PLATFORM TITLE: Public-Private Mechanisms for Watershed Protection

ANNEX B BOGOTA WATER FUND EXAMPLE

This Annex illustrates the process undertaken to design, negotiate and start implementing the Water Fund (financial mechanism as stated by initial partners) to conserve the watersheds that provide water to the city of Bogotá. It also explains how partners would benefit by implementing a financial tool to carry out conservation activities that would reduce sedimentation loads within the watersheds. In addition to lowering water-treatment costs due to decreased sedimentation levels, this type of fund will also help conserve biological diversity and have a positive social impact.

1) ENVIROMENTAL PROBLEMS

The watersheds that provide water to city of Bogotá have a myriad of environmental conflicts that were analyzed before key decisions about conservation and regulation of the water cycle can be made. These conflicts are mainly related to the erosion generated by crops established in the buffer zones of the water supplier systems and loss of some hydrological environmental services on some buffer zones of Chingaza National Park due to over-grazing.

According to the Environmental Management Plan for lands owned by the Bogota Water Facility Company (Ponce de León, 2003), the predicted silting index among several dams for the next 10 -15 years is:

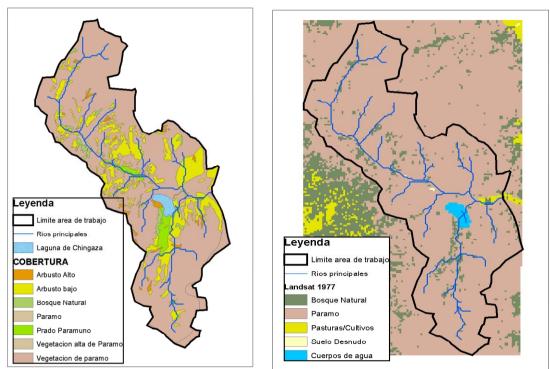
Dam	Silting index
Chisacá	65.000 m3/year
Mugroso	40.000 m3/year
Curubital	100.000 m3/year

In addition to causing erosion and sedimentation, these conflicts pose a significant threat to biodiversity and diminish ecosystems' potential to naturally restore themselves. They also increase the vulnerability of the supplier system to climate change because of modifications that the hydrologic cycle might suffer. There are land uses that adversely affect environmental services and a simultaneous increase of invasive species that compete with native species for food and shelter.

2. BACKGROUND

2.1. Historical loss of natural vegetation coverage in the watersheds of Chingaza National Park and buffer zones

A multi-temporal analysis of land use in the Chingaza National Park showed the expansion of pastures reducing the páramo (high grasslands) vegetation between 1977 and 2001 (CIAT, 2007¹). Páramos in the studied area shrank from 92.6% to 78.4% in just 24 years. Grasses rose from 0.3% to 19.2% in the same time period. If this trend continues, there could be negative consequences to watersheds in terms of regulation capacity and flow levels.



Map 1: Land coverage analysis: Chingaza National Park 1977-2001

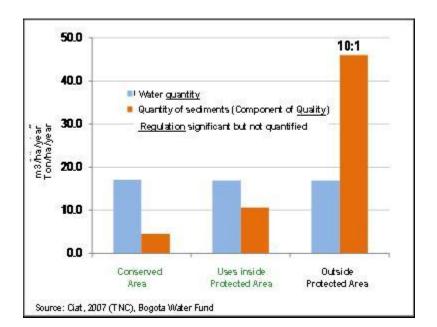
Source: CIAT 2007. Feasibility studies sponsored by the Conservancy, Bogotá Water Facility Company, Patrimonio Natural and National Parks Unit of Colombia

2.2. Changes in land use with negative effects on environmental services

Studies made by CIAT on vegetation coverage in the Chingaza System determined that páramo plants contribute to the regulation of the water flows (CIAT, 2007). Human activities that reduce both páramo vegetation and Andean forests in the watersheds do not just affect the regular hydrological cycles and river volumes, but also generate sediments that deteriorate the quality of the water.

¹ CIAT 2007. Feasibility studies sponsored by The Nature Conservancy (the Conservancy), Bogotá Water Facility Company, Patrimonio Natural and National Parks Unit of Colombia

Graph 1 (below) shows different amounts of sediments produced within the study area with different conservation levels: a scenario with different conservation activities proposed by the Fund; current use in and outside the Chingaza National Park.



Graph 1: Water and sediments produced in Chingaza National Park

2.3. Isolated Institutional Work

The institutional scene related to the management of water resources in the area is complex and involves a great number of institutions including Regional Environmental Authorities, the National Parks Service, the Bogotá Water Facility Company and several non-governmental institutions, among others. Chingaza National Park for instance, is covered by four different environmental authorities who have jurisdiction over the areas that surround the park. There is a lack of strategic support by the private sector – both national and international- that might actively participate in the development of different and innovative conservation scenarios.

The efficiency of investments obeys isolated criteria and different points of view for long-term conservation programs in Chingaza. The proposal to create a water fund with local institutions (environmental regional authorities, water facility companies), national entities (Patrimonio Natural Foundation, National Parks Unit) and international organizations such as the Conservancy allows resources to be channeled in a more efficient way under clear guidelines and concerted programs involving all institutions that work in the area. This is achieved through the implementation of a Technical Secretariat that improves the level of efficiency in both investments and expected outcomes of the conservation activities. The water fund complements other efforts and investments' commitments in the watersheds and it is in

accordance with both policies and guidelines generated by the environmental authorities. This water fund has currently and anticipates good leverage from other sources.

2.4. Savings in treatment costs and conservation: New York and Quito

The Bogota Water Fund used as examples the cases of New York and Quito. New York decided to invest heavily in ecosystems management to ensure water quality instead of making investments in new treatment plants and sewer systems. This decision was made based on the difference in costs between both alternatives². New York City has saved almost one billion dollars due to the adequate management and investment in conservation in the watersheds that provide water to the city. This management allows the city to avoid building a sediment filtration plant and increasing sewer capacity.

Similarly, the Ecuadorian capital city of Quito has benefited from FONAG (Fund for the Protection of Water) since 2000, a conservation fund for watersheds high in the Andes that provide drinkable water to the city. The fund reached \$6 million in 2008 and invests almost one million dollars yearly in conservation activities. This fund invests not just in conservation activities but also in projects that encourage local people to engage in sustainable incomeearning activities in surrounding areas. This is a good model to use as inputs for other cases.

3. PHASES FOR THE DEVELOPMENT OF THE BOGOTA WATER FUND

3.1. Outreach

The Conservancy approached the Environmental Manager of the Water Company of Bogota to present the idea. Several meetings took place with his team to present and discuss the models and vision for a Water Fund. It was decided to organize a workshop in Bogota in early 2007 with important identified stakeholders. More than 20 national and local institutions attended the workshop. The objective was to share the Water Fund idea, identify the current status of studies and projects undertaken on the watersheds. Albert Appleton, Environmental ex-Commissioner for New York City and Pablo Lloret, manager of FONAG gave important inspiring presentations.

A general Memorandum of Understanding was signed between the Conservancy, The Water Facility Company of Bogota, The National Parks Unit and Patrimonio Natural Foundation in order to contract and develop de feasibility studies. The Terms of reference were developed by a Committee established among these four institutions.

It took the Conservancy and later stakeholders 6 months to implement this phase. The Conservancy invested approximately USD 12,000.

² Information provided by Al Appleton, former Commissioner of Environment, City of New York

3.2. Feasibility Study

Two well-known companies were hired to elaborate two studies in order to determine the feasibility of the Bogota Water Fund. These studies analyzed technical, legal, economic and financial issues related to the creation of the fund. Table 1 shows the information and the outcomes of these studies.

Table 1: Feasibility study

FIRM	Model	Type of analysis	Information anlysed	Final results
	SWAT Soil and Water Assessment Tool	Biophysic	Changes in hydrological features. Use daily climate data, (at least 20 years of record) and data from vegetation and soil to estimate water and sediments production	Swat y Fiesta estimate that watershed
CIAT	FIESTA Fog Interception for the Enhancement of Streamflow in Tropical Areas	Biophysic	Quantification of hydrological flows to generate compensation schemes, based on data available worldwide, quantification of water catchment by haze, but not include sedimentation component	generates 1625 m3/ha/year of water and 28 ton/ha/year of sediments
	ECOSAUT	Socioecononic	Relations between human population, agricultural production, production costs and environmental impacts	An asset value should correspond to how much local people is willing to pay for it. In the case of Chingaza National Park, the value one m3 of water located close to the reservoir is around USD 0.37. This value can be assumed as the average cost to encourage conservation, equivalent to USD 601/ha/year
ECONOMETRIA	ECONOMETRIA study	Legal, economic, finance	Legal alternatives for water fund constitution, fund's operational structure, financial and legal analysis	Allow Bogota water fund management to the foundation Patrimonio Natural. * Invite three entities: National Parks Agency, Bogota water facility company and TNC as members of executive board of Bogota water fund. * Design a marketing strategy in order to mobilize additional funds from volunteer donations of Bogota citizens.

3.3. Negotiation and seed capital

The negotiation process and placement of seed capital for the Bogota Water Fund took nearly 18 months due to institutional, legal and political discussions among stakeholders. The memorandum of Understanding was signed on October 2009. The most important aspects of the Bogota Water Fund are:

Objectives:

Support the conservation of watersheds that provide water to city of Bogotá and surrounding municipalities in order to:

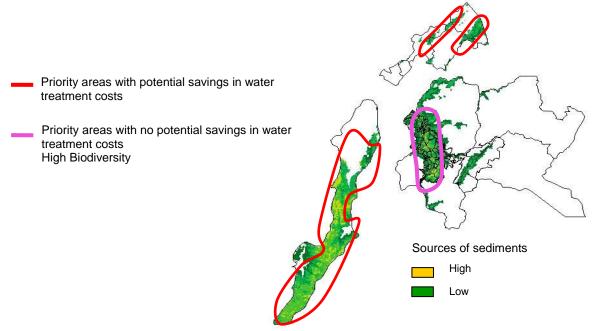
- Enhance the maintenance of the functionality and structure of the páramo and subpáramo ecosystems and Andean and high-Andean forests.
- Support the diminishment of the impacts of climate change through mitigation and adaptation projects.
- Improve long-term inter-institutional environmental management within watersheds
- Diminish water treatment costs

Priority areas of investment:

The feasibility study illustrates a priority exercise of the areas that need the most immediate attention within the supplier system because they contribute high levels of sediments. Sediment retention was selected as the key environmental service provided by natural and well managed areas, because it is the one that has a more direct impact in cost savings to the Water Facility Company. The feasibilities studies showed that water quantity was not changed due to different land covers. Water regulation was significant but more difficult to monitor for any sort of conservation goals and service payments/compensations and therefore was left for future proposals.

Additionally, the study showed conservation priority areas that, although they do not contribute with high levels of sediments, have strategic importance in terms of biodiversity conservation. The priority areas according to these two criteria are illustrated in the following graph:

Graph 2: Priority areas



Source: CIAT 2007. Study sponsored by the Conservancy, EAAB, Patrimonio Natural and National Parks Unit.

Conservation and costs projections:

The study developed by CIAT is a technical document supporting the creation of the Water Fund and presents three different scenarios where conservation activities are proposed according to the priority areas in relation to sediment contribution. Chart 1 presents the outcomes under these three different scenarios.

Chart 1: Conservation scenarios

	Option 1	Option 2	Option 3
Work Area (Has)	24.000	40.000	60.000
Avoided sediments (Million Ton)	1	1,5	2
Cost Aprox (Million USD)	3,7	5,8	8,3
Potential savings (Million USD /year)	1,8	2,5	3,5

Source: CIAT 2007. Study sponsored by the Conservancy, EAAB, Patrimonio Natural and National Parks Unit.

Analyzing these three options, Option #3 has an initial investment alternative with the most significant impact, indicating that carrying out conservation activities on 60,000 hectares would avoid the production of two million tons of sediment. This option is considered to be the best since it presents the best scale economies in relation to environmental, economic and social impacts.

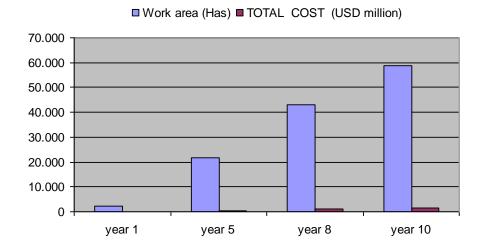
According to calculations, the scenario estimates an average investment of \$700,000 Colombian pesos (USD320 dollars) per hectare under different conservation scenarios that promote ecofriendly and sustainable systems, restoration and ecological reforestation of degraded ecosystems and other conservation activities such as ecotourism or payments for environmental services. This is based on an analysis ran by CIAT and surveys done on the watershed which estimated the opportunity cost of alternative uses of the land.

According to the following chart and graph, the goal of investing in 60,000 hectares would be accomplished in Year 8 of the implementation. This supports the adoption of Option #3 because it yields significant savings in treatment costs.

Chart 2: Timeline

	year 1	year 2	year 3	year 4	year 5	year 6	year 7	year 8	year 9	year 10
Work area (Has)	2.400	3.500	4.600	4.600	6.700	6.800	7.100	7.200	7.800	8.200
Reforestation	0	175	230	230	0.700	340	355	360	390	410
Conservation with life fences and filtration dikes	0	525	690	690	0	1020	1065	1080	1170	1230
Silvopastural system conversion	1200	1750	2300	2300	3350	3400	3550	3600	3900	4100
Ecotourism co finance	480	0	0	0	2000	0	0	0	0	0
Managemet Plans support	720	1050	1380	1380	1350	2040	2130	2160	2340	2460

Graph 3: Work Areas and total expenses.



Proposal of investments:

It is evident that environmental conflicts identified in the area make the watersheds vulnerable to threats and at a high risk of degradation. This proposal includes the development of investment alternatives that contribute to conservation of the watershed and are attractive in terms of yields for local communities in the supplier system buffer zones. These alternatives are

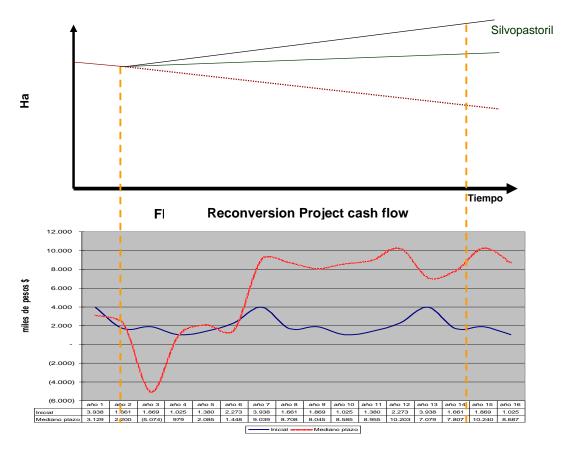
also being taken into consideration in the environmental authorities' plans and in many cases are already being applied in areas within the watershed by local NGOs and institutions. The Water Fund will scale up these pilot projects and investments.

The implementation of sustainable productive systems (for instance, silvopastoral systems), demonstrates a great efficiency in terms of increasing forest coverage, shrinking pasture size, and at the same time, raising incomes for landowners over the long-term. These sustainable productive systems are being supported by the National Parks Unit and the Bogota Water Facility Company through local NGOs and the Regional Environmental Authorities. Fundación Natura, CIPAV and the Conservancy developed an exercise in the Oak Forest Corridor in a similar area to Chingaza to determine the environmental, social and financial impacts of silvopastoral systems as well as the cash flows during the reconversion process (chart 3 and graph 4). This proposal should be accompanied by ecotourism scenarios and the design and improvement of management plans made by the National Parks Unit and the Bogotá Water Facility Company.

Chart 3: Silvopastoral Systems Reconversion Indicators

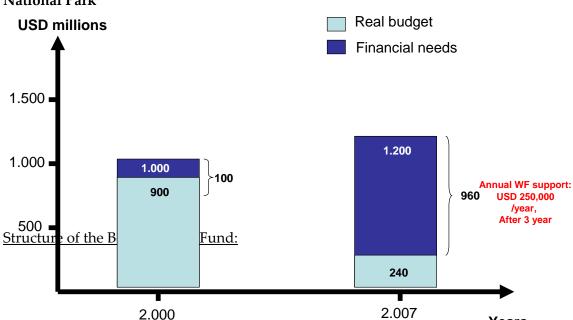
Model	Impacts	Current use (Ha)	Reconversion use (Ha)						
	Environmental impacts								
	Forests	5,0 (12,3 acres)	8,0 (19,7 acres)						
	Pastures	24,8 (61,28 acres)	11,0 (27,1 acres)						
	Crops	0,2 (0,5 acres)	0,2 (0,5 acres)						
	Silvopastoral systems		10,3 (25,4 acres)						
	Forage banks		0,3 (0,7 acres)						
	Firewood forest		0,2 (02 acres)						
30 Ha	Total area	30 (74,1 acres)	30 ((74,1 acres)						
(74,1 acres)	Life fences, Km.		1,0						
	Number of animals	12	12*						
	Socio economic impacts								
	Number of animals (UGG)	0,6	1,0						
	Births (%)	60%	80%						
	Yield (per cow per day)	4 liters	7 liters						
	Lactation (days)	240	270						
	Incomes in Colombian pesos (thousands per year)	2,024	7,079						

Source: CIPAV, the Conservancy and Fundación Natura, 2006



Graph 4: Cash flow of reconversion projects

It is also important to co-finance and support the development of the Chingaza National Park Management Plan in activities directly linked to hydrological environmental services provision. Activities such as the support of community based ecotourism are important as evidenced by graph 5.



Years

Graph 5: Water Conservation Fund's contribution to financial needs of the Chingaza National Park

Given that the Bogotá Water Fund has to accomplish essential functions (fiduciary function, hiring function, and technical support), an assessment was developed of main funds or structures that are part of the National Environmental System and make investments in environment issues. This assessment took into account various criteria such as legal nature and status, social objectives, strategic partners and institutional and management capacity. Several funds were evaluated.

Patrimonio Natural Foundation was selected and it currently serves as the Fund's resource manager. This Fund is opening a sub-account with technical and financial autonomy. This will guarantee its transparency, independence and efficiency. Several security controls were put also on the Fund agreement among stakeholders.

The Board of Governors is composed of public companies that hold 50% of the power (Bogota Water Facility Company and National Park Unit) and 50% by private institutions (the Conservancy, Bavaria SAB-Miller). Other institutions will be included later. Terms of reference for the manager of the Technical Secretariat have been developed.

Financial projections

Funds from Regional Environmental Authorities and the local environmental authority of Bogota: Funds from Regional Environmental Authorities come from water user fees and property taxes. As they are public funds, the Bogotá Water Fund has to submit annual proposals in order to obtain them.

Patrimonio Natural Foundation, according to the technical support duties associated with the Bogota Water Fund would be the organization responsible for preparing the proposal and competing for these funds. Accordingly, a special handling commission could be allocated to Patrimonio Natural in the event that the public funds are successfully obtained. Chart 5 shows the 2008 budgets of the three Regional Environmental Authorities involved in Bogota's water supply system.

According to the chart, the greatest amount of resources comes from the Regional Environmental Authority in Cundinamarca (CAR). Most of those resources come from property taxes. The Environmental Secretary of the City of Bogota has also resources from property taxes and other resources allocated by the District Government.

Chart 5: Regional Environmental Authorities. Incomes budget for year 2008 (millions)

Concept	Corpoorinoquia	Corpoguavio	CAR	total
Taxes (tributary)	1,1	0,3	63,9	65,3
Sewerage tax	0,2	0,03	0,027	0,3
Water use tax	0,1	0,00	0,027	0,2
Electric sector payments	0,2	4,96	3,033	8,2
Others	2,6	0,02	2,166	4,8
Total income	4,3	5,3	69,1	78,7

Source: Regional Environmental Authorities, Triennial Action Plans

About 78% of these funds are used for various goods and services or investments. From an investment perspective, Corpoguavio and Corporinoquia regional environmental authorities would spend some money on the watersheds that provide water to the city of Bogota.

Thus, we estimate that more than US\$15 million from the three Regional Environmental Authorities could be invested in watershed conservation in the next 10 years. The Bogotá Water Fund must be working in order to include some of these funds, and set up mid-term goals. As shown in Chart 6, approximately 20% of these funds could be reached after five years of fund operation.

In a conservative analysis, it is estimated that the funds of the Environmental Secretary of the City of Bogota would be similar to the amount spent on Chingaza National Park in 2007, or approximately US\$200,000, adjusted only for expected inflation rates.

Chart 6: Expected funds for the Bogota Water Fund from Regional Environmental Authorities and local environmental authority of Bogota.

Concept	Corpoorinoquia	Corpoguavio	CAR	Bogota District	total
Income	4,3	5,3	69,1		
% goods, services and investments	68,0%	74,5%	79,1%		
% Bogota watersheds	10%	75%	22%		
% goal for Bogota water fund	20%	20%	20%		
Goal for Bogota water fund	0,1	0,6	2,4	0,2	3,3
year 1	0,00	0,00	0,00	0,00	0,0
year 2	0,00	0,04	0,15	0,02	0,2
year 3	0,0	0,1	0,3	0,0	0,4
year 4	0,0	0,1	0,6	0,1	0,8
year 5	0,0	0,3	1,2	0,1	1,7
year 6	0,1	0,6	2,4	0,3	3,3
year 7	0,1	0,6	2,5	0,3	3,5
year 8	0,1	0,7	2,7	0,3	3,7
year 9	0,1	0,7	2,8	0,3	3,8
year 10	0,1	0,7	2,9	0,3	4,0

Source: ECONOMETRIA 2007. Study sponsored by the Conservancy, EAAB, Patrimonio Natural and National Parks Unit.

Funds from the Bogota Water Facility Company:

Funds are expected to be similar to the yearly amount allocated for conservation and protection projects: approximately US\$750,000. This amount is largely covered by savings obtained in treatment costs. These funds could increase in the medium run as results are shown.

Funds from the Conservancy:

As seed capital, the Conservancy will contribute with US\$150,000 in the first year. Additional funds over the next 10 years will reach approximately US\$350,000.

Donations from inhabitants of the city of Bogota:

The willingness of Bogota's population to pay for watersheds conservation is based on the environmental services provided by the ecosystems of Chingaza National Park³.

³ The National Parks Service developed a study about the valuation of economic benefits provided by the Natural National Parks System. Three key elements were considered in this study: 1) Hydrological resources conservation, 2) Ecotourism and, 3) *in situ* biodiversity conservation and carbon sequestration. See more in *Carriazo, Fernando; Ana María Ibáñez y Marcela García; Valoración de los Beneficios Económicos*

In order to determine the willingness of Bogota citizens to pay, a phone survey was designed and implemented through conversations with 269 households located in the city. This survey's first question asked how much water users would be interested in paying for the environment protection of areas that provide then with clean water—specifically, Chingaza National Park.

Survey results show there are no significant differences in how much they're willing to pay, even between different types of socioeconomic water user status. The survey also showed that Bogota citizens are concerned about environmental issues and they are willing to pay an initial yearly contribution of US\$16.50 (average per household), which could be reduced to approximately US\$7.35 per home (tempered by a statistical reliability rating of 95%).

When users were asked about their willingness to maintain these voluntary donations for the next three years, the average contribution they would willingly make falls down to US\$11.80 per year per household. When information about the relationship between water user contributions and the water quality, quantity and cost was included, willingness to pay of Bogota inhabitants increases appreciably and so does the amount they are willing to pay: they are willing to contribute almost four times the initial value, with a yearly average value per household of US\$58.30 (maximum) and US\$18.15 per year per household (minimum). Chart 7 shows total estimated incomes for the fund.

Revenue and expenditure summary chart:

For further detailed information please refer to the financial excel document.

Net profit

Chart 7: Estimated incomes for Bogota Water Fund USD millions

Activity		Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	TOTAL
-											
Revenue											
Water Fund											
Individual and corporate voluntary donations Multilateral donations	0	0	300.000 0	3.771.634 300.000	3.594.873 0	4.529.345 0	1.787.572 0	1.650.067 0	1.512.561 0	1.375.055 0	18.521.10 300.00
Goverment domestic cooperation funds Water tariffs and fees (Colombia and Brasil	0	0	350.000	799.856	1.233.131	2.081.352	3.758.549	3.946.477	4.143.800	4.350.990	20.664.15
Water Laws) Fiscal resources (1% of land use fees for	0	0	0	0	0	0	0	0	0	0	
watershed conservation or income of water utility Quito)	0	0	0	0	0	0	0	0	0	0	
Total Revenue	0	0	650.000	4.871.490	4.828.004	6.610.698	5.546.121	5.596.543	5.656.361	5.726.046	39.485.26
Expenditure					10.349.494						
1) Salaries											
Water Fund Manager			54.000	56.700	59.535	62.512	65.637	68.919	72.365	75.983	515.65
Technical Assistant 1 Technical Assistant 2			0	24.000 0	25.200 25.200	26.460 26.460	27.783	29.172 29.172	30.631 30.631	32.162	195.40
Technical Assistant 2 Technical Assistant 3			0	0	25.200	26.460	27.783 0	29.172	0	32.162 0	171.40
2) Equipments											
Office equipments			7.000	0	0	0	8.400	0	0	0	15.40
Monitoring equipments Monitoring infrestructure			0	23.800 3.600	0	0	0	0	0	0	23.80 3.60
3) Consultancy											
Legal support			45.000	0	0	0	0	0	0	0	45.00
Marketing studies Sediments load studies			480.000 0	0 200.000	0	500.000 0	0	0	0	0	980.00 200.00
3) Conservation projects											
Sustainable production Systems &											
reforestation			0	2.800.000	3.000.000	4.000.000	3.500.000	3.500.000	4.000.000	4.000.000	24.800.00
Ecoturims projects Management plan support			0	200.000 200.000	200.000 200.000	200.000	200.000 200.000	100.000 200.000	0 200.000	100.000 200.000	800.000 1.400.000
4) Travels	0	0	1.500	1.575	1.654	1.736	1.823	1.914	2.010	2.111	14.32
5) Operation Costs											
Office supplies			500	525	551	579	608	638	670	704	4.77
Services Sofware			1.500 300	1.575 315	1.654 331	1.736 347	1.823 365	1.914 383	2.010 402	2.111 422	14.32
Office rent			4.000	4.200	4.410	4.631	4.862	5.105	5.360	5.628	2.869 38.19
6) Finance Costs											
Taxes			0	0	0	0	0	0	0	0	
Audit			5.000	5.250	5.513	5.788	6.078	6.381	6.700	7.036	47.746
SUBTOTAL	0	0	598.800	3.521.540	3.524.047	4.830.249	4.045.162	3.943.600	4.350.780	4.458.319	29.272.49
Fiduciary Costs Bank Costs			29.940 11.976	176.077 70.431	176.202 70.481	241.512 96.605	202.258 80.903	197.180 78.872	217.539 87.016	222.916 89.166	1.463.625 585.45
TOTAL EXPENDITURE	0	0	640.716	3.768.048	3.770.730	5.168.367	4.328.323	4.219.652	4.655.334	4.770.401	
Water Fund BALANCE	0	0	9.284	1.103.443	1.057.274	1.442.331	1.217.798	1.376.891	1.001.027	955.645	
Acumulative Balance	0	0	9.284	1.112.727	2.170.000	3.612.331	4.830.129	6.207.021	7.208.047	8.163.692	
Interest Yields	0	0	743	89.018	173.600	288.987	386.410	496.562	576.644	653.095	2.665.059

Source: The Conservancy based on ECONOMETRIA 2007, Study sponsored by the Conservancy, EAAB, Patrimonio Natural and National Parks Unit.

2.343.600

5.216.540

3.901.318

6.703.582

10.027

1.201.745

This phase took nearly 2 years and approximately US\$320,000 was spent by the Conservancy which covered most of the associated costs. Field transportation and workshop expenditures were covered by the Bogota Water Utility Company and the National Parks Unit.

4. CURRENT STATUS

The Bogota Water Fund Memorandum of Understanding was signed on October 2009. Legalization of the memorandum of Understanding is underway. This agreement allows the Bogota Water Utility Company, the Conservancy, Bavaria SAB-Miller, the National Parks Unit and Patrimonio Natural Foundation to start implementing funds through Patrimonio Natural Foundation accounts.

Operational Manual, Financial and Conservation plans are drafted and are currently under final review by stakeholders. Financial resources (seed capital of nearly US\$950,000) will start to flow to Patrimonio Natural trust fund in the coming weeks.

IDB Aquafund is reviewing a proposal to invest nearly US\$300,000 in the Bogota Water Funds to develop several contracts that are needed to start implementing the financial and conservation plans.

Financial resources from the GEF would be used to pay for some operational costs of the Water Fund in the first 2 years (25%, US\$250,000) and endowment fund for long term environmental services payments (75%, US\$750,000). Please see financial excel analysis for further details.