. If the previous assumptions regarding the attitude of the stakeholders, including both governments, are valid, the assumptions regarding the real availability of financing and other resources become all the more well founded.
- 47. To a large extent, the success of the SJRB project will depend on the timetable, or more precisely, on the performance of each component at the right time. To assure that this is the case, each country will name a technical coordinator to work directly under the executing agency. Moreover, the SAP will be given great flexibility, as occurred in the preparatory stage.
- 48. The national governments have pledged their support to actions proposed to be implemented with the incremental financial assistance of the GEF by allocating to this project important state and national financial resources. Further, it is believed that local level initiatives can form a model upon which country level initiatives can be built over time hence the adoption of a "bottom-up" approach in most of the project activities. It is anticipated that these "bottom-up" approach with the active participation of key stakeholders will enhance the likelihood of SAP findings inclusion into national policies. The risk however that these local level initiatives are not adopted at the country level is the principal risk facing this project and has been identified as such hereabove. Finally, the SJRB project is being used as a pilot project for the formulation and implementation of a Strategic Action Plan for the Central American Isthmus. This regional SAP seeks the

implementation of regional policies for the integrated management of water resources in the Central American Isthmus. It will therefore, endorse SJRB SAP findings at a regional level, increasing further the probability of incorporating them into national policies.

4.3 <u>Workplan and Timetable:</u>

TABLE 1: PRELIMINARY DRAFT WORKPLAN AND TIME TABLE (to be further refined and endorsed at the inaugural Steering Committee Meeting).

| COMPONENT/ ACTIVITY | 1 | 2001 | | | | | | | | | 2002 | | | | | | | | | | | | 2003 | | | | | | | | | | | | | |
|--|---|------|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | J | F | Μ | Α | Μ | J | J | Α | S | C |) N | D | J | F | M | Α | Μ | J | J | Α | S | 0 | Ν | D | J | F | Μ | Α | Μ | J | J | Α | S | 0 | Ν | D |
| COMPONENT #1 | | | | | | | | | | | | | | | Î | | | | | | | | | | | | | | | | | | | | | |
| COMPONENT #2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Studies | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hydrometeorological and Water Quality Monitoring in the SJRB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydrographic survey of Lake Nicaragua and the San Juan River | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Determination of the plume of sedimentation in the coastal area | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Information for the sustainable management of critical aquatic habitats | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Study of the coastal and marine resources of the Tortuguero Conservation Area and the Indio-Maiz Reserve | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zoning to reduce vulnerability to natural hazards | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A study of transborder migration and new settlements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Information System (see activity h) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GIS Workshops . 4 workshops over two years (see activity h) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMPONENT #3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Demonstration Projects | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Conflict management for the La Virgen hydroelectric project | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fund for the development of agroforestry activities in Cárdenas Municipality | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sustainable use and rehabilitation of the Rio Frio sub- basin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Restoration and management of the banks of the Sarapiqui and Sucio rivers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Component #4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Demonstration Projects | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conservation of the Las Camelias Wildlife Refuge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Community organization and education for the control of fires | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reclamation of the Tepenaguasapa river sub-basin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ara ambigua and Dipterix panamensis habitat recovery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Workshops | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| COMPONENT/ ACTIVITY | | | | | | 20 | 001 | | | | | | | | | | | 200 | 02 | | | | | | | | | | | 20 | 03 | | | | | |
|--|---|---|---|---|---|----|-----|---|---|---|---|---|---|---|---|---|---|-----|----|---|---|---|---|---|---|---|---|---|---|----|----|---|---|---|---|---|
| | J | F | Μ | Α | Μ | J | J | Α | S | 0 | Ν | D | J | F | Μ | Α | Μ | J | J | Α | S | 0 | Ν | D | J | F | Μ | Α | Μ | J | J | Α | S | 0 | Ν | D |
| 6 Bi-national Workshops, 2 per year over 3 years | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 National Workshops, 2 per year per country over 3 years | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Component #5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 Meetings of the Steering Committee. Three in Costa Rica and three Nicaragua, and one 1 in Washington, D.C. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 Meetings of the Consultative Committees. Two in each country per year over 3 years | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMPONENT #6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Demonstration Projects | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Support for local environmental management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Reclamation of the Oyate River Sub-basin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Component #7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Demonstration Projects | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Environmental education in the municipality of San Carlos | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental education in San Carlos Canton | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Students for a clean Oro River | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

6/11/01 - San_Juan3.doc 4.4 <u>Budget:</u>

- 49. The total baseline of the project is estimated at US\$ 24.43 million and the alternative scenario is estimated at US\$29.86 million. The incremental cost is estimated at US\$5.43 million of which 18%, or US\$0.98 million is the estimated financial and in-kind contribution of local and national stakeholders. In addition to the US\$283,000 grant from the PDF Block B, already disbursed, GEF is requested to finance US\$3.92 million.
- 50. The budget as approved by the GEF is presented in Table 2 here below. A detailed budget broken down by workelements is presented in Annex VIII. The budget in UNEP format is presented in Annex IX of this document.

TABLE 2: PROJECT FINANCING AS APPROVED BY HE GEF

(in thousand of US dollars)

| Component/ Other Costs | Base Line ⁷ | Alternative Scenario ⁸ | Incremental Cost ⁹ | | Co-fina | GEF | Associated Financing | | |
|---------------------------|---------------------------|--------------------------------------|----------------------------------|--------|---------|--------|-------------------------|----------|--------|
| | | | | Gov. | UNEP | OAS | CRRH | | |
| Component #1 | 900.00 | 2,214.14 | 1,314.14 | 312.14 | 150.00 | 150.00 | 0.00 | 702.00 | 0.00 |
| Component #2 | 2,363.68 | 3,759.25 | 1,395.57 | 212.57 | 0.00 | 0.00 | 100.00 | 1,083.00 | 228.07 |
| Component #3 | 4,754.44 | 5,155.51 | 401.07 | 64.07 | 0.00 | 0.00 | 0.00 | 337.00 | 73.12 |
| Component #4 | 8,629.32 | 9,223.39 | 594.07 | 109.57 | 0.00 | 0.00 | 0.00 | 484.50 | 127.51 |
| Component #5 | 1,331.23 | 1,505.31 | 174.08 | 15.36 | 0.00 | 0.00 | 0.00 | 158.72 | 183.60 |
| Component #6 | 4,022.28 | 4,275.99 | 253.71 | 39.71 | 0.00 | 0.00 | 0.00 | 214.00 | 155.93 |
| Component #7 | 2,424.17 | 2,744.74 | 320.57 | 66.57 | 0.00 | 0.00 | 0.00 | 254.00 | 160.79 |
| Administrative Costs | 0.00 | 413.60 | 413.60 | 0.00 | 0.00 | 0.00 | 0.00 | 413.60 | 0.00 |
| PDF Block B | 0.00 | 498.00 | 498.00 | 165.00 | 25.00 | 25.00 | 0.00 | 283.00 | 0.00 |
| Totals | 24,425.12 | 29,789.93 | 5,364.81 | 984.99 | 175.00 | 175.00 | 100.00 | 3,929.82 | 929.02 |

4.5 <u>Cash Advance Requirements:</u>

An initial cash advance will be made upon signature of the project document by both parties and will cover expenditures expected to be incurred by the GS/OAS during the first six months from the UNEP contribution (i.e. GEF Funds provided by UNEP on behalf of the GEF) (see format in Annex XIV). Subsequent advances are to be made quarterly, subject to:

- (I) Confirmation by the GS/OAS, at least two weeks before the payment is due, that the expected rate of expenditure and actual cash position necessitate the payment, including a reasonable amount to cover "lead time" for the next remittance; and
- (ii) The presentation of:
 - (1) a satisfactory financial report showing expenditures incurred for the past quarter, under each project (see format in Annex XIV).

4.6 Follow-up:

Prioritized project designs necessary for the next activity implementation phases will be submitted to the GEF, UNEP and any other donors for their consideration.

SECTION 5 - INSTITUTIONAL FRAMEWORK

- 51. This phase of the project, whose purpose is to prepare a SAP for the sustainable development of the SJRB, will continue to be executed by the governments of Costa Rica and Nicaragua, through MINAE and MARENA respectively. A series of well-defined activities will have to be implemented in each country and throughout the SJRB. The coordination of these activities will be carried out by the two technical units in the national executing ministries. UNEP and OAS will support Project Execution. OAS, due to its historic involvement in the basin, its partnership with UNEP in similar projects within the region, and its role in implementing activities under related projects, will act as Executing Agency and manager of the funds provided to the project by UNEP on behalf of GEF, consistent with UNEP financial reporting requirements.
- 52. The technical units charged with drafting the SAP will each have a national director, appointed by the executing ministry, and a technical coordinator to be contracted with project funds by the

⁷ For this analysis, the "Business-as-Usual" scenario has been used as Baseline. Past expenditure for project preparation is not considered baseline.

⁸ The Alternative Scenario is equal to the Baseline plus the Incremental Cost.

⁹ The total Incremental Cost includes the costs to the GEF and Co-financing.

USDE/OAS in consultation with the governments and UNEP for the full 36 months of the project. The posts of technical coordinators have been budgeted at US\$3,500/month each, for a total of US\$252,000. The costs of communications, travel, copying, operations, and clerical services have been budgeted at US\$450,000 putting the total cost to the GEF of drafting the SAP at US\$702,000.

- 53. A Steering Committee will be established for the project, composed of the ministers of MINAE and MARENA, a representative of each country's Foreign Ministry, representatives of associations of municipalities, the Director of USDE/OAS, the Director of the Division of Environmental Information Assessment and Early Warning of UNEP, and the project's two national directors. Observers, in an *ex-officio* capacity, will include the other two GEF implementing agencies (World Bank and UNDP), the technical coordinators, and other cooperation agencies willing to be part of the SAP. This board will be the highest organ of the project and will meet at least twice a year. It is charged with approving the work plans of the technical units, the terms of reference of the demonstration projects, and any advisory opinions that OAS/USDE may present in concert with the national directors and the technical coordinators. Also, any significant change to programs and budgets must be approved at this level.
- 54. A Consultative Committee will be set up in each country. It will include national institutions involved in the management of the SJRB, private organizations taking part in the project and academic institutions. Its role will be to promote the active participation of the institutions and to advise on the orientations of the project. It will be co-chaired by the national directors and will also serve as a mechanism for the coordination of national actions.
- 55. Binational coordination will be promoted at various levels and through the exchange of information of the demonstration projects. To make progress on the studies and the preparation of the SAP, six binational workshops (two each a year) are being planned. At US\$17,250, the total cost will be US\$103,500. Twelve national workshops will also be organized, two a year in each country. At US\$5,000 each, the total cost will be US\$60,000. For all this it will be necessary to contract 27 months of international consulting services at US\$10,000/month, for a total of US\$270,000, and 159 months of national consulting services at US\$2,000/month for a total of US\$318,000.
- 56. Seven meetings of the Steering Committee are being planned for the three-year period. Six will be in Costa Rica and Nicaragua at a cost of US\$44,720. The final meeting at the end of the period, will take place in Washington, D.C., and travel costs have been calculated at US\$10,000. It is anticipated that the last couple of Steering Committee meetings will be preceded by donor roundtables to ensure donors buy-in and financial support for the SAP.
- 57. Successful implementation of the project will depend on the active participation of stakeholders in the Basin. To assure this, the proposal has specific elements for participation. Thus, the programs on public participation and education and training are of fundamental importance.
- 58. More than 100 institutions, government agencies, and civil society organizations took part in preparing this proposal, contributing their experience and hands-on knowledge to identify the elements needed to formulate, validate and identify the strategy for the formulation of the a SAP. In addition, more than 40 technical proposals, pilot project proposals, and recommendations for action were received. Studies carried out by consultants and technical reports and other government documentation from both countries were also important sources. Information was thus gleaned to complement the Diagnostic Study of the San Juan River Basin and Guidelines for a Plan of Action and to discover any gaps in knowledge and understanding of current and emerging transboundary environmental problems.
- 59. In addition to the public participation, fourteen consultants worked on this proposal: four from Costa Rica, five from Nicaragua, and five from other countries. The proposal is consistent with the environmental policies of Costa Rica and Nicaragua, and both MINAE and MARENA were regularly consulted. Two meetings with the cooperating agencies were organized, to open the doors of the project even wider and to make it a catalyst for generating other sources of financing for activities identified as priorities for the sustainable development of the SJRB. They proved very useful in learning about current and planned activities and in seeking mechanisms for coordination.
- 60. Under the supervision of UNEP, the General Secretariat of the Organization of American States (GS/OAS), will be responsible for the overall management of the project through their Unit for

Sustainable Development and Environment (USDE). The GS/OAS will assign a Project Manager who will be responsible for the timely execution of the project activities, for co-ordinating the inputs of technical Units in Costa Rica and Nicaragua and the various consultants hired under the project, and will liaise with UNEP (The Division of Environmental Information, Assessment and Early Warning (DEIAEW) and the GEF Coordination Office - see below) on all matters regarding the project. At the end of the project, the Project Manager will be responsible, in cooperation with UNEP/DEIAEW and UNEP/GEF Coordination Office for preparing prioritized project designs necessary to implement high priority strategic actions formulated under the SAP, to be submitted to the GEF Council for consideration. For the implementation of the activities the GS/OAS will work through co-executing arrangements with the Technical Units in Costa Rica and Nicaragua.

- 61. UNEP through DEIAEW, and as the GEF Implementing Agency of this project, will be responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and will provide guidance on linkages with related UNEP and GEF funded activities. UNEP also has the responsibility for regular liaison with the GS/OAS on substantive and administrative matters; assisting the Technical Units in Costa Rica and Nicaragua upon request; and participating in meetings and workshops as appropriate. The UNEP/GEF Coordination Office will provide assistance and advice to the GS/OAS and UNEP/DEIAEW in project management (e.g. revisions of workplan and budgets) and policy guidance in relation to GEF procedures, requirements and schedules.
- 62. The GS/OAS will be responsible for timely production of financial and progress reports to UNEP as mentioned in section 4 and 6.
- 63. All the proposed activities will be managed at the country level on a day-to-day basis by the Technical Units in Costa Rica and Nicaragua in consultation with the UNEP and GS/OAS.
- 64. The UNEP/GEF Coordination Office in close collaboration with UNEP/DEIAEW will be responsible for clearance and transmission of financial and progress reports to the Global Environment Facility. The DEIAEW of UNEP in close collaboration with UNEP/GEF Coordination Office retains responsibility for review and approval of the substantive and technical reports produced in accordance with the schedule of work. The DEIAEW of UNEP will also be responsible in collaboration with the GS/OAS for the production of the GEF Quarterly Operational Reports and their submission to the UNEP/GEF Coordination Office (see format in Annex XV).
- 65. All correspondence on *substantive and technical matters* of the project should be addressed to:

(1) In GS/OAS:

Mr. R. Meganck

Director - Unit of Sustainable Development and Environment

With Copy to:

Mr. Jorge Rucks

Chief, Geographical group II - Unit of Sustainable Development and Environment 1889 F Street, NW, Room 340 Washington, DC 20006 United Sates of America Tel: + 1-202-458-3556 FAX: + 1-202-458-3560 Email: rmeganck@aos.org Email: jrucks@oas.org

(2) In the Technical Units

Costa Rica Mr. Jorge Bonilla Cervantes Director Nacional Nicaragua Mr. Juan Jose Romero Director Nacional Minsterio de Ambiente y Energia (MINAE) (MARENA)

| Sabanilla de Montes de Oca, San Jose | Km 12 1/2 Carretera Norte, Managua |
|--------------------------------------|------------------------------------|
| Costa Rica | Nicaragua |
| Tel: +506-253-8556 | Tel: +505-263-2598 |
| FAX: +506-253-8556 | FAX: +505-233-1110 |
| Email: sanjuan@sol.racsa.co.cr, | Email: snipmare@tmx.com.ni |

(3) <u>In UNEP:</u>

Mr Tim Foresman Director Division of Environmental Assessment and Early Warning (DEIAEW)

With copy to:

Ms. Isabelle Vanderbeck

Task Manager DEIAEW P.O. Box 30552 Nairobi - Kenya Tel: + 254-2-624339/4028 FAX: + 254-2-622798 Email: isabelle.vanderbeck@unep.org Email: tim.foresman@unep.org

with copy to:

Mr. John Pernetta

Senior Programme Officer International Waters GEF Coordination Office P.O. Box 30552 Nairobi - Kenya Tel: + 254-2-624153 FAX: + 254-2 623126/520825 Email: john.pernetta@unep.org

All correspondence administrative and financial matters should be addressed to:

(1) In GS/OAS:

Mr. R. Meganck Director - Unit of Sustainable Development and Environment

With copy to

Mr. Richard Sims

Administrative Officer - Unit of Sustainable Development and Environment 1889 F Street, NW, Room 340 Washington, DC 20006 - United Sates of America Tel: + 1-202-458-3556 FAX: + 1-202-458-3560 Email: rmeganck@oas.org Email: rsims@oas.org

(2) In the Technical Units:

Costa Rica Mr. Jorge Bonilla Cervantes Director Nacional **Nicaragua** Mr. Juan Jose Romero Director Nacional Minsterio de Ambiente y Energia (MINAE) (MARENA) Sabanilla de Montes de Oca, San Jose Costa Rica Tel: +506-253-8556 FAX: +506-253-8556 Email: sanjuan@sol.racsa.co.cr,

Km 12 1/2 Carretera Norte, Managua Nicaragua Tel: +505-263-2598 FAX: +505-233-1110 Email: snipmare@tmx.com.ni

(3) In UNEP:

Mr. Edmundo Ortega Chief Budget and Fund management Unit UNON P.O. Box 67578 Nairobi - Kenya Tel: + 254-2-623637/ FAX: + 254-2-623755

With copy to

Ms. Immaculate Njeru GEF Fund and Administrative Officer GEF Coordination Office P.O. Box 30552 Nairobi - Kenya Tel: + 254-2-623595 FAX: + 254-2 623126/624041

SECTION 6: MONITORING AND REPORTING

6.1. MONITORING AND EVALUATION:

- 66. The administrative, technical and financial reporting framework will be provided by UNEP through the GS/OAS and Steering Committee using standard UNEP reporting protocols. Utilizing key process and status indicators will be an intrinsic part of the project. These indicators will be implemented through the establishment and integration of monitoring tools into project components, as agreed by the Steering Committee. A monitoring and evaluation plan, consistent with GEF criteria, will be prepared by the GS/OAS and, MINAE and MARENA, and approved by the Steering Committee and UNEP. The objective of this monitoring is to contribute to improving, and, if needed, adapting management of work program activities as well as creating the basis for project evaluation. UNEP supervision will be exercised through the GS/OAS and by participation in the regular meetings of the Steering Committee, the first and second meetings of the Steering Committee wherein the work plan and terms of reference for project staff and consultants will be discussed and agreed. A project implementation review would be undertaken jointly by the Government and UNEP two years after the end of the project.
- 67. During the conduct of the project, UNEP in cooperation with GS/OAS will undertake one evaluation mission to diagnose possible problems and suggest the necessary corrective measures. It will evaluate the efficiency of the project management, including delivery of inputs and activities in terms of quality, quantity and timeliness.
- 68. Upon completion of the project, UNEP/DEIAEW and UNEP/GEF Coordination Office will undertake a desk evaluation to measure the degree to which the objectives have been achieved and highlighting for the GEF in particular, lessons learned in the preparation of a project of national scope. The evaluation should also seek to reflect the views and feedback from the country involved in the achievement of the project goals. This final desk evaluation will be undertaken according to UNEP approved Monitoring and Evaluation procedures.

- 69. A post facto in depth evaluation will be conducted, under the supervision of UNEP the GEF Monitoring and Evaluation Unit two years after the project has been completed, to evaluate the environmental impacts and long term effects of the project, and to make recommendations for future action, identify the conditions for successful replication if appropriate and draw generic lessons. This evaluation of the overall performance of the project will be undertaken within the framework of the Monitoring and Evaluation programme of the GEF Secretariat and by an external and independent consultant.
- 70. STAP Review. (Annex III) This project proposal was reviewed by Dr Ed Ongley, Emeritus Scientist, National Water Research Institute, Environment Canada, an International Waters Expert included in the STAP Roster of Experts. Comments made by Dr. Ed Ongley have been addressed in details in Annex C. The Information System and the SAP formulation components (Para 20 through 25) as well as paragraph 7 of the detailed workprogramme (Annex VIII) have also been altered to address specific concerns of Dr. Ed Ongley.
- 71. Dissemination Incorporated into the SAP formulation are specific work program components (see Components 4&7) which explicitly aim to promote and disseminate the experiences obtained through the SAP formulation process to the SJRB Stakeholders, and to communities within the SJRB through a program of public information and education. Work program activities encourage and facilitate technology transfer and information dissemination through programs of public participation, stakeholder involvement, and professional and community-based education and information dissemination. States and municipal governmental organizations, NGOs and citizen involvement in project execution will also contribute to the dissemination of information on specific technologies and techniques that contribute to the sustainable environmental management and economic development of the watershed. Finally, the publication of the SAP for the SJRB will communicate to all concerned organizations, agencies and citizens, the comprehensive strategic approach for the management of this critical drainage basin. Copies of this management program will be widely disseminated within the planning project area.

6.2. QUARTERLY OPERATIONAL REPORTS:

72. As at 31 January 2001, 30 April 2001, 31 July 2001, 31 October 2001, 31 January 2002, 30 April 2002, 31 July 2002, 31 October 2002, 31 January 2003, 30 April 2003, 31 July 2003, and 31 October 2003, GS/OAS shall submit to UNEP/DEIAEW with a copy to UNEP/GEF Coordination Unit, using the format given in Annex X and XI, quarterly/half-yearly operational reports on the progress in project execution, scheduled to be submitted by GS/OAS within 15 days of the end of the reporting period.

6.3. TERMINAL REPORT:

73. Within 60 days of project completion, the GS/OAS shall submit to the Chief Fund Programme Management Branch with copies to UNEP/DEIAEW and UNEP/GEF Coordination Office a project terminal report, using the format given in Annex XII.

6.4. SUBSTANTIVE REPORTS:

74. As per section 4 above, copies of the substantive and technical reports produced in accordance with the schedule of work will be submitted to UNEP/DEIAEW for technical review with copies to UNEP/GEF Coordination Office and to the Chief, Fund Programme Management Branch.

6.5. FINANCIAL REPORTS:

6.5.1 PROJECT EXPENDITURE ACCOUNTS

(i) Details of expenditures will be reported, every three months (as at 31 January 2001, 30 April 2001, 31 July 2001, 31 October 2001, 31 January 2002, 30 April 2002, 31 July 2002, 31 October 2002, 31 January 2003, 30 April 2003, 31 July 2003, and 31 October 2003) on an activity by activity basis, in line with project budget codes as set out in the project document using the format given in Annex XIII. All expenditure accounts will be dispatched to UNEP within 15 days of the end quarter to which they refer, certified by a duly authorized official of the GS/OAS.

- (ii) In addition, UNEP requires that the end of year expenditure account should be reported as part of an annual independent audit of the External Auditors of the GS/OAS.
- (iii) Within 60 days of the completion of the project, the GS/OAS will supply UNEP with a final statement of account in the format as for the three-month statements. The General Secretariat confirms that the financial records of this programme will be an integral part of the financial records of the General Secretariat, which are subject to an independent audit by the board of External Auditors of the GS/OAS, and agrees to furnish copies of these audit reports to UNEP along with such other related information as may be requested by UNEP with respect to any questions arising from the audit report.
- (iv) Any portion of cash advances remaining unspent or uncommitted by the GS/OAS on completion of the project will be reimbursed to UNEP within one month of the presentation of the final statement of accounts. In the event that there is any delay in such disbursement, the GS/OAS will be financially responsible for any adverse movement in the exchange rates.

6.5.2 CASH ADVANCE ACCOUNTS

75. A statement of advances of cash provided by UNEP should be submitted in the format shown in Annex XIV.

SECTION 7: TERMS AND CONDITIONS

7.1. NON-EXPENDABLE EQUIPMENT

76. The GS/OAS will maintain records of non-expendable equipment (items costing \$1500 or more as well as items of attraction such as pocket calculators) purchased with UNEP funds, and will submit an inventory of all such equipment to UNEP, indicating description, cost, date of purchase, and present condition of each item attached to the 2nd and 4th quarter reports (see Annex XVI for the inventory format). Upon completion of project activities, GS/OAS will attach to the terminal report a final inventory of all non-expendable equipment purchased under this project. All such equipment shall remain the property of UNEP until its disposal is authorized by UNEP, in consultation with the GS/OAS. The GS/OAS shall be responsible for any loss of or damage, ordinary wear and tear excepted, caused by GS/OAS to equipment purchased with UNEP funds. The proceeds from the sale of equipment duly authorized by UNEP upon completion of project activities shall be credited to the accounts of UNEP, or the appropriate Trust Fund or Counterpart Contribution.

7.2 <u>RESPONSIBILITY FOR COST OVERRUNS</u>

77. Any cost overrun (expenditure in excess of the amount budged in each budget sub-line) shall be met by the organization responsible for authorizing the expenditure, unless written agreement has been received by letter or cable, in advance, from UNEP. In cases where UNEP has indicated its agreement to a cost overrun in budget subline, either to transfer funds from one sub-line to another, or to increase the total cost to UNEP, a revision to the project document amending the budget will be issued by UNEP.

7.3. CLAIMS BY THIRD PARTIES AGAINST UNEP

78. The GS/OAS shall be responsible for dealing with any claims which may be brought by third parties against UNEP and its staff, in relation to work executed by GS/OAS under this Agreement and UNEP shall not be liable to GS/OAS in relation to those claims unless those claims were caused by the negligence or other conduct of UNEP or UNEP's staff. Nothing in this Agreement may be construed as a waiver of the immunities from suit, legal process, execution, of either UNEP or GS/OAS.

7.4. DISPUTES RESOLUTION PROVISION

79. Any controversy or claim arising out of, or in accordance with this Agreement or any breach thereof, shall, unless it is settled by direct negotiations, be settled in accordance with the UNCITRAL Arbitration Rules as at present in force.

80. The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such controversy or claim.

7.5. MODIFICATION

81. This Agreement may be modified or otherwise amended by the written agreement of the Parties, signed by their duly authorized representatives, dated, and attached hereto.

7.6. TERMINATION

- 82. Either party may terminate this Agreement with sixty days' advanced written notice to the other. In the event of such termination, each party shall provide the corresponding funding in accordance with its obligations herein to cover any
- 83. Project costs up until the termination date, including, but not limited to, the costs of complying with third-party commitments made pursuant to the project that may run beyond the termination date and which cannot be revoked without incurring liability.

7.7. OAS CONTRIBUTION

84. The GS/OAS contribution under this project document is subject to the approval and non modification of the corresponding appropriation in the GS/OAS programme budget by the competent organs of the OAS.

LIST OF ANNEXES

- Annex I. Incremental Cost
- Annex II. Logical Framework Matrix
- Annex III. STAP Roster Technical Review and response
- Annex IV. Transboundary Diagnostic Analysis, including Root Cause Analysis
- Annex V. Public Involvement Plan Summary
- Annex VI. Map of the SJRB and Surrounding Area
- Annex VII. Definition of Terms
- Annex VIII. Proposed Work Program and Descriptions of Specific Studies and Demonstration Projects
- Annex IX. Budget in UNEP format
- Annex X: Format for quarterly reports
- Annex XI: Format for half-yearly reports
- Annex XII: Format for terminal report
- Annex XIII: Format for Project Expenditure accounts
- Annex XIV: Format for cash advance statements
- Annex XV: Format for GEF Quarterly Operation Reports
- Annex XVI: Format for Equipment Inventory

LIST OF ACRONYMS/ABBREVIATIONS

| AECI AMURS | Spanish International Cooperation Agency Asociación de Municipios del Río San Juan (Association of Municipalitica of the San Juan Biyar) |
|----------------|---|
| ASCOMAFOR | Municipalities of the San Juan River) Asociación para la Conservación y Manejo de Areas Forestales (Association for the Conservation and Management of Forest |
| CATIE | Areas) Centro Agronómico Tropical de Investigación y Enseñanza (Research and Training Center for Tropical Agriculture) |
| CCAD | Comisión Centroamericana de Ambiente y Desarrollo (Central American Commission of Environment and Development) |
| CRRH | Comité Regional de Recursos Hídricos (Central American Committee on Water Resources) |
| DANIDA EU | Danish International Development Agency European Union |
| FINNIDA GEF | Finnish International Development Agency Global Environment Facility |
| GTZ | German Agency for Technical Cooperation |
| IDA | International Development Agency (World Bank) |
| IDB IDR | Inter-American Development Bank |
| IDR | Instituto Nicaraguense de Desarrollo Rural (Nicaraguan Institute for Rural Development) |
| INETER | Instituto Nicaraguense de Estudios Territoriales (Nicaraguan |
| | Institute for Territorial Studies) |
| INIFOM | Instituto Nicaraguense de Fomento Municipal (Nicaraguan Institute of Municipal Promotion) |
| KFW | German Development Bank |
| MARENA | Ministerio de Ambiente y Recursos Naturales (Ministry of |
| MARENAP | Environment and Natural Resources) Protected Areas and Natural Resources Management Project of MARENA |
| MINAE | Ministerio de Ambiente y Energía (Ministry of Environment and Energy) |
| NDF | Nordic Fund |
| NGO | Non Governmental Organizations |
| OAS | Organization of American States |
| PANIF | Nicaragua-Finland Environmental Program |
| PDF | Project Preparation and Development Facility |
| PROTIERRA | Reforma de Políticas de Recursos Naturales (Natural Resources Policy Reform) |
| SAP | Strategic Action Program |
| SDC | Swiss Agency for Development and Cooperation |
| SIAPAZ | Sistema Integrado de Areas Protegidas para la Paz (Protected |
| SICA | Areas Integrated System for Peace) Sistema de la Integración Centroamericana (Central American Integration System) |
| SIDA | Swedish International Development Agency |
| SINAC | Sistema Nacional de Areas de Conservación (Conservation Areas National System) |
| SJRB | San Juan River Basin and its Coastal Zone |
| TDA | Transboundary Diagnostic Analysis |
| UN | United Nations |
| UNEP | United Nations Environment Programme |
| USAID | United States Agency for International Development |
| USDE WB | Unit for Sustainable Development and Environment World Bank |