

**UNITED NATIONS ENVIRONMENT PROGRAMME  
GLOBAL ENVIRONMENT FACILITY  
PROPOSAL FOR PDF BLOCK B GRANT**

**Country:** Regional - International Basin of the Upper Paraguay River.

**Focal Area:** International Waters

**Project Title:** Integrated Management of the Upper Paraguay River Basin and Strategy for the Conservation of Biodiversity in its Aquatic Ecosystems

**Funding Requested:** US\$286.000

**Other Contributions:** US\$212,000 (in kind)

**Sources:** Various: UNEP; OAS; Ministério do Meio Ambiente, dos Recursos Hídricos e da Amazônia Legal (MMA); Secretaria de Recursos Hídricos; Secretaria do Meio Ambiente; States of Mato Grosso and Mato Grosso do Sul (Brazil)

**Requesting Agencies:** UNEP and the World Bank

**Executing Agencies:** Organization of American States (OAS) and the World Bank

**Local Executing Agency:** Secretaria de Recursos Hidricos/MMA (Brasil).

**Block:** Block B

**Block A Grant awarded:** No.

**Duration:** March - November 1997

**I. SUMMARY, PROJECT OBJECTIVES AND DESCRIPTION**

**Background**

The international basin of the Upper Paraguay River, shared by the Republics of Brazil, Bolivia and Paraguay, is a part of the Plata Basin which drains almost a fifth of the South American continent to the Atlantic Ocean. For the purposes of this study, however, the Upper Paraguay River Basin (UPRB) is delimited as that portion of the Paraguay River Basin above the confluence of the Apa River which forms the border between Brazil and Paraguay. This Basin drains an area of 496,000 km<sup>2</sup>; 396,000 km<sup>2</sup> of which are located in the States of Mato Grosso and Mato Grosso do Sul, Brazil, and the remaining 100,000 km<sup>2</sup> located in Bolivia and Paraguay. Within this area lies the Pantanal, the most extensive wetland ecosystem in South America and the world. It comprises an area of approximately 140,000 km<sup>2</sup>--an area large enough to encompass Austria, Belgium, Hungary and Portugal. The Pantanal has been

identified as an area of special concern by the Government of Brazil and proclaimed to be an area of National Heritage in the Federal Constitution of Brazil.

The Brazilian portion of the Upper Paraguay River Basin (UPRB) encompasses two interdependent ecosystems: the upper sub-basin (or Rim), comprising about 256,000 km<sup>2</sup> at altitudes above 200 m, and the lower sub-basin (or Pantanal), comprising some 140,000 km<sup>2</sup>. The lower sub-basin receives its water from the upper sub-basin, and remains flooded for several months, each year.

RIVER BASIN	AREA (km <sup>2</sup> )	PERCENT OF WHOLE
Mato Grosso State	182,691	46
Mato Grosso do Sul State	213,309	54
<b>Basin Total</b>	<b>396,000</b>	<b>100</b>

The Pantanal occupies about 36% of the total watershed area of the UPRB. Subsidence, associated with tectonic movements which occurred during the emergence of the Andes, gave rise to the formation of a large depression in the present Paraguay River Basin, an area which originally drained to the Paraná River. The alluvial deposits that filled this depression today form the Pantanal. Although flow from the Upper Basin now finds its way to the Paraguay River, this region is still subject to the deposition of alluvium<sup>1</sup>. The unusual geomorphologic structures which have resulted from this geological process have contributed largely to the formation of the present river network. This system has not yet reached equilibrium; meander cut-off, stream captures, and displacement of outfalls still occur and may be caused by changes in environmental conditions.

The Pantanal is a very flat region. Its slope is slight, varying between 6 and 12 cm/km from east to west and from 1 to 2 cm/km from north to south. Consequently, the flow along the mainstream is slow. In several areas, flows reach numerous small lakes through abandoned meanders which have been cut off by the main channel. These lakes are generally covered by floating vegetation. As a result of these processes, the Pantanal behaves like a reservoir which retains a large portion of the total annual run-off. It has been estimated that the total submerged area can vary from year to year from 10,000 km<sup>2</sup> to 30,000 km<sup>2</sup>. Maximum annual precipitation occurs close to the divide between the UPRB and the Amazon River Basin. An extensive network of rainfall, river flow and water quality gauging stations is present in the Basin.

Due to its location at the center of South America, the Pantanal is a biogeographical meeting point of several endemic floral and fauna units. The confluence of elements of fauna and flora with origins in the Amazon, Chaco, Savanna and Mata Atlantica regions contributes to the extensive biological diversity of the region<sup>2</sup>. The Pantanal also displays different types of upland and lowland

<sup>1</sup> Almeida, F.F.M (1949) Relevô de "Cucstas" na Bacia sedimentar do Rio Paraná. Boletim Paulista de Geografia, São Paulo, 3: 21-23, Out.

<sup>2</sup> Adámoli, Jorge (1995) Diagnóstico do Pantanal: características ecológicas e problemas ambientais. Programa Nacional do Meio Ambiente, 1992,1995. Brasília.

stationary forests, the "chaquenhas", as well as a diversified species of savanna known as "cerrados", open areas of steppe-like grassland, and natural pastures. The Pantanal is habitat for a unique and extremely rich array of wildlife: more than 230 species of fishes, 80 species of mammals, 81 species of reptiles, and more than 650 classified species of birds. "Dourados", "Pintados" and "Pacus" are highly prized angling species present in the system. The avifauna is comprised of species that include egrets and Royal Egrets; "Jaburu", "Maguari" and "Tuiuiu" storks, and shoobills. Endangered species such as the Spotted Jaguar, Pantanal Deer, Manned Wolf, beavers, otters and Giant Armadillo are also present in the Upper Paraguay River Basin.

The human population of the UPRB is sparse, with a density of approximately 2.2 hab/km<sup>2</sup> in Mato Grosso do Sul, where it is concentrated in the Maracajú-Campo Grande plateau, and 2.5 hab/km<sup>2</sup> in Mato Grosso, where it is concentrated in the "Baixada Cuiabana". The concentration of population in these locations is due mainly to the quality of soils, ability to gain local access, flood protection capacity, and the type of relief that favors mechanized agricultural. The majority of the population is concentrated in the urban areas, both in the plateau and in the lower sub-basin.

Basin development has to be considered in the context of the two states, Mato Grosso and Mato Grosso do Sul. Historically, the Basin's socio-economic system has been based on livestock production which helped define its political and economic interests, and its main social and cultural characteristics. Present development includes agriculture and livestock production, tourism and mining. In the lower sub-basin, near Corumbá, the Urucum manganese reserves are estimated at 100 million tons. In the same location, iron ore reserves are estimated at 800 million tons. Elsewhere in the Basin, known copper occurrences have good potential for exploitation, as do peat, lignite, gypsum, sapphires, amethysts and topaz deposits. Minerals presently being exploited include gold, diamonds, limestone, marble, and clay.

Since the mid-1970s, the traditional balance between agriculture and mining has been upset due to the expansion of the agricultural frontier in the upper sub-basin. The principal factors causing environmental problems in this sub-basin are soil erosion, caused primarily by the large scale, mechanized production of soybeans and rice, and the water pollution caused by intensive use of agrochemicals, which are washed into the standing waters of the lower sub-basin. Soil erosion rates in the upper sub-basin have been estimated at 300 tons/km<sup>2</sup>/year and 40 tons/km<sup>2</sup>/year in the lower basin. This problem is exacerbated by the compaction of the soil by heavy farm machinery, and the resulting lack of percolation of stormwater. The Pantanal is also being affected by land clearing in the areas of inflow and along river banks, by pollution from ever-growing agribusiness, and by uncontrolled urban and industrial discharges into the river system. Between 1995 and 1996, it is estimated that 3% of the limited forest cover has been cleared. Throughout the Basin, fish are threatened by overfishing and, most recently, by the dumping of hazardous chemicals, especially large quantities of mercury used in gold mining.

Associated with these existing problems are the potential effects of specific development projects, including the highly controversial Paraguay-Paraná Waterway Project (Hidrovia Paraguai-Paraná, or simply Hidrovia), which seeks to facilitate the transport of iron and manganese ore from Corumbá and the transport of agricultural

products from Mato Grosso and Rondônia (located outside of the UPRB) through the Paraguay River system. In the latter case, some 5 million tons of grain are expected to be transported each year. Considering that Brazilian agriculture is heavily based on the use of agrochemicals, it is probable that the barges carrying grain downriver, as well as other vessels, will bring oil, and fertilizers and other agrochemicals upriver. Any accident on this waterway could directly affect, from the point of the accident downstream, not only the riverine flora and fauna, but also the urban water intakes of riverside cities.

It is necessary to quantify possible negative consequences caused by the rectification and dredging of river stretches in specific areas, such as Posto de São Francisco and Fecho dos Morros. In these areas, the river has a reservoir-like character which influences both the upstream hydrological behavior of the Upper Paraguay River and the downstream passage of flood peaks.

### PREVIOUS SUPPORT

A study for the Integrated Development of the Upper Paraguay River Basin (EDIBAP) was conducted by the Government of Brazil, with the support of the Organization of American States (OAS) and UNDP, between 1978 and 1981. It formulated a series of proposals, with the objective of developing the Pantanal region, based on a strategy founded on principles of environmental conservation, ecological balance, and rational land use. The strategy proposed was selective and contemplated specific actions to attenuate social problems. It included an assessment of the impacts of several proposed development projects on the hydrological regime of the Paraguay River Basin in Brazil, using the SSARR Model (Streamflow Synthesis And Reservoir Resolution). The results of the simulations indicated that a certain measure of flood control could be achieved at several locations by the construction of reservoirs, which would also improve navigation conditions at several key points downstream of the regulation sites, especially along the Cuiabá River downstream the City of Cuiabá. The study concluded that the operation of the reservoirs, both under normal and extreme conditions, would not significantly alter the hydrological response of the Upper Paraguay River Basin downstream of points at Porto Esperança and Porto Murtinho.

Subsequently, in 1991, the Government of Brazil and the World Bank initiated the Pantanal Project in collaboration with the Ministerio do Meio Ambiente, dos Recursos Hídricos e da Amazonia Legal (MMA), the Secretariat of Environment of the State of Mato Grosso and the Secretariat of Environment and Sustainable Development of Mato Grosso do Sul. The objective of the Pantanal Project was to establish measures to ensure the conservation of the Pantanal through the elaboration and implementation of the Upper Paraguay Basin Conservation Plan (PCBAP) and emergency actions for environmental protection. The PCBAP included an environmental zoning component with general and specific guidelines for conservation, recuperation and preservation; a geographic database implemented in both States to make available physical, biological, social, legal and economic information; and, a real time flood model designed to prevent negative impacts in urban and rural areas. Emergency actions identified were the inspection and licensing of polluting activities, the inspection and control of exploitation of flora and fauna, monitoring of water quality in the Basin, management and control of mining areas, rehabilitation of degraded areas, creation of a center for the rehabilitation of wildlife, and promotion of informal environmental education activities.

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Information gathered by these planning studies makes possible the implementation of this new project for soil erosion and water pollution control, implementation of management programs in the Upper Paraguay River Basin, and conservation and management of the aquatic ecosystem. Therefore, the Secretary of Water Resources of Brazil invited the UNEP, the OAS and the World Bank to field a mission to the Upper Paraguay River Basin. The mission was conducted during May 1996, at the conclusion of which, the Government of Brazil, through its GEF Focal Point, requested UNEP and the OAS to prepare an application to the GEF for PDF/B funds for the preparation of a water resources management planning project in the Upper Paraguay River Basin. This proposal is the result of that request.

## **PROJECT OBJECTIVES**

Building on the previous studies, the GEF project that will be prepared by this Block B Grant will help the Government of Brazil to promote the sustainable development of the Upper Paraguay River Basin, based on the implementation of the PCBAP guidelines through a comprehensive program of action addressing multiple focal areas. Key specific objectives will be to:

- Promote and improve stakeholder participation for water resources management in the Basin;
- Define the role of all existing players in the UPRB and, where appropriate, proposing new roles to ensure proper integrated water resources management;
- Define and evaluate the nature of interactions, between the UPRB, the Pantanal and the lower Paraguay River Basin, under various development scenarios,
- Formulate a Watershed Management Plan (WMP) for the UPRB addressing different GEF focal areas and seeking to solve priority environmental issues and contribute global benefits.
- Assist the Government of Brazil to incorporate sustainable development concepts, including biodiversity and land degradation protection, into its development policies, plans and programs.
- Rehabilitate selected degraded areas as pilot demonstration projects, during the preparation of WMP, to gain information for management purposes. These areas would be representative of the major classification of problems including mine waste mitigation, watershed erosion and non-point pollution sources.
- Strengthen Basin institutions and build capacity to enhance the ability of federal, state and local agencies to manage the Basin, including development of appropriate economic instruments to enhance the management of natural resources, optimization of the hydrological and sediment monitoring networks, enhancement of the capacity to implement statutory environment and water permitting/licensing requirements, the exchange and use of information and data between agencies and organizations and, the promotion of institutional networking through, among others, the Inter-American Water Resources Network (IWRN).

- Assist the incorporation of the "Plano de Conservação da Bacia do Alto Paraguai" into Brazil's national development plan or other instrument as a guide to the conduct of feasibility studies, implementation of sustainable development projects and management of financial resources for the Basin. Preparation of an integrated management program for the Basin to promote sustainable development, integrate specific sectoral interests and programs, and protect the aquatic system
- Implement of pilot demonstration projects in reforestation, mine waste reclamation, non point source agricultural pollution control, and land management, including a program to improve soil management and conservation practices to mitigate and prevent erosion problems in critical areas already identified by the PCBAP (such as Vale do Rio Branco, Chapada dos Guimarães, Planalto do Casca, Planalto dos Alcantilados (escarpas), Serra de São Gabriel, Planalto do Taquari and Serra de Maracaju) to establish their feasibility and costs. These projects will emphasize public participation in the management of priority ecosystems with recommendations for activities designed to promote sustainable livelihood and resources use.
- Develop a Public Awareness and Information Program for natural resource conservation and management within the Region.

This PDF proposal would support the preparation of this project. This is a phased approach, with UNEP proposed as the implementing agency because of the nature of the initial diagnostic work that will be accomplished as well as its partnership with the OAS in the conduct of similar, previous work in Latin America. OAS is proposed as the executing agency because of this partnership and their experience in similar projects and in the Plata Basin. Because of past and present involvement of the World Bank in the Basin, the Bank will support the implementation of the Block B Grant activities. UNEP and OAS are each providing US\$25,000 in kind for project preparation, and the Government of Brazil is providing US\$162,000 in kind. Other donors and the private sector are expected to contribute to the support of the actual project.

The MMA, through the Secretaria de Recursos Hídricos (SRH), is proposed as the local executing agency because of its national competence and mandate to coordinate such initiatives in the Upper Paraguay River Basin, and other federal river basins, with the participation of the Secretaria do Meio Ambiente (SMA). The SRH will provide for the participation of additional federal, state and municipal agencies and organizations, having interests in the development of the Upper Paraguay River Basin, to enhance their regional role and capabilities during preparation of the project.

A steering committee consisting of representatives of the MMA, representatives of the State of Mato Grosso, Mato Grosso do Sul, representatives of the Implementing Agencies of GEF, and OAS is proposed for project preparation. This is a country-driven project and, therefore, the steering committee will be chaired by the SRH.

Participation of the national, state and municipal agencies with competence in the region, scientific and academic institutions, and concerned civil organizations (NGOs) will be by way of committees of the steering committee. It is intended that

consultants from the region will be used to the maximum extent and some support for equipment for the MMA has been included.

## **II DESCRIPTION OF PDF ACTIVITIES BY COMPONENT**

### **Objectives of the PDF Activities**

The PDF grant will allow the Ministry of Environment, Water Resources and Legal Amazon (MMA) supported by UNEP/OAS to prepare a project proposal for GEF Council approval, consult extensively with stakeholders in both participating states, and initiate institutional arrangements for its implementation. The specific objectives of the PDF activities are:

- Establishing the steering committee and preparing Terms of Reference for the establishment of the Secretariat, National Director and Technical Coordinator of the committee.
- Conducting workshops in the region in order to consult with stakeholders and other project participants in order to obtain their feedback on the project design and agreement on their participation in project implementation.
- Formulating the technical and institutional components of the project, including the identification of participating institutions, pilot sites and appropriate economic instruments for water resources management, the linkage with other regional projects, and the preparation of required terms of reference.
- Preparing an initial information document and subsequent GEF proposal in consultation and discussion with government authorities, stakeholders, and the GEF implementing agencies.
- Formulating implementation instruments, including an implementation plan, a monitoring and evaluating system, and required legal and financial documents.
- Developing terms of reference (work plans) for activities to be conducted as part of the Project.

### **PROPOSED PDF ACTIVITIES**

#### **A GEF-funded Activities**

The following activities are proposed to be funded in part by funds provided by the GEF:

**Activity 1. Establishment of the Steering Committee and preparation of Terms of Reference for the Secretariat, National Director and Technical Coordinator.**

The MMA, with the support of UNEP/OAS, will establish the Steering Committee as mentioned above. The Steering Committee, chaired by an Executive Director named by the SRH, will prepare Terms of Reference for the Secretariat,

National Director and Technical Coordinator. These Terms of Reference will guide the conduct of subsequent PDF activities and the subsequent project activities.

**Activity 2. Review of major present and emerging environmental issues of the region.**

Experts, appointed by the SRH, will review existing information on the UPRB, and prepare an overview of the major present and emerging environmental issues in the region in order to identify priority environmental concerns that will form the basis for the determination of subsequent activities to be conducted during the project.

**Activity 3. Coordination and consultation with organizations in both states in the identification and prioritization of actions for the protection and management of natural ecosystems, including locally-based initiatives.**

The Steering Committee will conduct consultations with agencies and units of government in Brazil, civil institutions and nongovernmental organizations, scientific and academic institutions, and other groups within the Upper Paraguay River Basin in order to identify initiatives, responses and priority actions for the protection and management of natural ecosystems of the upper and lower sub-basins of the UPRB, and to ensure close coordination between project development activities, proposed project activities and other related GEF projects. The Inter-American Water Resources Network will participate in the conduct of this activity. (Public participation activities set forth under Activity 5).

The initiatives identified and consultative framework established during the conduct of this PDF activity will form the basis for subsequent activities proposed for the project.

**Activity 4 Support for strengthening institutional arrangements.**

The Steering Committee will identify needed actions for strengthening the regional role of the MMA, especially the SRH and the SMA, and the Upper Paraguay River Basin-Pantanal Integration Committee, and other institutions within the UPRB. Actions will address the regional responsibilities, institutional structures, monitoring and analytical capabilities, and roles in promoting and managing development, etc. Some equipment required immediately may be included under this activity. Relevant follow-up activities will be recommended for inclusion in proposed project activities.

**Activity 5 Support for public participation and consultation.**

The Steering Committee will convene four state workshops and two interstate workshops to promote technical and public inputs to, and citizen involvement in, the proposed project, especially with regard to the sustainable development of the UPRB. The concerns identified and approaches for citizen involvement identified as a result of this activity will be used to formulate public participation elements in the proposed project, and to prepare social assessments for the project.



**Activity 6 Preparation of project concept and documents for approval of the Government of Brazil, and submission to the GEF Council.**

The Steering Committee will oversee preparation of a project document for the preparation of a project designed: to implement a program of watershed management taking into consideration economic instruments, water quality protection, and protection of biodiversity in the UPRB to mitigate priority environmental concerns and related sectoral issues; to formulate a WMP for the Basin addressing different GEF focal areas and seeking to solve priority environmental issues and contribute global benefits; to assist the Government of Brazil, in consultation with the governments of Bolivia and Paraguay to incorporate environmental concerns into their development policies, plans and programs for the Basin; and to conduct pilot demonstration activities during WMP formulation to gain information needed for management purposes. This activity will include the prioritization of actions and preparation of long range watershed management programs for the basin.

**B CO-FUNDED ACTIVITIES**

The following activity is proposed to be co-funded:

**Activity 7 Analysis of regional problems and on-going projects in the region, and their relevance to the development of the basin.**

The analysis of regional problems in matters of water quality and sustainable development concerns in the UPRB and its area of influence, its relevance to MMA and the Government of Brazil, and Government of Bolivia and Paraguay, and proposals for activities that are best executed if regional coordination exists, based upon existing information assembled by consultants under the direction of the Steering Committee in Activity 2, will guide the PDF activities and form the basis for the formulation of subsequent project activities.

In addition to the foregoing activities, the Government of Brazil will undertake specific basic studies relevant for the future development of the GEF project. Appropriate data gathered and information collected in terms of these studies will be incorporated into the overview of major present and emerging environmental issues within the region, set forth as Activity 2 above. These data will contribute to the analysis, to be funded by the Government, identified as Activity 7 of the PDF process. Likewise, the Government of Brazil will provide further, general support for the PDF process, including office facilities and support services for consultants and others participating in, and contributing to, the PDF process.

**C GENERAL CONSIDERATIONS**

All the proposed activities will be driven by the Government of Brazil, and the Upper Paraguay River Basin-Pantanal Integration Committee.

The SRH will appoint the Executive Director of the Steering Committee. He will be assisted by a National Coordinator. A Technical Coordinator will be contracted by the executing agency with funds provided by GEF. UNEP/OAS will support the

**Steering Committee in this preparatory phase.**

**Participation in the Steering Committee, of national personnel as well as of the implementing agencies of GEF, will be by invitation of the MMA.**

**Activities of national personnel, with the support of the international agencies, will be based upon preparatory work and Terms of Reference agreed with and approved by the Steering Committee. To the extent possible, all tasks will be executed by national agencies of Brazil and/or by national consultants.**

**All three GEF Implementing Agencies will be invited to participate in the Steering Committee. It is anticipated that UNEP will assist in preparing project elements relating to the identification and mitigation of priority environmental issues; World Bank would assist in consultations among entities in the Basin and in preparing project elements relating to institutional strengthening; and provide guidance for the preparation of project elements relating to economic development and associated sectoral policy issues. OAS will act as manager of the funds provided to the project by UNEP on behalf of GEF.**

### **III. ELIGIBILITY**

**The Ministry of Environment, Water Resources and Legal Amazon (MMA) of the Government of Brazil is responsible for the implementation of the National Environmental Policy. Within the MMA, the SRH is the institution responsible for the general implementation of the National Water Resources Policy, and, therefore, for programming in the basin, and the organization responsible for regional cooperation and the coordination of development activities related to water resources management. With this background, the SRH is the most appropriate agency to receive support from the GEF. It is presently receiving technical support from OAS, UNEP, and the World Bank. In addition, the preparation of the PCBAP, coordinated by the SMA, is presently receiving support from the World Bank.**

**This request fulfills and accords with the approach laid out in the "Scope and Preliminary Operational Strategy for International Waters" approved by the GEF Council Meeting of 22-24 February 1995:**

- **It focuses on the international basin of the Upper Paraguay River, which is a part of the Plata River Basin, a common watershed shared by five countries (Argentina, Bolivia, Brazil, Paraguay and Uruguay). Activities in the UPRB will condition the development of other activities being carried out or to be executed in other parts of the Plata Basin.**
- **It proposes an approach based upon (1) strengthening and developing capacity needed to enable existing or new institutions to function more effectively, and (2) sharing costs for interventions required for setting up priority elements within comprehensive plans that have been already agreed upon.**
- **It proposes to help catalyze the necessary regional actions, and the resulting national and local actions, required to address international waters problems in this region.**

- It aims to help decision-makers in the Upper Paraguay and Plata River Basins to identify necessary changes in decisions in order to help make existing programs of development in the region consistent with the principles of sustainable development and compatible with the capability of the environment in the region to support them.
- It accords with GEF's key role in promoting collective actions to address the issues codified or otherwise articulated in this large body of international agreements and policy instruments, and helps ensure, to the extent possible, that international efforts are coordinated and not duplicated.

#### **IV. NATIONAL LEVEL SUPPORT**

The Government of Brazil has pledged an king contribution amounting to US\$162,000 as detailed in the general finance table presented in point VI.

As mentioned above, the Government of Brazil invited the OAS, UNEP, World Bank, and GEF Secretariat to field a mission to the Upper Paraguay River Basin in May 1996. At the conclusion of which, the Government of Brazil requested UNEP, in association with the OAS, to prepare this application to the GEF for PDF/B funds for the preparation of a water resources management and biodiversity conservation planning project in the Upper Paraguay River Basin.

#### **V. JUSTIFICATION**

The present PDF proposal has been prepared by SRH, with the assistance of UNEP, OAS and the World Bank, at the request and on behalf of the GEF-eligible Republic of Brazil. It responds to the policy guidance of the "Scope and Preliminary Operational Strategy for International Waters" approved by the GEF Executive Council in its meeting of 22-24 February 1995 as programming guidance for GEF International Waters activities in the Operational Phase.

The present proposal is designed to support an integrated and holistic approach to the management of the international basin of the Upper Paraguay River, the interaction of this with management actions in the Plata River Basin, and actions for the mitigation of environmental problems leading to global and regional environmental benefits in the area of International Waters.

#### **VI. ITEMS TO BE FINANCED**

It is proposed that the PDF finance consultant services (in technical and institutional fields), travel for national consultants, and workshops costs (participants travel, workshop coordinator, supporting services) amounting to US\$286,000. The OAS and UNEP would contribute their own staff time, travel budget and materials in support of the project amounting to US\$50,000. The Government of Brazil will contribute in kind with participant staff time and logistical support for the national and regional workshops, estimated to amount to US\$162,000.

The following table shows the support provided by, and allocation of resources between, each of the implementing agencies, governments and other co-funders. The

SRH will be the local executing agency. OAS will manage funds provided through UNEP. Funds requested will be used by UNEP to finance expenses related to the support of the Steering Committee in carrying out the activities proposed. Following GEF PDF rules, funds will be used for Implementing Agency consultant and staff travel only upon specific request to the GEF Secretariat by the Government of Brazil.

ITEM	GEF		GOVERNMENT (in kind)		OTHER IN KIND CONTRIBUTIONS	
Activity 1: Establishment of Steering Committee.	UNEP/OAS	\$4,875	Brazil	\$4,000	OAS	\$25,000
					UNEP	\$25,000
Activity 2: Review of major present and emerging environmental issues of the region.	UNEP/OAS	\$17,625	Brazil	\$34,000		
Activity 3: Coordination and consultation with organizations in Brazil in the identification of initiatives for the protection and management of natural ecosystems.	UNEP/OAS	\$47,250	Brazil	\$16,000		
Activity 4: Support for strengthening institutional arrangements.	UNEP/OAS	\$42,375	Brazil	\$16,000		
Activity 5: Support for public participation and consultation.	UNEP/OAS	\$50,000	Brazil	\$16,000		
Activity 6: Preparation of project concept and documents for approval of Government of Brazil and submission to GEF Council.	UNEP/OAS	\$47,250	Brazil	\$36,000		
Activity 7: Analysis of regional problems and on-going projects in the region, and their relevance to the development of the basin.	UNEP/OAS	\$29,625	Brazil	\$12,000		
General Support	UNEP/OAS	\$47,000	Brazil	\$28,000		
TOTAL COSTS AND AGENCY INVOLVEMENT	UNEP/OAS	\$286,000	Brazil	\$162,000	OAS	\$25,000
					UNEP	\$25,000
	Total	\$286,000	Total	\$162,000	Total	\$50,000

#### IMPLEMENTING AGENCY REPRESENTATIVES:

- UNEP:** Dr. Walter Rast, Deputy Director, Water Branch.
- World Bank:** Mr. Larry D. Simpson, Water Resource Management Consultant, Natural Resources and Rural Poverty Division, Latin America and the Caribbean Region.
- UNDP:** Mr. Nicholas Remple  
Regional Environmental Officer  
GEF/REBLAC
- GEF Secretariat:** Mr. Alfred Duda,  
Chief Administrative Officer and,  
Senior Environmental Specialist (Water Resources)