

**UNITED NATIONS ENVIRONMENT PROGRAMME
GLOBAL ENVIRONMENT FACILITY
PROJECT DOCUMENT
SECTION 1 - PROJECT IDENTIFICATION**

- 1.1 Sub-Programme Title:** International Waters – 09: Land and Water
- 1.2 Project Title:** Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin
- 1.3 Project Number:** PMS: GF/1010-
IMIS:
- 1.4 Geographical Scope:** Regional: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela
- 1.5 Implementation:** General Secretariat of the Organization of American States (GS/ OAS)
Tel: +1-202-4583556
Fax: +1-202-4583560
- 1.6 Duration of the Project:** 23 months
Commencing: June 2005
Completion: April 2007

1.7 Cost of the Project:

	US\$	%
Cost to the GEF Trust Fund:	700,000	48%
Co-financing (in-kind):		
National Contribution	600,000	42%
GS/OAS	75,000	5%
UNEP	75,000	5%
<i>Sub-total:</i>	<i>750,000</i>	<i>52%</i>
Total Cost of the Project	1,450,000	100%

1.8 Project Summary:

The goal of this project is to strengthen the institutional framework for planning and executing, in a coordinated and coherent manner, activities for the protection and sustainable management of the land and water resources of the Amazon River Basin in the face of ongoing climatic changes being experienced in the Basin. The proposed project endeavors to realize a shared vision for the sustainable development of the region, based upon the protection and integrated management of transboundary water resources and adaptation to climatic changes. This specific project or PDF-B represents the preparatory phase, which will primarily build a common vision, formulate a framework TDA (see list of acronyms on page 34) for the basin as a whole as well as a project brief for the next phase through a comprehensive public participation process.

- 1.9 Contract Document:** This Contract Document includes the following: Sections 1-5 and twelve annexes attached hereto.

Signatures

For GS/OAS

Mr. Jose Miguel Insulza
Secretary General

Date: _____

For UNEP

David Hastie, Acting Chief,
Budget and Financial Management
Service, UNON

Date: _____

Box 1: Identifiers of PDF-B Document as approved by GEF Secretariat



PROJECT DEVELOPMENT PREPARATION (PDF) PROPOSAL REQUEST FOR PDF Block B APPROVAL

AGENCY'S PROJECT ID: GF/1040-XXXX
GEFSEC PROJECT ID: 2364
COUNTRY: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela

PROJECT TITLE: Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin

GEF AGENCY: UNEP
EXECUTING AGENCY: General Secretariat of the Organization of American States (GS/OAS)
OTHER EXECUTING AGENCY(IES): Organization of the Amazon Cooperation Treaty (OTCA), in cooperation with the following national institutions:

- Bolivia:** National Hydrology and Meteorology Service
- Brazil:** National Water Agency/Ministry of the Environment (ANA/MMA)
- Colombia:** Institute of Hydrology, Meteorology, and Environmental Studies
- Ecuador:** National Water Resources Board
- Guyana:** Guyana Water Authority
- Peru:** National Institute of Natural Resources (INRENA)
- Suriname:** Ministry of Public Works/Hydraulic Research Division
- Venezuela:** Directorate of Hydrographic Basins/Ministry of Environment

FINANCING PLAN (US\$)	
GEF PROJECT / COMPONENT	
Project (<i>estimated</i>)*	10,000,000
PDF A	
PDF B	700,000
PDF C	
<u>Sub-Total GEF</u>	10,700,000
PROJECT CO-FINANCING (<i>estimated</i>)	
GEF Agency	150,000
Government	5-6,000,000
Bilateral	
NGOs	
Others **	5-6,000,000
<u>Sub-Total Co-financing:</u>	10-12,150,000
PDF CO-FINANCING (details provided in Part II, Section w/Budget)	
GEF Agency	50,000
National Contribution	600,000
Others	100,000
<u>Sub-Total Co-Financing:</u>	750,000
<u>Total Project Financing:</u>	21-23,600,000

* For a 4.5 years period with 5 million from IW focal area and 5 million from Climate Change Adaptation

** GS/ OAS, WMO, CAF, IDB....

DURATION: 23 Months

GEF FOCAL AREA: International Waters

GEF OPERATIONAL PROGRAM: OP # 9

GEF STRATEGIC PRIORITY: IW Priority No.2/Climate Change Adaptation

ESTIMATED STARTING DATE: January 2005

ESTIMATED WP ENTRY DATE: Feb. 2007 Inter-sessional Work Program

PIPELINE ENTRY DATE: 12 November 2003

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT: (see Annex 4)

- | | |
|---|----------------------|
| 1. Carlos Eduardo Lampert Costa
GEF Focal Point, Min. Planning and Management,
Secretariat Internal Affairs, Brazil | Date: April 29, 2004 |
| 2. Juan Pablo Bonilla
Vice Minister of Environment, Colombia | Date: March 15, 2004 |
| 3. Carlos René Valenzuela
Viceministerio de Recursos Naturales y
Medio Ambiente, Bolivia | Date: July 06, 2004 |
| 4. Fabian Valdivieso Eguiguren
Ministro del Ambiente, Ecuador | Date: May 30, 2004 |
| 5. Doorga Persaud
Executive Director EPA, Guyana | Date: July 28, 2004 |
| 6. Mariano Castro Sánchez-Moreno
Secretario Ejecutivo, CONAM, Peru | Date: July 02, 2004 |
| 7. M. Kerkhoffs-Zerp – Environmental Policy
Officer, Ministry of Labor, Technological
Development and Environment. | Date: July 22, 2004 |
| 8. Oscar Hernández Bernadette
Embajador, Ministerio de Relaciones Exteriores,
Unidad de Medio Ambiente, Venezuela | Date: March 22, 2004 |

.....
IA/ExA Coordinator:
 A. Djoghlafl, Assistant Executive Director
 Date:

.....
Project Contact Person:
 I. Vanderbeck, Task Manager
 Tel.: +254 - 20 - 624339
 Email: isabelle.vanderbeck@unep.org

SECTION 2 - BACKGROUND AND PROJECT CONTRIBUTION TO OVERALL SUB-PROGRAMME IMPLEMENTATION

PROJECT DEVELOPMENT PREPARATION – PDF-B

JUSTIFICATION

BACKGROUND

Description of the Basin – See Annex 5 for basin Map

The Amazon River Basin occupies the entire central and eastern area of South America, lying to the east of the Andes mountain range and extending from the Guyana Plateau in the north to the Brazilian Plateau in the south. Its altitude ranges from 4,000 m in the western mountain range to sea level. The Basin covers more than 6,100,000 km², or 44% of the land area of the South American continent, extending into Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela. The Basin has widely varying climatic and topographic characteristics, with elevations ranging from sea level at the River's mouth, to an altitude of 6,500 m in the Andes. Precipitation levels range from 200 mm per year in the Andes to more than 6,000 mm per year in the foothills and plains. Seasonal variations in rainfall are the result of movements in the inter-tropical convergence zone (ITCZ), with periods of maximum precipitation occurring during the months of March through June in the northern hemisphere, and December through March in the southern hemisphere.

The Amazon River, which runs for approximately 7,100 km from its source in Peru to the Atlantic Coast of Brazil, is the world's longest, widest, and deepest river. Its discharge of approximately 210,000 m³ per second exceeds the combined discharge of the world's nine next largest rivers. Its hydrological characteristics are unique. The Amazon River system is divided into 10 subbasins, the largest of which in area are the Negro, Xingú, Madeira, Tapajós, and Juruá subbasins. The Negro River subbasin (comprised of the Negro and Branco river systems) is the largest in area, accounting for nearly one-fourth of the Basin's total land surface. In terms of discharge, from a hydrological standpoint, an estimated 65% the Basin's total flows into the Atlantic Ocean comes from the Solimoes and Madeira river sub basins, originating in the Andes and comprising about 60% of the Basin's land area. About 15% of the flow is from the Negro River subbasin. The greatest demand for water is found in the Madeira, Tapajós, and Xingú sub basins, where irrigation accounts for 90% of the demand.

The dense vegetation and large volumes of water that circulate throughout its extensive drainage network produce clouds over the Basin that generate high levels of precipitation and release heat, affecting the regional and global climate through tropical circulation patterns. Most of the Basin is covered by tropical rainforest, accounting for more than 56% of all broad leaf forests in the world. Its ecosystems are characterized by great biodiversity, with more than 30,000 plant species, nearly 2,000 fish species, 60 reptile species, 35 mammal families, and approximately 1,800 bird species. The Amazon River Basin is also an important source of natural resources for human economic development. It contains some of the world's largest known reserves of bauxite (nearly 15% of the world total), and industries within the Basin are some of the largest suppliers of iron and steel to world markets. Wood and wood byproducts, gold, and tin are other products from the Basin that are increasingly in demand for export.

The population of the Amazon River Basin is estimated at approximately 10 million persons, mostly concentrated in urban areas (Iquitos, Leticia, Manaus, Río Branco, Porto Velho, Boa Vista, and Macapá, among others) along the river and its main tributaries. A high percentage of the total population consists of indigenous communities settled mainly along the banks of the river and its tributaries, and belonging, *inter alia*, to the following ethnolinguistic groups: Quichua, Inga, Secoya,

Huitoto, Andoque, Ynomami, Waimiri, Atroari, Matis, Mayorum, and Ticuna. In recent decades, there has been an accelerated process of immigration into, and settlement within, the Amazon River Basin. Population growth rates range from 5.2% to 7.2%, well above the national averages for the Amazon countries. These factors, combined with the high levels of poverty, place constant pressure on the region's natural resources, and in particular on residual native forests.

Environmental Issues and Concerns

The mountainous portions of the Amazon River Basin, consisting of the eastern slope of the Andes in Bolivia, Peru, Ecuador, and Colombia, account for a little over 12% of the total land area of the Basin. Given the abundant rainfall and steep topography, the Andean slopes are subject to severe erosion, with more than 1,000 tons/km²/year of sediment flowing toward the Atlantic Ocean. Measurements in the upper Madeira River subbasin indicate that, of the 3,200 tons/km²/year of sediment produced, up to 60% reaches no farther than the Andean foothills, at which point, the sharply reduced longitudinal gradients lower the stream's carrying capacity resulting in internal sediment deposition within the Basin. Overall, the Amazon River transports an average of 600 to 800 million tons of sediment annually, with the majority of the sediment coming from the Solimoes (62%) and Madeira (35%) river sub basins and originating in the Andes.

Given its expansive drainage system, the Amazon Basin is significantly affected by ENSO-type climatic variations (those causing a substantial decline in precipitation), considerably increasing the areas at risk from fire and defoliation. The last "El Niño" event of 1997 caused the worst drought in 25 years in the Amazon Basin. The drop in water levels in the Amazon River and its tributaries was substantial (Rio Negro alone registered a level that was 8.6 meters lower than normal), drying-up areas usually flooded and altering ecological conditions that increased fire hazards throughout the Basin. Millions of acres of burned forest reduced visibility, caused respiratory problems, and closed airports at times. Lagoons and ecosystems became isolated because of drought, stranding recently hatched turtles, for example, and concentrating predators into smaller areas. Reduced river flows also caused power rationing and a reduction in river transport capabilities.

Current anthropogenic pressures on the Basin (deforestation, agriculture, mining, urbanization, etc.) are altering the condition of the plant cover and soils, which, in turn, modifies and increases the area's vulnerability to climatic cycles. Studies indicate that changes in soil moisture and evaporation, caused by deforestation, can lead to persistent drought. Deforestation has increased significantly in recent years. In 1960, the deforested area in the Brazilian portion of the Basin totaled 97,600 km². With the major influx of people into the Region beginning in the 1980s, this deforested area has increased nearly six-fold, encompassing a total of 569,269 km² by 1999. Data published by INPE for 1999 and 2000 indicate a rate of deforestation of about 17,259 km² and 19,836 km², respectively, during those two years alone. The processes of deforestation differ from one portion of the Basin to the next. In the upper basin, where anthropogenic pressures on resources are greater, the rate of deforestation is high, while, in the middle and lower basins, forest extraction activities are limited—if highly selective. In part, this reduced pressure on the middle and lower basins may be an artefact of the area's relative isolation, lack of infrastructure, and the heterogeneity of tree species per unit of land area. The main commercial species include cedar, caoba, aceite, aguacatillo, balsam, brazil, and rosewood. Notwithstanding, around populated areas, major new settlements are accompanied by deforestation. Deforestation in the upper basin and at the edges of the middle and lower basins, and the clearing of plant cover for pasture creation, have led to significant soil loss, increasing sedimentation, altering drainage conditions, and increasing the likelihood of flooding in normally unaffected areas.

The main environmental problems of a transboundary nature affecting the project area can be summarized as follows:

1. Anthropogenic pressures, owing to the uncontrolled expansion of human activities such as agriculture and fishing, exacerbated by climatic variability—especially droughts and, to a lesser extent, floods—contributing to the destruction of fragile ecosystems in the Andean foothills and within the headwater glaciers.
2. Deforestation and clearing of plant cover, mainly in the upper basin, causing soil loss and erosion, reduced biodiversity, and sedimentation in the rivers. In the middle and lower basins, the problems of deforestation are associated with the over-exploitation of high-value forest species.
3. Changes in the hydrologic cycle, associated with changes in the global climate and exacerbated by the alteration of the Amazonian forests, that, within the Amazon River Basin, expose these forests to uncontrolled fires that, in turn, are exacerbated by periodic droughts that have recurred with increasing frequency in recent decades, necessitating the recognition of, and adaptation to, these events by human societies dependent upon the River and its resources.
4. Water pollution, resulting mainly from the indiscriminate use of agricultural pesticides; the dumping of solid wastes and wastewaters from populated areas; the use of persistent chemicals in connection with the cultivation and control of illicit crops; the use of mercury in gold mining (*garimpos*) and as a result of natural and anthropogenic alteration of soils; and, in Ecuador, crude oil spills. Water quality degradation is further exacerbated by inappropriate or inadequate water use and wastewater treatment.

Political and Institutional Framework

The participating countries are signatories to the Amazon Cooperation Treaty (TCA), a legal instrument signed in 1978 for the purpose of fostering integrated and sustainable development of the Amazon River Basin through bilateral or joint activities among the countries involved. Among the Treaty's objectives, particular importance is assigned to the implementation of joint activities and exchanges of information to promote harmonious development in the Amazon territories so as to ensure better environmental protection and the rational use of water resources (see Articles V and XV of the TCA, appended hereto as Annex 1). The Organization of the Amazon Cooperation Treaty (OTCA) was created in 1998, by means of a Protocol of Amendment of the TCA, as a mechanism for institutionally improving and strengthening the process of cooperation among the countries within the framework of the TCA.

The proposal for this project was officially presented during the Eleventh Regular Meeting of the Amazon Cooperation Council (CCH) and the Eleventh Meeting of the Foreign Affairs Ministers of the TCA, held in Santa Cruz de la Sierra, Bolivia, during November 2002. During this latter meeting, the Ministers welcomed the proposal presented by the OTCA to hold a technical meeting in Brasilia, Brazil, to continue the process of preparing the project proposal with a view to presenting it for consideration by the Global Environment Facility (GEF). The Declaration of Santa Cruz, signed by the foreign affairs ministers of the Amazon countries, stresses *"the importance of water resource management and conservation in the Amazon River Basin and the need to integrate and harmonize the initiatives and efforts of each country."* It further expresses the concern of the foreign affairs ministers over *"the progressive melting of glaciers in the Andes Mountain Range, which could have severe consequences for the sustainability of the Amazonian forest."*

Subsequently, during July 2003, the OTCA, with support from the General Secretariat of the Organization of American States and the National Water Agency of Brazil, held a follow-up technical meeting in Brasilia in conjunction with a meeting of the GEF-financed DELTAmerica Project (UNEP-GS/OAS) steering committee. This meeting was attended by, among others, the focal points of the Inter-American Water Resources Network (IWRN), who prepared a preliminary document presenting the conceptual basis for a Program for Sustainable Water Resource Management in the Amazon River

Basin. The results of this technical meeting, and the document resulting from the meeting, were then presented to a meeting of the Coordination Committee of the Amazon Cooperation Council, wherein the countries highlighted the strategic character of the proposal and jointly undertook to make it a reality. The resulting *Concept Document for the Integrated and Sustainable Management of Transboundary Water Resources in the Amazon River Basin* was adopted by the GEF Secretariat on 11 November 2003, which document forms the basis for this PDF Block B funding request.

The need for a framework for joint action throughout the Amazon River Basin, of a preventive nature as well as in guiding the development process, is increasingly evident given the global importance of this hydrographic basin and the growing threats to a biome that, to date, has been relatively unaffected by human settlement. The current institutional dynamic, with the creation and operationalization of the Organization of the Amazon Cooperation Treaty (OTCA), provides an excellent opportunity to strengthen and support the movement by the Amazon countries toward the integrated management of their shared, transboundary water resources. Institutional development and strengthening, the coordination of policies and activities within the Basin, the generation and exchange of technical and scientific knowledge and information, the development of shared and harmonious legal regimes, the effective coordination of projects and initiatives across the region, and the identification of the principal current and emerging problems and joint solutions to those problems are some of the aspects that could be addressed in a coordinated and coherent manner, laying the groundwork for the sustainable management and development of the planet's largest watershed.

A large number of studies and activities on environmental problems affecting the Amazon River Basin are being conducted by countries and research centers. Numerous projects and initiatives, with both national and international financing, are underway and/or programmed. While important in terms of their specific impact, the majority of these initiatives remain isolated and generally national (or sub regional) in scope. Consequently, these efforts do not allow realistically for the joint preventive action needed to protect or sustainably utilize the Basin's water and natural resources, which are (i) of decisive importance for the survival of a key biome sustained by the world's largest watershed, and (ii) of increasing importance as a key element of the global climate and hydrological cycle. For these reasons, the aim of this project is to develop a framework for joint action among the eight countries of the Amazon River Basin so as to integrate and rationalize these currently isolated scientific efforts, find and develop joint solutions to the principal transboundary problems affecting the water resources of the region, and identify and ultimately implement strategic actions to manage and mitigate (adapt to) the consequences of disturbances to the global climatic regime.

This will clearly be a long-term effort. The development of an institutional structure for the coordinated management of the Amazon region is recent and still fragile. The challenge, in terms of its hemispheric scale and the number of countries sharing responsibility (eight countries within the TCA), is great. All eight are developing countries, and their economic and technical capacities have evolved in very different ways, both in terms of scale as well as related institutional and legal frameworks. Accordingly, the project is proposed to be divided into three four-year phases: the first for planning and development of institutional capacity; the second for implementation of jointly identified strategic activities; and the third for strengthening sustainable and integrated water resources management in the Basin, recognizing the likely impacts forecast to arise as a consequence of ongoing changes to the global circulation and climatic regimes.

SUMMARY PROJECT OBJECTIVES AND DESCRIPTION¹ –

The goal of this project is to strengthen the institutional framework for planning and executing, in a coordinated and coherent manner, activities for the protection and sustainable management of the land and water resources of the Amazon River Basin in the face of ongoing climatic changes being experienced in the Basin. The proposed project endeavors to realize a shared vision for the sustainable development of the region, based upon the protection and integrated management of transboundary water resources and adaptation to climatic changes. This goal can be stated as seven specific objectives:

- i. Make progress toward the integrated management of land and water resources, incorporating planning for adaptation to climatic variation and change, through more effective decision-making by the relevant national institutions, based upon the forecast impacts of such climatic variations and changes on land and water resources, and determinations of the vulnerability of people and ecosystems to the consequent changes in aquatic and terrestrial ecosystems, modes of production and transportation, and opportunities for economic and social (community) development.
- ii. Strengthen the shared strategic vision of the Basin as the basis for integrated land and water resource planning and management, adaptation to climatic change, and sustainable development.
- iii. Strengthen the technical-institutional structure for the identification of land and water resources at risk of environmental impairment (critical areas or “hot spots”) in order to develop and recommend measures, plans, and projects to protect and/or rehabilitate areas of impairment and, in association with in the responsible institutions in each country, initiate remedial measures.
- iv. Generate more knowledge about the types and sources of water pollution in the Basin, the means to monitor them, and the mechanisms to attack their root causes.
- v. Assess the vulnerability of ecosystems and local communities to climatic variations, particularly those resulting in droughts and floods, by analyzing adaptation options to altered flows in the glacial headwater areas and other vulnerable regions that have the potential to significantly alter the hydrology and ecology of the downslope portions of the River system and alter the dynamic equilibrium upon which many indigenous communities (among others) depend.
- vi. Make progress toward the harmonization of the legal framework for the sustainable development and management of the Basin, the development of economic instruments, the strengthening of technical and institutional capacities, and the promotion of public participation and involvement in the management of the land and water resources in the Basin necessary to support an effective and appropriate Basin-wide response to ecosystem threats and climatic variations.
- vii. Strengthen the TCA Secretariat as an effective coordination agency for countries in the Basin in the short-, medium-, and long-terms.

¹ Although this section is not mandatory in the revised format template, it allows the reader to keep the PDF-B in perspective. The rest of the PART I info are available in the approved 12 November 2003 Concept paper.

DESCRIPTION OF PDF ACTIVITIES

This proposal is the result of priorities and needs indicated by the Amazon countries in various fora, seminars, and technical meetings held within the framework of the Amazon Cooperation Treaty. The eight countries have jointly stressed the need to establish a common framework for action in the Amazon River Basin so as to: cooperatively address the main environmental problems affecting them; adapt to the changing climatic conditions manifested in the Basin by increasingly frequent floods, droughts and fires; and, guide and coordinate the sustainable development of the Basin. The Permanent Secretariat of the Organization of the Amazon Cooperation Treaty (OTCA), as the agency responsible for implementing the objectives of the Treaty, is requesting financial support from the Global Environment Facility (GEF) for the formulation of a project to strengthen the institutional framework for planning and executing activities for the protection and sustainable management of water resources in the Amazon River Basin, including the identification and implementation of actions and programs to protect and rehabilitate the River waters and associated ecosystems, the management of development so as to preserve opportunities and alternatives for future generations, and the adaptation of human activities and communities to forecast alterations likely to occur within the Basin and its ecosystems as a consequence of global climate changes. A key element of the project is the creation and implementation of a shared vision for the sustainable development of the region, based on the protection and integrated management of its transboundary water resources and adaptation to forecast climatic changes.

PDF Block B financing in the amount of US \$ 700,000 is requested from the GEF to prepare this project, with the preparation activities to be executed over a period of 23 months. As noted above, the proposed project produces local, regional, and global benefits, all associated with the central role of the Amazon River Basin. The grant resources will be used mainly to define the project components in greater detail, develop and promote a Vision for the Basin, and conduct a preliminary diagnostic assessment based upon the active participation and involvement of affected communities and stakeholders. Table 1 shows the five activities to be conducted during project preparation process. Completion of these project development activities within 23 months, as shown in Table 2, will allow the eight Basin countries, within the framework of the OTCA as local executing agency, to define the parameters, establish Terms of Reference, and determine the components and activities to be included in a full-sized GEF project. The preparation of the project also will involve the institutions in each country responsible for defining the policies required for the sustainable and integrated management of water resources, including substantive participation from the appropriate national environmental institutions, NGOs and stakeholders, should water resources responsibilities be spread across several agencies. Table 3 shows an indicative budget, assuming contributions from the GEF, the countries, and participating agencies and organizations.

The outcome of the five activities set forth below will be the preparation of a project document (Project Brief) for the full-sized project. This document will not only guide the application for GEF funds, but also stimulate parallel actions by the Basin countries and other stakeholders to strengthen the Basin Vision and the program of integrated management of its resources, including adaptation to the changing ecological and hydrological conditions being experienced as a result of global climate change.

Component 1. Vision for the Basin and Transboundary Diagnostic Analysis process.

This component will generate consensus agreements on the objectives of the Basin countries for the Amazon River Basin. This consensus will inform the manner in which the Basin countries collaborate in their efforts to sustainably and strategically develop the Basin's resources in the face of ongoing

economic, climatic, and ecological changes being experienced in the Basin. In short, this Activity will define the shared strategic objective(s) of the Basin countries for the land and water resources of the Amazon River Basin. Based upon an analysis of the current and forecast future situation, and the main problems identified, a Vision for the Amazon River Basin will be defined and agreed, and, in part, assist in the identification of those issues of transboundary interest to be considered within the mega basin-wide TDA. It will be the task of the OTCA—with the support of the relevant technical institutions in each of the countries, and with input from the specialised consultancies, community workshops, and stakeholder participation opportunities—to prepare the framework for the mega basin-wide TDA in a manner consistent with the agreed Vision. Initially, this component will identify major problems at Sub-Basin level.

This Component has 5 complementary and interactive activities:

- 1.1 Compilation and analysis of existing information for the conduct of the basin Vision and for a framework of the macro Transboundary Diagnostic Analysis (TDA) for the whole basin, including an assessment of the vulnerability of communities and ecosystems to climatic fluctuations. This analysis will inform the formulation of the Mega basin-wide TDA in the next phase;
- 1.2 Conduct of national public participation and consultation workshops, regional and international seminars within the framework of the TCA;
- 1.3 Conduct of political and technical meetings within the framework of the TCA;
- 1.4 Definition of the scope and Terms of Reference for project activities, including agreement of an appropriate Monitoring and Evaluation Plan with achievable indicators and milestones;
- 1.5 Publication and Dissemination of the results.

The cost of this component is US \$ 520,000. GEF: US \$225,000, and co-financing from the countries and the OTCA in the amount of US \$295,000.

Component 2. Institutional Strengthening and Capacity Building for Integrated Water Resource Management.

This Activity will address the institutional issues that currently characterise the fragmented management of the water and natural resources of the Amazon River Basin. The creation of the OTCA, during 1998, was a major step toward creating a more efficient management mechanism for the Amazon River Basin. The conduct by the OTCA of the activities required to prepare this proposed project, in concert and coordination with their country counterparts, is a continuation of this process of institutional harmonization and development, and further advances are proposed to be achieved throughout the process of preparing the Project.

This component has 4 complementary and interactive activities:

- 2.1 Compilation of the institutional analyses and proposals already prepared for the institutions of Amazon River Basin, including identification of existing information centres and systems, and development of proposals for strengthening existing water resource information systems and user networks in the Amazon River Basin countries;
- 2.2 Analysis of the institutional strengthening needs of the institutions responsible for water resources management within the Basin, and preparation of proposals for cooperation activities, traineeships, institutional liaisons between and among agencies and civil society, and inter-ministerial coordination;
- 2.3 Development of a conceptual basis and Terms of Reference for the design and implementation of a shared Decision Support System (DSS);

2.4 Definition of activities for the technical-institutional strengthening of the OTCA for the purposes of planning and coordinating integrated water resources management in the Basin, especially in view of forecast climatic and ecologic changes likely to occur within the Basin.

The cost of this component is US \$365,000. GEF: US \$185,000; co-financing from the countries and the OTCA in the amount of US \$180,000.

Component 3. Forecasting the hydrological impacts of climatic variation and adaptation to change.

This Component will elaborate the scope and Terms of Reference necessary to develop capacity within the Amazon River Basin to predict with more certainty, and ultimately respond to, the impacts and consequences of climatic variability (short and medium term) and change (long term) on the land and water resources, and on the people and ecosystems within the Basin that are vulnerable to such variability and change. The Activity will initiate a process that is intended to establish close ties with the Centre for the Prediction of Climate Change and Hydrologic Variability proposed to be created during Phase II of the GEF la Plata River Basin project.

This Component has 4 complementary and interactive activities:

- 3.1 Definition of the conceptual basis and Terms of Reference for the design and operation of the hydroclimatological forecasting system, as the technical basis for assessing and characterising droughts, floods and other impacts likely to arise due to climatic variability and change;
- 3.2 Conduct of an international, multidisciplinary workshop to define the technical basis for the forecasting system to be developed;
- 3.3 Preparation of technical proposals and Terms of Reference for the strengthening of academic and meteorological institutions in the region, including creation of appropriate linkages and twinning agreements both within and outside of the Amazon River Basin;
- 3.4 Provision of technical support for the OTCA in identifying and (ultimately) implementing projects to facilitate the exchange of scientific information, knowledge, and experiences among the institutions working in this area in the Amazon region.

The cost of this component is US \$170,000. GEF: US \$90,000, and co-financing from the countries and the OTCA in the amount of US \$80,000.

Component 4. Integrated and sustainable management of water use.

During the preparation of the project, specific activities will be considered to address priority topics and areas of concern. To this end, pilot demonstration projects will be identified and included to investigate the feasibility and cost of actions to resolve those issues on which it is possible to act with immediacy during the period of preparation of the FSAP. No more than five such projects are currently envisaged; each being essential to resolve and identify the feasibility and costs associated with specific interventions required for the sustainable management of the Basin's water resources, focusing primarily on responses of the ecosystem and human communities to climatic variation as manifested by droughts, floods, and forest fires within the Basin. This component will identify priority geographic areas and environmental and economic issues of concern in order to develop activities proposed to be implemented during the FSAP preparation process.

This Component has 5 complementary and interactive activities:

- 4.1 Compilation and analysis of existing information on the value of the hydrological cycle, particularly with respect to its associated flood and drought cycles, in the provision of goods and services for society and for nature, including the changing role of headwater glaciers in delivering water to the Amazon River Basin;
- 4.2 Investigation of the legal aspects of agreed priority issues, and identification of similarities and opportunities for standardization and joint action among and by the eight Basin countries, their institutions and communities;
- 4.3 Completion of new or refined land-use and environmental zoning maps focusing on critical communities and ecosystems (“hot spots”);
- 4.4 Collection, compilation, and dissemination of information from within the region—using the IWRN in a manner consistent with the principles of IW-LEARN—to heighten community awareness, particularly with respect to critical areas (“hotspots”);
- 4.5 Preparation of proposals for joint action by national agencies and civil society institutions to reverse and prevent deterioration, through the participation of local populations and indigenous groups (in coordination with the formulation of the macro TDA and Framework SAP).

The Terms of Reference for these projects will be developed in necessary detail during the project preparation phase to allow implementation of the proposed activities, including estimated costs, indicated results, and indicators of success (to be determined by appropriate monitoring and evaluation procedures).

The cost of this component is US \$160,000. GEF: US \$80,000, and co-financing from the countries and the OTCA in the amount of US \$80,000.

Component 5. Public participation for the sustainable management of water resources in view of changing climatic conditions in the Amazon River Basin.

The development of the Vision and the TDA will be sustained and supported by a process of stakeholder participation and involvement at the Basin level, and integration of the scientific knowledge of the region with both the demands of the users and the judicial and institutional instruments currently developed by the governments of the Basin countries. This Activity will facilitate the conduct of national workshops in each of the Basin countries, on defined themes, with the participation of competent institutions with an interest in these selected topics, including academic institutions and organisations from civil society. Specific attention will be given to gender and generational issues, focusing on women and youth, and issues affecting indigenous communities.

This Component has 4 complementary and interactive activities:

- 5.1 Preparation of Terms of Reference for the execution of environmental information and education programs (public awareness, training, and formal and informal education programs) to heighten awareness and improve understanding of water quality and land-based pollution, in view of forecast climatic changes affecting the hydrology and ecology of the Basin, in the most vulnerable communities;
- 5.2 Preparation of the Public Participation Program and Public Involvement Plan, consistent with the principles of the ISP, to be implemented during project execution, including identification and inclusion of specific local communities and indigenous groups;
- 5.3 Development of technical proposals for the acquisition and dissemination of technical and scientific information on land and water resources, among resource professionals, at all levels of government, in the private sector, and to the general public;
- 5.4 Identification and selection of pilot demonstration projects to be conducted during the first phase of the project, and preparation of the Terms of Reference for this purpose, utilizing the Basin Vision, the preliminary of the TDA process, and the program of consultations with local communities conducted during the project preparation phase;

5.5 Preparation of a Monitoring and Evaluation Plan, consistent with GEF principles, to guide execution of the project and enable adaptive management of the project.

The cost of this component is US \$135,000. GEF: US \$70,000, and co-financing from the countries and the OTCA in the amount of US \$65,000.

Table 1. Activities to be conducted during the project preparation phase, by Component.

Activity	Elements
<p>1. Vision for the Basin and Mega Transboundary Diagnostic Analysis <i>(Definition of strategic objectives; identification of principal transboundary problems, possible courses of action, and monitoring and evaluation indicators at the subbasin level)</i></p>	<p>1.1 Compilation and analysis of existing information for the conduct of the basin Vision and for a framework of the macro Transboundary Diagnostic Analysis (TDA) for the whole basin, including an assessment of the vulnerability of communities and ecosystems to climatic fluctuations. This analysis will inform the formulation of the Mega basin-wide TDA in the next phase;</p> <p>1.2 Conduct of national public participation and consultation workshops, regional and international seminars within the framework of the TCA;</p> <p>1.3 Conduct of political and technical meetings within the framework of the TCA;</p> <p>1.4 Definition of the scope and Terms of Reference for project activities, including agreement of an appropriate Monitoring and Evaluation Plan with achievable indicators and milestones;</p> <p>1.5 Publication and Dissemination of the results.</p>
<p>2. Institutional Strengthening and Capacity Building for Integrated Water Resource Management</p>	<p>2.1 Compilation of the institutional analyses and proposals already prepared for the institutions of Amazon River Basin, including identification of existing information centres and systems, and development of proposals for strengthening existing water resource information systems and user networks in the Amazon River Basin countries;</p> <p>2.2 Analysis of the institutional strengthening needs of the institutions responsible for water resources management within the Basin, and preparation of proposals for cooperation activities, traineeships, institutional liaisons between and among agencies and civil society, and inter-ministerial coordination;</p> <p>2.3 Development of a conceptual basis and Terms of Reference for the design and implementation of a shared Decision Support System (DSS);</p> <p>2.4 Definition of activities for the technical-institutional strengthening of the OTCA for the purposes of planning and coordinating integrated water resources management in the Basin, especially in view of forecast climatic and ecologic changes likely to occur within the Basin.</p>
<p>3. Forecasting the hydrological impacts of climatic variation and adaptation to change</p>	<p>3.1 Definition of the conceptual basis and Terms of Reference for the design and operation of the hydroclimatological forecasting system, as the technical basis for assessing and characterising droughts, floods and other impacts likely to arise due to climatic variability and change;</p> <p>3.2 Conduct of an international, multidisciplinary workshop to define the technical basis for the forecasting system to be developed;</p> <p>3.3 Preparation of technical proposals and Terms of Reference for the strengthening of academic and meteorological institutions in the region, including creation of appropriate linkages and twinning agreements both within and outside of the Amazon River Basin;</p> <p>3.4 Provision of technical support for the OTCA in identifying and (ultimately) implementing projects to facilitate the exchange of scientific information, knowledge, and experiences among the institutions working in this area in the Amazon region.</p>
<p>4. Integrated and sustainable management of water use</p>	<p>4.1 Compilation and analysis of existing information on the value of the hydrological cycle, particularly with respect to its associated flood and drought cycles, in the provision of goods and services for society and for nature, including the changing role of headwater glaciers in delivering water to the Amazon River Basin;</p> <p>4.2 Investigation of the legal aspects of agreed priority issues, and</p>

Activity	Elements
	<p>identification of similarities and opportunities for standardization and joint action among and by the eight Basin countries, their institutions and communities;</p> <p>4.3 Completion of new or refined land-use and environmental zoning maps focussing on critical communities and ecosystems (“hot spots”);</p> <p>4.4 Collection, compilation, and dissemination of information from within the region—using the IWRN in a manner consistent with the principles of IW-LEARN—to heighten community awareness, particularly with respect to critical areas (“hotspots”);</p> <p>4.5 Preparation of proposals for joint action by national agencies and civil society institutions to reverse and prevent deterioration, through the participation of local populations and indigenous groups (in coordination with the formulation of the macro TDA and Framework SAP)</p>
<p>5. Public participation for the sustainable management of water resources</p>	<p>5.1 Preparation of Terms of Reference for the execution of environmental information and education programs (public awareness, training, and formal and informal education programs) to heighten awareness and improve understanding of water quality and land-based pollution, in view of forecast climatic changes affecting the hydrology and ecology of the Basin, in the most vulnerable communities;</p> <p>5.2 Preparation of the Public Participation Program and Public Involvement Plan, consistent with the principles of the ISP (Principles for Public Involvement), to be implemented during project execution, including identification and inclusion of specific local communities and indigenous groups;</p> <p>5.3 Development of technical proposals for the acquisition and dissemination of technical and scientific information on land and water resources, among resource professionals, at all levels of government, in the private sector, and to the general public;</p> <p>5.4 Identification and selection of pilot demonstration projects to be conducted during the first phase of the project, and preparation of the Terms of Reference for this purpose, utilizing the Basin Vision, the preliminary of the TDA process, and the program of consultations with local communities conducted during the project preparation phase;</p> <p>5.5 Preparation of a Monitoring and Evaluation Plan, consistent with GEF principles, to guide execution of the project and enable adaptive management of the project.</p>

OUTPUTS OF THE PDF BLOCK B

The most important output of the PDF-B process will be the preparation of the project brief, and a defined Vision for the sustainable development of the Basin, with an agreed scope and Terms of Reference for the development of a program of strategic action between the countries and among civil society including the framework for the mega basin wide TDA based on sub-basin ones. Specifically, outputs of the execution of the PDF Block B program will include:

- i) Strengthening of the capacity of the OTCA to formulate programs and projects, co-ordinate and execute activities between countries, and catalyse co-operation and financing within the Amazon River Basin;
- ii) Preparation of the Terms of Reference for the preparation of the Framework SAP for the Basin; conduct of intra-Basin traineeships, cooperation activities, and institutional arrangements; design and implementation of the DSS; strengthening and integration of the

information systems within the Basin; design and operation of a shared hydrometeorological/hydroclimatological monitoring and warning system; preparation of strategies for integrated management and action plans for aquatic biodiversity and ecosystem protection to address “hot spots” within the shared Basin; conduct of a vulnerability analysis to determine the impacts and potential response of ecosystems and communities likely to be affected by climatic change within the Basin; development of common analytical protocols for water quality monitoring and management; design and execution of environmental education, public involvement and stakeholder participation and technical exchange programs; and, identification and selection of pilot demonstration projects;

- iii) A public participation plan and stakeholder involvement program;
- iv) An agreed Monitoring and Evaluation plan;
- v) Definition of the technical and instrumental basis, with appropriate Terms of Reference, for implementing a Decision Support System in the Amazon River Basin;
- vi) Identification of a group of concrete demonstration projects to quantify critical topics and areas, capable of being executed during the period of the formulation of the Framework SAP, that will provide information and experience in the integrated management of the water resources of the Basin, their costs, feasibilities, and ability to adapt in response to the changing climatic, hydrologic, and ecological conditions, to be incorporated into the Framework SAP;
- vii) Publication of a group of technical documents containing:
 - a Vision for the sustainable development of the Basin agreed among the eight countries as it relates to shared water resources in the Basin,
 - a framework for the Transboundary Diagnostic Analysis (TDA) aimed at identifying the root causes of, and priorities for action to address, the main environmental problems in the Basin including major sub-basins TDAs;
 - a preliminary characterisation of the primary and secondary data sources from which to determine and quantify the principal transboundary problems facing the Basin that will form the basis of the TDA;
 - a proposal and operating protocol for the strengthening and operation of a shared data collection and dissemination network and hydrometeorological/hydroclimatological forecasting network;
 - the development of an institutional analysis, highlighting potential areas for cooperation in the area of management of transboundary water resources, and a proposal for a DSS to support decision-making at all levels of society within the Basin at a sub basin level;
 - the development of a program of public participation and stakeholder involvement at the sub basin level consistent with the ISP;
 - an analysis of the current legal and jurisdictional framework for the management of shared transboundary water resources in the Basin and proposals for harmonizing the existing systems to enhance sustainable use of the common resources;
 - the definition of indicators of success included within an agreed Monitoring and Evaluation Plan;
 - an identification and evaluation of communities and ecosystems vulnerable to climatic variation and change within the Basin, including relevant forecasts and scenarios underlying their assessed vulnerabilities; and

- a cartographic base map of the Basin, linked to up-to-date economic, social, and environmental information consistent with the protocols of IW-LEARN, available to users within the eight Basin countries and elsewhere.

TIMETABLE

The preparation phase of the project will have a duration of 23 months. Activities have been programmed as indicated in Table 2.

Table 2. Preliminary timetable of project preparation activities.

ACTIVITIES	QUARTER							
	1	2	3	4	5	6	7	8
<p>1. Vision for the Basin and Framework Macro Transboundary Diagnostic Analysis (<i>Definition of strategic objectives, identification of principal transboundary problems, possible courses of action, and monitoring and evaluation indicators at the sub-basin level</i>)</p> <p>1.1 Compilation and analysis of existing information for the conduct of the basin Vision and for a framework of the macro Transboundary Diagnostic Analysis (TDA) for the whole basin, including an assessment of the vulnerability of communities and ecosystems to climatic fluctuations. This analysis will inform the formulation of the Mega basin-wide TDA in the next phase;</p> <p>1.2 Conduct of national public participation and consultation workshops, regional and international seminars within the framework of the TCA;</p> <p>1.3 Conduct of political and technical meetings within the framework of the TCA;</p> <p>1.4 Definition of the scope and Terms of Reference for project activities, including agreement of an appropriate Monitoring and Evaluation Plan with achievable indicators and milestones;</p> <p>1.5 Publication and Dissemination of the results.</p>								
<p>2. Institutional strengthening and capacity building for water resource management</p> <p>2.1 Compilation of the institutional analyses and proposals already prepared for the institutions of Amazon River Basin, including identification of existing information centres and systems, and development of proposals for strengthening existing water resource information systems and user networks in the Amazon River Basin countries;</p> <p>2.2 Analysis of the institutional strengthening needs of the institutions responsible for water resources management within the Basin, and preparation of proposals for cooperation activities, traineeships, institutional liaisons between and among agencies and civil society, and inter-ministerial coordination;</p> <p>2.3 Development of a conceptual basis and Terms of Reference for the design and implementation of a shared Decision Support System (DSS);</p> <p>2.4 Definition of activities for the technical-institutional strengthening of the OTCA for the purposes of planning and coordinating integrated water resources management in the Basin, especially in view of forecast climatic and ecologic changes likely to occur within the Basin.</p>								

ACTIVITIES	QUARTER							
	1	2	3	4	5	6	7	8
<p>3. Forecasting the hydrological impact of climatic variation and adaptation to change</p> <p>3.1 Definition of the conceptual basis and Terms of Reference for the design and operation of the hydroclimatological forecasting system, as the technical basis for assessing and characterising droughts, floods and other impacts likely to arise due to climatic variability and change;</p> <p>3.2 Conduct of an international, multidisciplinary workshop to define the technical basis for the forecasting system to be developed;</p> <p>3.3 Preparation of technical proposals and Terms of Reference for the strengthening of academic and meteorological institutions in the region, including creation of appropriate linkages and twinning agreements both within and outside of the Amazon River Basin;</p> <p>3.4 Provision of technical support for the OTCA in identifying and (ultimately) implementing projects to facilitate the exchange of scientific information, knowledge, and experiences among the institutions working in this area in the Amazon region.</p>								
<p>4. Integrated and sustainable management of water use</p> <p>4.1 Compilation and analysis of existing information on the value of the hydrological cycle, particularly with respect to its associated flood and drought cycles, in the provision of goods and services for society and for nature, including the changing role of headwater glaciers in delivering water to the Amazon River Basin;</p> <p>4.2 Investigation of the legal aspects of agreed priority issues, and identification of similarities and opportunities for standardization and joint action among and by the eight Basin countries, their institutions and communities;</p> <p>4.3 Completion of new or refined land-use and environmental zoning maps focussing on critical communities and ecosystems (“hot spots”);</p> <p>4.4 Collection, compilation, and dissemination of information from within the region—using the IWRN in a manner consistent with the principles of IW-LEARN—to heighten community awareness, particularly with respect to critical areas (“hotspots”);</p> <p>4.5 Preparation of proposals for joint action by national agencies and civil society institutions to reverse and prevent deterioration, through the participation of local populations and indigenous groups (in coordination with the formulation of the macro TDA and Framework SAP).</p>								

ACTIVITIES	QUARTER							
	1	2	3	4	5	6	7	8
5. Public participation for the sustainable management of water resources								
5.1 Preparation of Terms of Reference for the execution of environmental information and education programs (public awareness, training, and formal and informal education programs) to heighten awareness and improve understanding of water quality and land-based pollution, in view of forecast climatic changes affecting the hydrology and ecology of the Basin, in the most vulnerable communities;					■	■		
5.2 Preparation of the Public Participation Program and Public Involvement Plan, consistent with the principles of the ISP, to be implemented during project execution, including identification and inclusion of specific local communities and indigenous groups;		■	■	■		■		
5.3 Development of technical proposals for the acquisition and dissemination of technical and scientific information on land and water resources, among resource professionals, at all levels of government, in the private sector, and to the general public;				■	■	■		
5.4 Identification and selection of pilot demonstration projects to be conducted during the first phase of the project, and preparation of the Terms of Reference for this purpose, utilizing the Basin Vision, the preliminary of the TDA process, and the program of consultations with local communities conducted during the project preparation phase;					■	■		
5.5 Preparation of a Monitoring and Evaluation Plan, consistent with GEF principles, to guide execution of the project and enable adaptive management of the project.	■						■	■

BUDGET - ITEMS TO BE FINANCED

The total estimated cost for the project preparation phase is US \$ 1.45 million: US \$ 700,000 to be requested from the GEF in the form of a Block B grant; US \$ 600,000 in-kind, including personnel, office space, and equipment for the activities to be provided by the participating countries as co-financing; and US \$ 150,000 to be provided by the participating agencies. Table 2 shows the estimated costs and financing sources envisaged for each of the activities shown in Table 1.

UNEP will contribute the costs associated with the participation of its specialized technical personnel of its GEF Division associated with project supervision, evaluation and participation in meetings of the Project Steering Committee.

The GS/OAS, through the Office of Sustainable Development and the Environment, will contribute the costs associated with the contributions of specialized and administrative technical personnel at the headquarters of the GS/OAS and, in the countries, of administrative personnel in its National Offices.

Table 2. Indicative budget for the preparation of a program for the integrated and sustainable management of the transboundary water resources of the Amazon River Basin.

Activity	Amount (US \$ x 1,000)			
	GEF	Countries ^a	Agencies ^b	Total
1. Vision for the Basin and Transboundary Diagnostic Analysis process (<i>Definition of strategic objectives, identification of principal transboundary problems, possible courses of action, and monitoring and evaluation indicators at the sub-basin level</i>)	225	195	100	520
2. Institutional strengthening and capacity building for integrated water resources management in the Basin	185	180	0	365
3. Forecasting the hydrological impacts of climatic variation and adaptation to change	90	80	0	170
4. Integrated and sustainable management of water use	80	80	0	160
5. Public participation for the sustainable management of water resources	70	65	0	135
Contingencies	50	0	50	100
TOTAL	700	600	150	1,450

^a Country financing is expected to reflect the relative contributions of each country to the OTCA; to which Brazil will contribute 35% of the project co-financing, Colombia 16%, Peru 16%, Venezuela 16%, Bolivia 6.5%, Ecuador 6.5%, Guyana 2%, and Suriname 2%.

^b UNEP and GS/OAS anticipate allocating funds to support the participation of their staff in the project to the value of US \$150,000.

ELIGIBILITY

The countries of the Amazon River Basin are eligible for financing by the GEF pursuant to paragraph 9b of the Instrument for the Establishment of the Restructured Global Environment Facility (2004).

PARTICIPATION AND SUSTAINABILITY

National Level Support

The OTCA has developed its Plan of Action, the Program for Sustainable Water Resource Management in the Amazon, for the period from 2003 through 2005, in accordance with the guidelines established by the Meetings of Presidents and of the Foreign Affairs Ministers of the Amazon Countries, the Organization's highest policy and decision-making bodies. The Second Meeting of the Presidents of the Amazon Countries, held in Manaus, Brazil, during February 1992, with due consideration of issues identified in connection with the United Nations Conference on Environment and Development, agreed on the following position with respect to the issue of water resources management:

1. Environmentally appropriate water resource management is essential for the preservation of ecosystems, the protection of health, and the promotion of well-being.
2. The close correlation between integrated water resource management and the protection of marine and land ecosystems, biological diversity, and rational soil use should be recognized. Sustainable water resource development programs at the local, national, regional, and global levels, and the necessary means to implement them, must, therefore, be identified.
3. Particularly significant, in this connection, are measures adopted at the national and regional levels for land use planning, conservation, and integrated watershed management. Such measures are essential to ensure that water resources are used appropriately for productive activities such as irrigation, fishing, energy production, and transportation, and to control pollutants through environmental prevention and control measures in respect of irrigation and the protection of human health.
4. The quality of life in a community correlates closely with the availability of treated fresh water in amounts and of a quality commensurate with the community's needs, requiring that precise water supply targets be established and achieved within a predetermined period of time, over the next decade.
5. Institutional development, training, public information and awareness, education, and the availability of financial resources are prerequisites for integrated water resource management. National efforts to integrate management of the region's watersheds should be recognized and supported through cooperation by the international community.

In accordance with Article V of the Treaty, the Foreign Affairs Ministers, meeting for the first time in October 1980, in Belem, Brazil, recommended to the authorities of this regional cooperation mechanism that studies be conducted on the Amazon's water resources. Following that decision, subsequent ministerial meetings emphasized the importance of joint action in the area of water resources and land management, to ensure environmentally appropriate use and adherence to criteria for conservation, use, and rational management.

As indicated earlier in this document, the Foreign Affairs Ministers, meeting in Santa Cruz de la Sierra, Bolivia, during November 2002, decided to move ahead with this initiative. The Amazon Cooperation

Council (CCA) welcomed the proposed project, and agreed to hold a first working meeting of the member countries of the Organization of the Amazon Cooperation Treaty to discuss the preliminary Concept Document. Accordingly, in Brasilia, Brazil, on July 25, 2003, the Permanent Secretariat of the Organization of the Amazon Cooperation Treaty (PS-OTCA) organized the First Working Meeting of institutions responsible for water resource management in the OTCA member countries.

The execution of this program will address, in a crosscutting manner, the strategic priorities of Amazon basin countries with respect to production and the sustainable use of biodiversity; knowledge creation and technology transfer; regional integration; job and income generation; political structures; and capacity building and institutional strengthening, as fundamental steps toward sustainable development in the region, all of which are subject to the potential future and actual current impacts of climatic changes and variability.

Institutional Arrangements

The OTCA is the agency designated by the eight signatory countries of the Amazon Cooperation Treaty as the local executing agency for this project. The OTCA will receive technical and administrative support in developing and implementing the project from (1) the General Secretariat of the Organization of American States, through the Office of Sustainable Development and Environment, and the GS/OAS National Offices in the participating countries, and from (2) the United Nations Environment Program (UNEP), as GEF executing and implementing agencies respectively for this project.

The OTCA will coordinate the activities to be undertaken by the countries in terms of this proposal. Project execution will be coordinated in each country by the National Permanent Committees of the TCA, multi-sectoral entities established by the countries for the implementation and application of the Treaty. (Annex 3 presents the institutions that make up each of the National Permanent Committees participating in this project). These Committees will act as **inter-ministerial** and **inter-sectoral** committees for the purposes of the project, serving as focal points for not only governmental but also societal participation and involvement in the project. The National Permanent Committees of the TCA embody the country-level commitment to the project, under the coordination of the Secretary General of the OTCA, who will act as Project Director during the preparation phase. In this capacity, the Secretary General will coordinate the technical work of the project and will supervise preparation of the project brief.

The GS/OAS, as the regional executing agency, and in consultation with the OTCA and UNEP, will hire the Project Technical Coordinator, who will be the specialist responsible for programming, coordinating, and supervising the technical work of the project, in close coordination and cooperation with the OTCA, UNEP and GS/OAS. The Technical Coordinator will work at the OTCA headquarters in Brasilia and will travel from time to time to the Amazon River Basin countries as necessary in support of the project activities.

The institutions responsible for water resource management in each country—the designated national focal points for the Inter-American Water Resources Network (IWRN)—will act as the National Executing Agencies for the project. These institutions will have responsibilities for monitoring and executing the technical activities of the project within their respective jurisdictions, in coordination with and supported by the Permanent National Committees, as described above. The National Executing Agencies have been tentatively identified as follows:

- Bolivia: National Hydrology and Meteorology Service
- Brazil: National Water Agency (ANA)/Ministry of Environment
- Colombia: Institute of Hydrology, Meteorology, and Environmental Studies
- Ecuador: National Water Resources Board
- Guyana: Guyana Water Authority/Hydraulic Research Division
- Peru: National Institute of Natural Resources (INRENA)
- Suriname: Ministry of Public Works
- Venezuela: Directorate of Hydrographic Basins/Ministry of Environment.

During the project preparation phase, the National Executing Agencies will be responsible for coordinating and conducting, within each country, the seminars, workshops, hearings, and other activities to ensure the participation and involvement of academic institutions, civil society, indigenous groups, stakeholder organizations, and governmental institutions at all levels engaged in activities relevant to the project. These Agencies also will endeavor to incorporate the results of these consultations into their technical proposals to be implemented during the project. It is envisioned that the National Executing Agencies will facilitate day-to-day inter-ministerial discussion, coordination, and participation in project activities, and ensure the active involvement of sister units of government having interests and mandates in the area of land and water resource management, and climate change response, in the Amazon River Basin.

The OTCA, on behalf of the riparian countries and their respective National Executing Agencies, GS/OAS, and UNEP, will form part of a Steering Group, which will meet on average twice per year or when ever deemed necessary to review and discuss progress, achievements, and difficulties encountered in project execution. The Steering Group will also review the scientific and technical aspects of the project for the Amazon River Basin as a whole. Representatives of the other GEF implementing agencies (UNDP and the World Bank) and of regional and international financing agencies (CAF, IDB, etc.) could be invited to attend and participate in meetings of the Steering Group in an *ex officio* capacity and when deemed appropriate.

A Technical Committee will also be set up to establish general guidelines for the work and supervise overall implementation of the project. This Technical Committee will be structured along the same lines as the Amazon Cooperation Council (CCA), and act through the CCA Coordination Committee, as the Treaty authority responsible for ensuring that activities undertaken in the Basin are consistent with the aims of the Treaty. The CCA Coordination Committee is tasked by the CCA with taking decisions concerning the bilateral or multilateral execution of projects and studies. For the purposes of the project, representatives of GS/OAS and UNEP, as well as other agencies and entities cooperating in the project, will be invited to attend meetings of the Technical Committee which will be arranged possibly back to back with Steering Group meetings for ease of attendance. The composition of this Technical Committee will be further defined and agreed to at the inaugural Steering Group meeting.

A comprehensive organigram picturing the institutional arrangement for the project will be presented and agreed to at the inaugural Steering Group meeting.

Public Participation and Involvement

The present PDF-B proposal is based upon the results of various seminars, workshops and meetings conducted within the framework of the Amazon Cooperation Treaty. The basic elements of the project were discussed during the meeting of the IWRN focal points from the Amazon River Basin countries, convened at the margins of the DELTAMERICA MSP (UNEP-GS/OAS) meeting, with the participation of the National Hydrology and Meteorology Service of Bolivia; the National Water Agency (ANA), the Secretariat for Water Resources (SRH), and the Ministry of Environment of Brazil; the Institute of Hydrology, Meteorology, and Environmental Studies of Colombia; the National Water Resources Board of Ecuador; the National Institute of Natural Resources (INRENA) of Peru; and the Department of Hydrographic Basins of the Ministry of Environment of Venezuela.

During the project preparation phase, activities will be designed to ensure greater and more effective participation and involvement by civil society, particularly by stakeholders and indigenous groups, at the level of the principal sub-basins. For each sub-basin, a program of meetings and consultations with civil society will be conducted, involving local authorities, universities, academic and research groups, governmental institutions, NGOs, industry, etc. A series of pilot demonstration projects also will be conducted in each sub-basin to address the issues and areas most representative of the transboundary problems affecting the specific area. In this way, the direct participation and involvement of affected communities in the selection and characterization of priority problems, and in the development of the

technical proposals to solve them, will be facilitated. A Public Participation Program and Public Involvement Plan will be developed during the project preparation phase for implementation during subsequent phases of the project.

Sustainability

Sustainability of the project is related to the strengthening of the OTCA and participating national institutions (particularly those concerned with water resource management), the direct involvement and participation of affected communities, the involvement of financing agencies during the initial stages of project execution, and the incorporation of project results in the environmental agendas of each country and each of the economic sectors involved. The participation of the Permanent National Committees of the TCA, as inter-ministerial committees, and the National Executing Agencies, will enhance the sustainability of the project and contribute to the replication of sustainable practices within the Amazon River Basin. The participation and involvement of these agencies, as well as agencies of local government, stakeholder organizations, and other interested groups from within civil society, will ensure that adequate institutional, human, and financial resources are available to implement agreed strategic actions in the Basin.

MONITORING AND EVALUATION INDICATORS

UNEP, as the GEF Implementing Agency and in co-operation with the GS/OAS as Executing Agency, will ensure that the project conforms to GEF requirements relative to reporting and financial management. In addition, UNEP, the GS/OAS, and the OTCA, through the Steering Committee structure, will ensure that the project addresses the GEF-IW monitoring and evaluation indicators. Utilising these 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, as set forth above. 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. Implementing Agency supervision will be exercised through the Executing Agency and by participation in the regular 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 will be undertaken jointly by the governments of the Basin countries and UNEP-GS/OAS within one year after the end of the project.

The principal performance indicator against which the Project will be measured is the existence of an overall framework (Strategic Action Program), including technical, scientific, institutional and legal aspects, for the sustainable management and protection of the Amazon River Basin in the Basin countries. Key performance indicators with regard to this overall framework will include process indicators, stress reduction indicators, and environmental status indicators:

Process Indicators

- the existence of a strengthened multi-country agreement on the institutional and technical framework for the management of the Amazon River Basin based upon the OTCA with effective stakeholder involvement;
- the existence of a completed and endorsed Vision and framework mega basin-wide Transboundary Diagnostic Analysis setting forth:
 - priority areas for intergovernmental co-operation;
 - root causes of specific transboundary concerns.

- the existence of a Framework Strategic Action Program for the sustainable management of the Amazon River Basin, including programs for:
 - the operation and maintenance of the data and monitoring system;
 - the implementation of the legal-institutional framework once such a framework is approved and adopted by the countries;
 - investments in pollution prevention and mitigation measures, and conflict resolution.

Stress Reduction Indicators

- the existence of an up-to-date, functioning database shared among the Basin countries;
- agreed, identified, and quantified water quality threats and shared systems for assessing such threats;
- identified and documented pollution mitigation and management measures implemented and monitored in specific “hot spots”.

Environmental Status Indicators

- an operational communications campaign, with a defined percentage of the target population reached;
- increased stakeholder awareness throughout the Amazon River Basin.

SECTION 3 - WORKPLAN AND TIMETABLE, BUDGET, FOLLOW-UP

3.1 Workplan and Timetable:

For the overall workplan and timetable, refer to section 2 and timetable subsection above. At the inaugural steering group the project technical Unit will submit for approval an overall detailed work programme for the duration of the PDF – B. Semestrial and annual plans of operation will be further prepared and submitted to the steering group for approval.

3.2 Budget:

A detailed budget in UNEP format is presented in Annex 6. This budget is based upon the GEF approved budget provided in GEF format in the GEF Medium sized project brief.

3.3 Follow-up:

The project brief formulated under the present PDF –B will be submitted to the GEF council for approval. Upon approval, the planning phase (TDA-SAP) should then start thereby allowing the riparian countries to advance further in the strengthening of environmentally friendly management and development of the Amazon River Basin.

SECTION 4 - INSTITUTIONAL FRAMEWORK AND EVALUATION

4.1 Institutional Framework

GS/OAS will be responsible for the implementation of the project in accordance with the objectives and activities outlined in Section 2 of this document. UNEP as the GEF Implementing Agency 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. The UNEP DGEF Co-ordination will monitor implementation of the activities undertaken during the execution of the project and will be responsible for clearance and transmission of financial and progress reports to the Global Environment Facility. UNEP retains responsibility for review and approval of the substantive and technical reports produced in accordance with the schedule of work.

All correspondence regarding **substantive and technical matters** should be addressed to:

At GS/OAS:

Mr. S. Vaughan

Director - Office of Sustainable Development and Environment

1889 F Street, NW, Room 340

Washington, D.C. 20006 United States of America

Tel: + 1-202-458-3779

FAX: + 1-202-458-3560

Email: svaughan@aos.org

With copy to:

Mr. J. Rucks

Chief, Division II

Office of Sustainable Development and Environment & Organization of American States

Buenos Aires Office

Tel: +54-11-4803-7606/8

Email: oea@oea.com.ar

And a copy to:

Mr. E. Bello

Programme Manager – Office for Sustainable Development and Environment
1889 F Street, NW, Room 340
Washington, D.C. 20006 United States of America
Tel: + 1-202-458-3779
FAX: + 1-202-458-3560
Email: ebello@oas.org

And a copy to:

Mr. Nelson da Franca

OAS – International Coordinator
SGAN Quadra 601, Lote. 01, Ed. Codevasf, Sala 213
70.830-010, Brasilia, DF, Brasil
Tel: (61) 322.7895/224.2861
Fax: (61) 224.6902
E-mail: Nelsonf@oeabrasil.com.br, oeabra@terra.com.br

At UNEP

Mr. Ahmed Djoghlaif

Director,
UNEP/DGEF Coordination
P. O. Box 30552
Nairobi - Kenya
Fax: + 254-2-624041
Phone: +254-2-624166
Email: Ahmed.Djoghlaif@unep.org

With a copy to:

Ms. Isabelle Vanderbeck

Task Manager
1889 F Street, N.W.
Washington, D.C. 20006 United States of America
Tel: + 1-202-458-3556
FAX: + 1-202-458-3560
Email: isabelle.vanderbeck@unep.org

All correspondence regarding **administrative and financial matters** should be addressed to:

At UNEP

Mr. David Hastie

Acting Chief, Budget and Financial Management Service (BFMS)
UNON
P.O. Box 30552
Nairobi, Kenya
Tel: (254) 2 623637
Fax: (254) 2 623755

Email: David.Hastie@unep.org

With a copy to:

Immaculate Njeru

Fund Management Officer,
UNEP /DGEF Co-ordination,
P O Box 30552
Nairobi, Kenya
Tel: 254-2-623595
Fax: 254-2-623162
Email: immaculate.njeru@unep.org

At GS/OAS:

Mr. S. Vaughan

Director - Office of Sustainable Development and Environment

With copy to

Ms. Beatriz Santos

Administrative Officer - Office of Sustainable Development and Environment
1889 F Street, N.W. Room 340
Washington, D.C. 20006 - United States of America
Tel: + 1-202-458-3556
FAX: + 1-202-458-3560
Email: svaughan@oas.org
Email: BSantos@oas.org

4.2 Eligibility

The countries are eligible for GEF funding under the rules and requirements specified in the *Instrument for the Restructured Global Environment Facility*. Given that the project has potential for replication of lessons learned at a global level, country and regional ownership will be ensured from the onset of implementation of the PDF-B by fully involving key national and regional developing country agencies and governments in the implementation process. In addition, activities will include the development of an information dissemination and public awareness raising strategy that will help ensure that results from the project are integrated into national and regional planning processes.

SECTION 5: MONITORING AND REPORTING

5.1 Management Reports

5.1.1 Progress Reports

Within 15 days of the end of the reporting period, GS/OAS will submit both paper copies and electronic versions of signed copies of the progress report to UNEP/DGEF Coordination, using the format given in Annex 8A and B combined in one single Quarterly Progress Report as of 30 June 2005, 30 September 2005, 31 December 2005, 31 March 2006, 30 June 2006, 30 September 2006, 31 December 2006, and 31 March 2007.

5.1.2 Terminal Report

Within 60 days of the completion of the project, GS/OAS will submit to UNEP/DGEF Coordination a Terminal Report in both electronic and paper copies detailing the activities taken under the project, lessons learned and any recommendations to improve the efficiency of similar activities in the future, using the format provided in Annex 11.

5.1.3 Substantive Reports

At the appropriate time, GS/OAS will submit to UNEP electronic copies in draft of any substantive project report(s) and, at the same time, inform UNEP of its plans for publication of that text. Within 30 days of receipt, UNEP will give GS/OAS substantive clearance of the manuscript, indicating any suggestions for change and such wording (recognition, disclaimer, etc.) as it would wish to see figure in the preliminary pages or in the introductory texts.

It will consider the publishing proposal of GS/OAS and will make comments thereon as advisable.

It may request GS/OAS to consider joint publishing. Should GS/OAS be solely responsible for publishing arrangements, UNEP will nevertheless receive a minimum of 100 free copies of the published work in each of the agreed languages, for its own purposes and dissemination to Secretariat of the Global Environment Facility.

5.2 Financial Reports

- (i) Details of expenditures will be reported on an activity by activity basis, in line with project budget codes as set out in the project document, as of 30 June 2005, 30 September 2005, 31 December 2005, 31 March 2006, 30 June 2006, 30 September 2006 and 31 December 2006 and 31 March 2007 using the format given in Annex 10. All expenditure accounts will be dispatched to UNEP within 15 days of the end of the three-month period to which they refer, certified by a duly authorized official of GS/OAS. Both soft copies and hard duly signed copies will be sent to UNEP.
- (ii) In addition, the total expenditures incurred during the year ending 31 December, certified by a duly authorized official, should be reported (both in signed electronic and paper copies) in an opinion by a **certified public accounting firm**, and should be dispatched to UNEP no later than 30 August of the following year. In particular, the auditors should be asked to report whether, in their opinion:
 - Proper books of account have been maintained;
 - **Project expenditures are supported by vouchers and adequate documentation;**
 - Expenditures have been incurred in accordance with the objectives outlined in the project document.
- (iii) Within 90 days of the completion of the project, GS/OAS will supply UNEP with both electronic and paper copies of a final statement of account in the format as for the quarterly expenditure statements duly signed by authorized officials of GS/OAS and certified by a **certified firm of public accountants as part of the annual external audit of accounts of the GS/OAS.**
If requested, GS/OAS shall facilitate an audit of the accounts of the project by the United Nations Board of Auditors and/or the Audit Service
- (iv) Any portion of cash advances remaining unspent or uncommitted by 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, GS/OAS will be financially responsible for any adverse movement in the exchange rates.

- (v) Interests accrued on cash remitted to GS/OAS should be reported as part of cash advance accounts (see format in Annex 9). Once re-programmed, the amount of interests generated will be credited to the project and the GS/OAS will be notified officially of the project budget revision. A proposal for the re-programming of the funds will be prepared by GS/OAS in close consultation with UNEP for endorsement at the next Steering Committee meeting.

5.3 Terms and Conditions

5.3.1 Non-Expendable Equipment

GS/OAS will maintain records of non-expendable equipment (items costing US\$1,500 or more as well as items of attraction such as pocket calculators, cameras, computers, printers, etc.) purchased with UNEP funds (or with Trust Funds or Counter funds administered by UNEP) and will submit, using the format in Annex 12, an inventory of such equipment to UNEP, once a year, (indicating description, serial no., date of purchase, original cost, present condition, location of each item) attached to the progress report submitted on 31 December. Within 60 days of completion of the project, GS/OAS will submit to UNEP a final inventory of all non-expendable equipment purchased under this project indicating description, serial number, original cost, present condition, location and a proposal for the disposal of the said equipment. Non-expendable equipment purchased with funds administered by UNEP remains the property of UNEP until its disposal is authorized by UNEP, in consultation with GS/OAS. GS/OAS shall be responsible for any loss or damage to equipment purchased with UNEP administered funds. The proceeds from the sale of equipment, (duly authorized by UNEP) shall be credited to the accounts of UNEP, or of the appropriate trust fund or counterpart funds. A duly authorized official of GS/OAS should physically verify this final inventory.

5.3.2 Responsibility for Cost Overruns

Any cost overruns (expenditures in excess of the amount in each budget sub-line) shall be met by the organization responsible for authorizing the expenditure, unless written agreement has been received in advance from UNEP. In cases where UNEP has indicated its agreement to a cost overrun in a budget 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.

5.3.3 Cash Advance Requirements

Initial cash advance of US\$ 250,000 will be made upon signature of the project document by both parties and will cover expenditures expected to be incurred by GS/OAS during the first three months of the project implementation. Subsequent advances are to be made biannually, subject to:

- (i) Confirmation by 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:
 - A satisfactory financial report showing expenditures incurred for the past quarter, under each project activity.
 - Timely and satisfactory reports on project implementation

Requests for subsequent cash advances should be made using the standard format provided in Annex 9.

5.3.4 Claims by Third Parties against UNEP

GS/OAS shall be responsible for dealing with any claims which may be brought by third parties against UNEP and its staff, and shall hold UNEP and its staff non-liable in case of any claims or liabilities resulting from operations carried out by GS/OAS or other project partners under this project document, **except where such** claims or liabilities arise from gross negligence or willful misconduct of the staff of UNEP. Nothing in this project may be construed as a waiver of the immunities from suit, legal process, and execution, of either UNEP or GS/OAS.

5.3.5 Amendments

The Parties to this project document shall approve any modification or change to this project document in writing.

5.3.6 Disputes resolution provision

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.

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.

5.3.7 Termination

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 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.

5.3.8 Terrorism Finance Provisions

The United Nations Security Council Resolution 1373 of 28 September 2001 on the fight against terrorism shall be adhered to by the Executing Agency, failure to which shall, without prejudice to other legal actions, lead to the immediate cancellation of the project.

5.3.9

Notwithstanding the provisions in 5.3.8, it is understood that the Executing Agency in this project is a public international organization.

ACRONYMS USED

CCA	Amazon Cooperation Council
DSS	Decision Support System
EMINWA	Environmentally-sound Management of Inland Water
FSAP	Framework Strategic Action Program
GPA	Global Plan of Action for the Protection Marine Environment from Land-Based Activities
GEF	Global Environment Facility
GEF-IW	Global Environment Facility, International Waters focal area
GS/OAS	General Secretariat of the Organization of the American States
IA	GEF Implementing Agency
ISP	Principles for Public Involvement
ITCZ	Inter-Tropical Convergence Zone
IW-LEARN	International Water Lessons Learned Network
IWRN	Inter-American Water Resources Network
LME	Large Marine Ecosystem
M&E	Monitoring and Evaluation
NGO	Nongovernmental Organization
OTCA	Organization of the Amazon Cooperation Treaty
PDF-B	Project Development Facility, Block B
SAP	Strategic Action Program
TCA	Amazon Cooperation Treaty
TDA	Transboundary Analysis of the Basin
WMP	Watershed Management Program
UDSMA	Unit for Sustainable Development and Environment
UNDP	United Nations Development Program
UNEP	United Nations Environment Programme
WB	The World Bank
WSSD	World Summit on Sustainable Development

LIST OF ANNEXES

1. Text of the Amazon Cooperation Treaty (TCA)
2. Protocol of Amendment for the Creation of the OTCA
3. National Permanent Committees of OTCA
4. Endorsement letters
5. Basin Map
6. Budget in UNEP Format
7. Project Review Sheet and response
8. A: Quarterly Progress Report Format for GEF
B: Quarterly Progress Report Format for UNEP
9. Format for Cash Advance Request
10. Format for Quarterly Expenditure Statement
11. Format for Terminal Report
12. Format for Non-Expendable Equipment

