



GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL SIZE PROJECT

TYPE OF TRUST FUND: GEFTF

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title:	Integrated Management of Water Resources of the Mira-Mataje and Carchi-Guáitara, Colombia – Ecuador Binational Basins		
Country(ies):	Colombia-Ecuador	GEF Project ID: ¹	
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5753
Other Executing Partner(s):	Ministry of Environment and Sustainable Development of Colombia (MADS) and National Water Secretariat of Ecuador (SENAGUA)	Submission Date:	20 July 2016
		Resubmission Date:	16 Aug 2016
GEF Focal Area(s):	International Waters	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	[if applicable]	Agency Fee (\$)	365,750

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
IW-1 Program 1 (select) (select)	GEFTF	3,850,000	16,000,000
Total Project Cost		3,850,000	16,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To promote the integrated water resources management (IWRM) in the Mira-Mataje and Carchi Guáitara river basins shared by Colombia and Ecuador by strengthening the institutional and managerial capacities at the regional, local and community levels for achieving environmental and socio-economic benefits.

Project Components	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Generation of knowledge, information management and diagnostic analysis of the current status of the transboundary water resources (surface and ground waters) of the Mira-	TA	1.1 Priority transboundary issues affecting quality and quantity of water, its vulnerability to climate change and variability and barriers for IWRM, and their immediate and root causes, have been identified, including a governance and	1.1.1 Transboundary Diagnostic Analysis (TDA) on Mira-Mataje and Carchi-Guáitara basins, based on the secondary information and generation of primary information, including structural causes,	GEFTF	754,902	3,137,254

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

³ Financing type can be either investment or technical assistance.

Mataje and Carchi-Guáitara binational basins.		stakeholder analysis to further inform the SAP process.	<p>future status and dynamics completed and validated.</p> <ul style="list-style-type: none"> - Environmental and socioeconomic baseline established. - Hydrologic maps updated -Baseline assessments of selected aquifers to inform conjunctive management approach in the SAP. - Results of TDA are spread at a national and sub-national levels (regional, local and communities). - Set of environmental and socioeconomic indicators on status of water use, supply and quality (both surface and ground water resource)s is determined for use in monitoring SAP and NSAP implementation. -Risks and measures for adaptation to climate change and extreme climate events identified. 			
2. Strategic planning to strengthen governance for transboundary IWRM in Mira-Mataje and Carchi-Guaitara binational watersheds and aquifers	TA	<p>2.1 Priority actions required for achieving IWRM of the Mira-Mataje and Carchi-Guáitara basins identified and integrated to the binational, national and sub-national development plans in both countries.</p> <ul style="list-style-type: none"> - Policy, legal, institutional and financial instruments, as well as private sector and community conservation mechanisms for IWRM identified, including assessing feasibility of their 	<p>2.1.1 Strategic Action Program (SAP): Binational Agreements ministerial adopted by the two countries on the priority actions (governance reforms, investments) to address the transboundary issues identified by the TDA in the Mira-Mataje and Carchi-Guáitara basins.</p> <ul style="list-style-type: none"> - Binational Integrated Management Plan of 	GEFTF	623,529	1,644,538

		<p>harmonization and/or adoption at bi-national level.</p> <p>- Agreements to modify, adapt and harmonize the policy, legal and institutional frameworks and to establish mechanisms for enabling the transboundary IWRM in the binational river basins, have been adopted and ready for implementation.</p>	<p>water Resources of the Carchi-Guáitara, and Mira and Mataje transboundary basins formulated and in implementation process.</p> <p>- National Strategic Action Programs in each country.</p> <p>- Binational basin council established and river basin councils, in each country, technically strengthened (include private sector participation)</p> <p>- Agreed suite of process, stress reduction and environmental and socioeconomic status indicators to monitor the degree of implementation of the SAP and NSAPs agreed.</p> <p>- Hydrological, meteorological and water quality monitoring mechanisms for the Carchi-Guáitara, and Mira and Mataje transboundary basins strengthened.</p>			
<p>3. Capacity building at public, private and community level enabling the shared IWRM of Mira-Mataje and Carchi-Guáitara river basins.</p>	TA	<p>3.1 Improved individual and institutional capacities in both countries to apply IWRM in the binational basins.</p>	<p>3.1.1 Training of key national and subnational stakeholders in IWRM on the Mira-Mataje and Carchi-Guáitara river basins for strengthening the monitoring and control of water quality and availability:</p>	GEFTF	347,059	2,389,076

			<ul style="list-style-type: none"> - Land use planning and territorial GIS, - Environmental impact assessment, - Integrated water resource management incorporating climate variability and climate change. - Application of standards and incentives on water quality. 			
<p>4. Innovative interventions for testing the socio-economic and environmental benefits from applying the IWRM at selected sites of the Mira-Mataje and Carchi-Guáitara river basins.</p>	Inv	<p>4.1. Integrated water resource management and sustainable land use reduce pollution, improve water use efficiency and protect/restore aquatic ecosystems in the Mira-Mataje and Carchi-Guáitara river basins and their aquifers.</p> <p>4.2 Learning generated through replicable innovative interventions supports the SAP development and decision-making.</p>	<p>4.1. Four (4) small scale innovative interventions on IWRM for ensuring the provision of hydrologic eco-system services and sustainable livelihoods, preserving traditional knowledge on water and biodiversity management in the Mira-Mataje and Carchi-Guáitara binational river basins.</p> <p>4.1.1 Two (2) pre-feasibility studies on investments required for the transboundary IWRM in the Mira-Mataje and Carchi-Guáitara river basins during the SAP implementation phase.</p> <p>4.2.1 Systematization of results, lessons and experience from innovative interventions in the Mira-Mataje and Carchi-Guáitara basins is available for relevant national and subnational</p>	GEFTF	1,941,177	8,067,227

			stakeholders, as well as for other projects through participation in IW:LEARN, included international conferences of international waters and the establishment of a website that is consistent with the IW:LEARN guides (at least 1% of the GEF grant will be going towards supporting these IWLEARN activities).			
Subtotal					3,666,667	15,238,095
Project Management Cost (PMC) ⁴				GEFTF	183,333	761,905
Total Project Cost					3,850,000	16,000,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE (GESTIONAR LAS CIFRAS INDICATIVAS DE COFINANCIAMIENTO Y LAS CARTAS DE ENDOSO)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Gobierno Nacional y Regional de Ecuador	Cash	4,000,000
Recipient Government	Gobierno Nacional y Regional de Ecuador	In - Kind	4,000,000
Recipient Government	Gobierno Nacional y Regional de Colombia	Cash	4,000,000
Recipient Government	Gobierno Nacional y Regional de Colombia	In - Kind	4,000,000
Total Co-financing			16,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	GEFTF	Regional (Colombia and Ecuador)	IW		3,850,000	365,750	4,215,750
Total GEF Resources					3,850,000	365,750	4,215,750

a) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT PREPARATION GRANT (PPG)⁵

Is Project Preparation Grant requested? Yes No If no, skip item E.

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$150,000					PPG Agency Fee: 14,250		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁶ (b)	Total c = a + b
UNDP	GEF TF	Regional (Colombia and Ecuador)	IW		150,000	14,250	164,250
Total PPG Amount					150,000	14,250	164,250

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>Hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>Hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>2 Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectorial planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe:

⁶ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

⁷ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

The basins

1. The Mira-Mataje and Carchi-Guáitara basins are the main water resources shared by Colombia and Ecuador in the Pacific Ocean basin. These resources make up an important supply of water, essential for the socioeconomic development and the integrity of the ecosystems of the region.
2. For the area of Colombia, the basins are identified in the following way: Carchi-Guáitara, and the Mira and Mataje basins, and for Ecuador the Mira and Carchi basins are described within the Mira Hydrographic Basin District (HBD). Because of this technical and legal approach, the description of the basins is presented in an independent way for each country, but agreed between both of them. The total area of the two basins is nearly 1.462.150 hectares, of which 719.424 hectares are in Colombia (Carchi-Guáitara: 364.045; Mira 366.810; Mataje: 11.870) and 719.424 hectares are in Ecuador of which in the HBD Mira.
3. The Mira-Mataje Binational Basin has a total area of 1.061.150 hectares of which nearly 64% corresponds to Ecuadorian territory and approximately 36% is found in Colombia. In Ecuador, the basin of the Mira River starts in the Andes, where there is an average altitude of 4.600 meters over sea level; in Colombia, the river originates in the upper part of the Western Mountain Range (4.746 meters). The Mataje River flows independently in the coastal region of the two countries until its river mouth terminates in the Pacific Ocean, dividing the territories of Ecuador and Colombia in 28 km along the route.

Colombia

4. The hydrographic basin of Carchi-Guáitara is a transboundary basin that is located between the department of Nariño in Colombia and the province of Carchi in Ecuador. In Colombia, it has an area of 364.046 hectares equivalent to approximately 91% of the total area of the basin. The basin borders by the South with the country of Ecuador and the towns of Ipiales and Potosí; by the North with the towns of Los Andes, el Peñol and Policarpa; by the East with the towns of El Tambo, La Florida, Nariño, Pasto, Funes, Puérreres and Cordoba; and by the West with the towns of Llanada, Samaniego, Santacruz, Mallama and Cumbal.
5. The basin of the Mira River and Mataje is located south East of the department of Nariño and it is shared between Colombia and Ecuador, deemed strategic for the development of these countries. In the Colombian territory, the Mira river basin has a hydrographic area of 366.801 hectares. The Mira river starts at Ecuador's Andean Mountain Range, in the Paramo del Angel and the bends of Mojanda-Cajas, with elevations that exceed 4.600 meters over the sea level, it enters Colombia at a point named Piedra Fina; when entering Colombia, it feeds the rivers of San Juan river, which serves as border between the two countries from its beginning in the Snowy Volcano of Chiles and the Guiza river as its main tributary. Its waters empty into the Manglares Cape (Pacific) and it extends from the town border of Sapúyes on the East, to the Pacific coast and from the Pasto-Tumaco highway to the border with Ecuador. The Mataje River starts near the town of Loja in Ecuador and it serves as border between the two countries along 28 km until its river mouth in the Pacific; the total area of this basin is 26.000 hectares, of which 11.870 hectares (46%) belong to Colombia. This river empties in the point named Boca del riot Mataje, the point in which the Colombian-Ecuadorian land international border reaches the sea, according to the Covenant on Marine and Submarine Areas Delimitation of 1975 and to the Border Treaty of 1916.

Ecuador

6. In Ecuador, the zones of interest are mainly in the Mira Hydrographic Basin District (MHD) where the Mira and Carchi Local Water Units of Planning (LHUP) are located, the surface that these two LHUP covers is 705.293 hectares, in the case of the Mataje river basin corresponding to an area of 14.130 hectares that are within the Cayapas LHUP, the same that is found within the Esmeraldas MHD, this said the total area that involves the Ecuadorian territory is 719.423 hectares, all of these basins correspond to the Pacific watershed.

Table 1. Area per basin in each country, MHD: Mira Hydrographic Basin District; LHUP: Local Water Units of Planning

COUNTRY	BASIN	Has	TOTAL Has
COLOMBIA	CARCHI-GUÁITARA	364.046	742.726
	MIRA	366.810	
	MATAJE	11.870	
ECUADOR	MIRA MHD (Mira and Carchi LHUP)	705.293	719.423
	ESMERALDAS MHD (Cayapas LHUP)	14.130	
ÁREA TOTA 2 CUENCAS			1.462.149

7. Because of their geographical location and their environmental characteristics, the Carchi Guáitara and Mira-Mataje binational basins house different ecosystems, such as the paramo, sub-paramo, Andean upper forest, Andean forest, tropical rain forest, and dry forest, which supply important eco-systemic services at a regional and local level such as water supply for the towns and the conservation of biodiversity. The Angel-Chiles-Cumbal-Azufral-Quitasol Binational Biological Corridor stands out as a benchmark of these ecosystems, which goes through the Andean Mountain Range between the Province of Carchi on the North of Ecuador and the Department of Nariño on the South of Colombia.
8. Productive activities such as farming (mainly extensive) and transitory crops from cold to warm climate are developed in approximately 60% of the area of the basin, from which the inhabitants mainly derive their livelihood. Additionally, other productive activities such as mining and industrial activities are also present.
9. The estimated annual average volumes of surface water flows for each basin are: Carchi-Guáitara Basin 2,5 Km³ and for the Mira Basin it is of 2 km³ (0,7 Km³ in Ecuador and 1,2 km³ in Colombia). At the moment, there are a total of 35 monitoring points of water quality in the Carchi-Guáitara and Mira basins of which 28 are in the Ecuadorian territory and 7 in the Colombian territory, where it has been concluded that the water is suitable for irrigation and drinking and if it is required for human consumption it needs to go through a water treatment process.
10. The estimated total population for the transboundary basins reaches 1.195.664 inhabitants, from which 538.727 belong to Ecuador and 656.937 inhabitants to Colombia, that is 45% and 55% respectively. The basin is mostly inhabited by indigenous communities of the Inkal AWA, Esperara Siapidara, Chachis ethnic groups and Afro descendants, as well as peasants and inhabitants of the urban centers, becoming an important region in cultural richness.

1) Global Environmental Problem, root causes and barriers that need to be addressed:

11. **Water quantity.** The area of the Carchi-Guáitara and Mira-Mataje basins is found in a high seismic threat zone, mainly for the sectors located towards the Pacific Ocean Mira-Mataje basin and the values of acceleration are reduced (SIGOT 2013) towards the Carchi-Guáitara basin. At a regional level, the analysis of the natural dryness natural conditions reports that for the Pacific Coast there is a low dryness index, meaning high excess of water, nevertheless towards high zones it increases significantly (579.259 has eroded in the Ecuador zone for the 2013 year). Nevertheless, for the Carchi-Guáitara and Mira-Mataje basins this kind of studies have not been done in detail, thus, given the importance of knowing the relationships between water, soil and vegetation, there is a need to propose this kind of study at a basin and sub-basin level.
12. **Water pollution.** The anthropogenic action generated by the regional economy includes the pollution of water bodies in the two binational basins. Contaminating activities are related to the excessive use of agrochemicals and heavy metals, implementation of infrastructure works, soil removal in mining exploitation activities (legal and illegal and artisan) and other (non-liquid) industrial waste. Coal and gold mining, industrial agriculture and farming and human settlements are identified by the Nation's General Comptroller (2009) as causing degradation in the quality of water. The use of these chemical products has caused damages to local bodies of water due to runoff waters and lixiviation, leaving great part of the water in the region that is not suitable for human consumption or for hygiene of local

communities. Inadequate disposal of solid waste and direct discharge of industrial and domestic residual waters to the riverbeds are compounded by the obsolete infrastructure of the sewage and water systems. The water quality in this region is below the national average (e.g. in Colombia the Quality of Water for Human Consumption Risk Index QWHCRI is 20, while in the area reaches to 50.29 placing it in a High risk). The sewage coverage and final disposal of wastewaters in the zone of influence of the Carchi Guáitara Basin in Colombia, reaches an average of 92.6% in the urban sector. In the rural sector coverage is minimum: only in certain isolated cases does the community use the septic well system. For the Mira-Mataje basin coverage of sewage system in the urban sector barely reaches 30.1% and there is no service in the rural area, in isolated cases the rural community uses the septic well system. In the area of these basins belonging to Ecuador, access to means of excreta disposal in houses reaches percentages of 22.9% in the populated centers and the rural houses have latrines.

13. The main underlying/ root causes of water pollution problem include: i) mining and agriculture practices without environmental protection measures; ii) insufficient public investment and insufficient treatment plants for wastewater and for the management of solid wastes; iii) insufficient means of enforcing existing environmental legislation; iv) low level of environmental awareness and effective access to information.
14. **Erosion and soil degradation.** The unsustainable exploitation of forest resources with its consequent lack of legality in its trade, is critically affecting representative binational ecosystems (15.032 deforested has in Ecuador for the 2013 year) such as mangroves and Andean forests. Deforestation is leading to degradation of the soil with the loss of nutrients associated to farming use, monocrops, illicit crops and infrastructure works. According to estimates from the World Bank (2007), degradation of soils in Colombia generated a cost or economic loss equivalent to 0.6% of GDP in the year 2004. The severe overuse of soil near the water bodies due to agricultural activities (monocrops and illicit crops) reduces water resource supply, compromises the stability of waterbeds, generates erosive processes and sedimentation and reduces the opportunities of the local community to establish productive options environmentally friendly linked to their ancestral knowledge.
15. The main underlying/root causes of this problem include: i) insufficient capacity to implement the environmental regulations and norms on land use and management; ii) lack of measures, incentives and sanctions for the prevention and control of pollution; iii) insufficient enforcement of norms for the protection of the environment, particularly in the management of hazardous substances; iv) unsustainable agricultural practices.
16. Climate change. In the coastal areas of these river basins, threats to ecosystems are associated to climate variability and extreme climate events, oceanographic issues such as changes in salinity, acidification and temperature of the sea, unsustainable fishing practices, disorganized urban expansion and excessive river traffic on important ecosystems such as beaches and mangroves. In the upper areas of these watersheds the natural variability in the climatic system leads to an increasing in droughts and floods which have an impact in the water availability causing stress on Andean and Sub Andean populations. In this sense, climate change can be considered an additional cross-cutting problem that has impact on the transboundary issues previously indicated and one that needs to be addressed in terms of adaptation.
17. The long term solution sought by the project is to ensure the conservation and integrated management of surface and groundwater resources including the maintenance of ecosystem functions associated with the water cycle in the Mira-Mataje and Carchi Guáitara river basins.

Barriers

Main barriers hampering the long-term solution include:

18. Weak institutional governance for managing transboundary water resources and insufficient knowledge of socio-ecological systems. The Carchi- Guáitara and Mira-Mataje binational basins lack from adequate governance mechanisms for managing transboundary waters. The legal frameworks and institutional arrangements do not have provisions for joint monitoring on water quality and there are no instruments to foster sustainable water use or to

establish a system for environmental service payments. The water policies cannot be applied in an inter-sector manner and structures and mechanisms for managing of the binational basins are incipient. It is also recognized that there is limited participation of relevant social actors and that there are still gaps on developing consensus building mechanisms, improving access to information, and providing recognition to ancestral customs and community ways of water management. Knowledge on the socio ecological system is not adequate and the importance of water resources is not fully recognized by the decision makers involved in these binational basins. This prevents from planning and adopting sustainable actions regarding the use, protection and conservation of water and environmental resources in the Carchi-Guáitara and Mira Mataje basins.

19. Limited capacities for IWRM. National and sub-national stakeholders still require improved capacities for the integrated water resource management, including monitoring and enforcement of water quality. Local and regional governments and other stakeholders (private sector) do not have the adequate skills for integrating groundwater and climate concerns/opportunities into development process nor to assess impacts on water resources, while private (specially agriculture sector) and community sectors need to expand their capacities to develop environmentally friendly activities, including water efficient use. In the case of local communities traditional knowledge is being lost and opportunities to continue developing sustainable livelihoods based on this knowledge are constrained.
20. Insufficient demonstration of appropriate practices and technologies. Approaches and technologies for conjunctive use of surface and groundwater have not been tested in critical areas of these basins for their potential of engendering environmental benefits nor in terms of financial feasibility, as it happens with interventions aiming at reducing impacts from mining and agriculture in the river basins and aquifers, and good practices for solid and liquid waste disposal.
 - 2) Baseline scenario and baseline projects
21. Colombia and Ecuador have developed the Binational Border Integration Plan (2014-2022) in which priority has been given to IWRM in the transboundary basins, including the development binational plans for IWRM (BIMWRP). Twenty-two projects have been identified in the Colombian territory and 19 in the Ecuadorian territory, which will be executed in short, mid and long term during 2015-2035.
22. Both countries are working jointly in some activities on managing transboundary water resources:
 - Quality of water – Ecuador and Colombia have gained some progress in monitoring the quality of water of their transboundary basins (Mira-Mataje and Carchi-Guáitara), which reports are available for 2015 and it is foreseen to continue with this monitoring effort during 2016.
 - Management of Water resources – Colombia already has a plan for management of water resources for the river basins located in the border zones, while Ecuador expects to have these plans after 2016.

Colombia

23. The Environmental and Sustainable Development Ministry MADS is currently supporting the regional environmental authorities in the development of the Mira and Guiza River Basin Plans, and the Nariño subnational government water plan.
24. The Autonomous Corporation of Nariño will implement several projects in the binational zone for the conservation and restoration of priority areas critical for the supply of water resources, water cleaning and quality monitoring of priority surface waters, sustainable use of biodiversity and eco-systemic services in strategic ecosystems (mangroves and moorlands) and recovery of ancestral and traditional knowledge for the conservation and sustainable production in the basins of the Guáitara and Mira-Mataje rivers. In the coastal area the Governorship of Nariño is programming actions for the sustainable development through conservation and ecological restoration of strategic land and marine-coastal ecosystems, and strengthening of good governance and environmental culture in the binational zone.
25. In the binational zone the development plan of the Nariño governorship proposes to enhance the conditions of the Drinkable Water and Basic Sanitation sector, through the construction of water works, sewage in Roberto and Magui

Payan and the completion of the 2nd stage of the construction of sewage and the home link-ups of the Barbacoas water works; and for the rural sector, nonconventional solutions for the improvement of drinkable water, waste water and solid waste and access to subsidies for strata 1, 2 and 3. It also sets forth the improvement of conditions of Drinkable Water and Basic Sanitation of the sector in the Coastal Foothill Sub-region, in this sense it will carry out the feasibility studies that lead to the creation of a drinkable water treatment plant for the sub-region, and promoting nonconventional solutions for the supply of drinkable water for the rural sector, treatment of water waste and Integrated management of solid waste.

Ecuador

26. The Environmental Ministry of Ecuador, MAE (for its Spanish acronym), through the National Biodiversity Directorate is currently implementing the Support Program to SNAP (PASNAP) with the support of KWF from Germany, which has the objective of Contributing to the conservation of biological biodiversity and the bases of life of the population through strengthening management and handling of the priority areas of the SNAP in co-responsibility of regional and local actors. For the binational areas the establishment of connectivity corridors for conservation (bio-corridors) is promoted, the functional connection of ecosystems through territorial management, conservation and restoration incentives and sustainable productive processes. This strategy is supplementary to the efforts that are done in protected areas.
27. The National Water Secretariat is currently in the process of implementing the National Plan of Integrated and Integral Management of the Water Resources of Ecuador. It was developed through the situational analysis of the water resources, the current and trending status of development of the economic and social sectors of the country, the study of extreme hydrological phenomena, the determination of the main problems of the resource of water in Ecuador, the objectives of development for the coming years of planning 2025 and 2035, proposes systems for: flood control and safe and complete relief of disasters; Integrated use of water of good quality and protection of water resources, as well as planning of an efficient system of management of water resources.
28. Currently, the Carchi prefecture is implementing the Project: “Design and Implementation of a Border Territorial Development Model for the Enhancement of the Environmental and Life Conditions of the Upper Hydrographic Basin of the Carchi River in Ecuador” INPANDES – PRODECARCHI financed by the European Union through the Andean Community (CAN) aiming at enhancing environmental and life quality of the inhabitants of the zone of intervention and at fostering the links and cooperation with neighboring provinces for the integrated development of the zone. Two environmental and productive initiatives were implemented recently for the conservation of binational water resources, through the following projects: “Sub-national, Binational Model for the Strengthening of Administrative Boards of Water for Human Consumption and Protection of Water Sources” and “Integrated Management of the Binational Biological Corridor el Angel, Chiles, Cumbal, Azufral Quitasol” financed by AECID through the Andean Community (CAN). Additionally, from the year 2013, the Carchi prefecture, develops projects with public resources that contribute to sustainable Integrated management of the Carchi Guáitara and Mira-Mataje, and periodically executes projects such as:
 - Creation of provincial areas of conservation and sustainable use.
 - Protection of water sources that supply the systems of human water consumption and irrigation.
 - Protection of river banks
 - Reforestation and restoration programs
29. The effects of global climate change may alter the conditions of availability of the water resources and increase the recurrence of extreme phenomena that exacerbate the challenges of satisfying water needs (e.g. direct human and economic uses) and environmental degradation. Besides what has been said, increase of demand for water for the population and the productive sectors, resulting of the strong population growth in the urban centers and that contrast with the projected trends of population decrease in the rural realm of the upper and mid parts of the Carchi-Guáitara and Mira – Mataje basins. Increase in the goods and services consumption patterns of the population requires a substantial enhancement of the quality of water services for the population and the recreation in a context of balance with nature.

30. It is also necessary to strengthen the hydrologic, meteorological and quality of water monitoring in the binational basins of the Colombian sector, with the purpose of collecting climate, hydrological information that allows having information on supply, demand and quality of the water resource. This with the objective of generating actual and updated knowledge and information of the water resources of the basins, elaborate the water balance, as well as applying hydrological models in the basins. Likewise, information related to underground water is minimal for the hydrological basins, thus it is necessary to carry out specific studies that allow the identification and characterization of the aquifers, which must be developed gradually. On the other side, it is required to carry out the necessary management for the prevention and control of water contamination in the Carchi- Guáitara basin, especially with water discharge and wastewater. Without a doubt, for the development of the different projects for the protection and conservation of water in the basins, it is necessary to consider the establishment and strengthening of the protected areas, inter-culturally of the territories and their view regarding usage and management of the water resource in their territories.
31. The average cost for implementing BIMWRP of the Carchi-Guáitara and Mira-Mataje transboundary basins for the 2015-2035 period, is estimated in 1.130 million dollars; in the Ecuadorian territory it ascends to 1.086 million dollars, and in the Colombian territory an approximate investment of 44 million dollars (in revision). Taking these estimated costs into account for the development of the different BIMWRP projects of the transboundary basins, it is required the Colombian and Ecuadorian governments define a financing strategy for the priority projects defined in the Plan.
32. Thus it is necessary to strengthen approaches where management of water resources fosters engagement of key local and other sub-national stakeholders (including private sector) defining their roles in a process which is guided by the principles of equity in access and the sustainable use and protection which deserves common good. Likewise, technological innovations that are developed for management of water resources show that they may contribute in great measure to the mitigation of the impacts and the reduction of the impact of the exploitation of the water resources in the water resources and the environment.
- 3) The proposed alternative scenario, GEF focal area⁸ strategies, with a brief description of expected outcomes and components of the project.
33. Intervention of the GEF will cover the incremental costs of the actions required to foster transboundary IWRM in the two shared basins, in coordination with the base line activities of the two countries and some incipient binational initiatives. This is to be achieved by strengthening the institutional and managerial capacities at national, subnational and community level aiming at the protection and sustainable water use, conservation of biodiversity and ecosystem services and the socioeconomic development of the inhabitants of the basins.
34. This intervention would improve knowledge on the social, economic, and environmental impacts resulting from inadequate management of the water resources of the Mira-Mataje and Carchi-Guáitara basins. This joint knowledge with a strengthened institutional and political scenario, acting in an efficient manner through the joint development of the SAP, will promote high level agreements on the priority actions that must be carried out in order to address these impacts. The project will also contribute to the identification of financial needs to implement priority actions to improve the integrated management of the water resources of these two basins. This will gain a greater political commitment, build a shared vision and enhance governance over these two transboundary water systems.
35. With an appropriate institutional framework for binational cooperation in the two basins, Colombia and Ecuador would come to common agreements on the transboundary problems, could identify the priorities and thus establish a common plan of action that promotes technical support and joint financing of the actions for the IWRM. The creation of dialog spaces at the transboundary basin level (binational river basin council), which include participation of the main

⁸ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

interested parties (and incorporate gender approach) will enhance communication, coordination and execution of these joint actions between the two countries. Thus at a binational level, the enhancement of the institutional frameworks and the cooperation abilities, will strengthen the transboundary management of the Mira-Mataje and Carchi-Guáitara basins and will lead to a better distribution of the benefits of the goods and services related to water, both in Colombia as in Ecuador. This will serve as a means to improve regional development and economic integration.

36. In the national realm, the capacities of the local/regional authorities and of the stakeholders for sustainable management and use of the water resources will be strengthened and a better coordination for the execution of the actions will be established. At a community level, the capacities for sustainable management of water resources will be strengthened, with better resilience of the communities and ecosystems to climate change. Fair access to water for sustainable livelihoods will also play a role in the reduction of poverty in a region that features high levels of people with basic needs unmet. The incorporation of the gender perspective in the whole project will ensure that both men and women benefit from the actions implemented and that the relevant concerns and opportunities for each sex be recognized.
37. Besides, the application of measures and actions related to improvement of quality and quantity of water, joint management of aquifers and surface waters in the territory, will lead to benefits for the health of the families that live in the Mira-Mataje and Carchi-Guáitara basins, aside the reduction of the workloads and risks for women. Access to quality water also opens the possibility of economic activities related with food processing and kitchen, which are usually carried out by women. Besides, the more efficient use of water for irrigation, will lead to an increase of agricultural productivity and it will improve the quality of life, as well as the protection of the quality of the soil, that is usually the only economic asset of the families. More availability of water for agriculture will also allow the families to improve productivity and frequency of their crops, which guarantees more food and income during the year. It also allows for the development of production chains generating direct and indirect employment.
38. The project is consistent with the need to foster cooperation for sustainable use of transboundary water systems and economic growth. In this sense the project seeks to support a binational dialogue process aiming at reaching a common understanding on the main transboundary issues, including pressures and drivers, affecting the main river basins shared by Colombia and Ecuador. It is expected that the project contributes to continue unlocking the process towards long-term sustainable development by fostering agreements on key actions for addressing divers of degradation and unsustainable use of water and related natural resources.
39. **Component 1 - Generation of knowledge, information management and diagnostic analysis of the current status of the transboundary water resources (surface and ground waters) of the Mira-Mataje and Carchi-Guáitara binational basins.** A critical outcome for both countries is to identify the priority transboundary issues affecting quality and quantity of water, its vulnerability to climate change and variability and barriers for IWRM, including their immediate and root causes and a governance and stakeholder analysis to further inform the SAP process. The development of this component will allow the elaboration of a systematic and complete evaluation of the Mira-Mataje and Carchi-Guáitara binational basins and aquifers that will allow an understanding between Colombia and Ecuador on current issues affecting their shared water resources.
40. **Component 1 has the following output and sub outputs:**
 - 1.1.1 Transboundary Diagnostic Analysis (TDA) on Mira- Mataje and Carchi-Guáitara basins, based on the secondary information and generation of primary information, including structural causes, future status and dynamics completed and validated. **This project will develop TDA/SAPs for two river basins that are not directly connected, but essential for both countries, it is confirmed that the project will deliver two separate TDAs and two separate SAPs.**
 - Environmental and socioeconomic baseline established.
 - Hydrologic maps updated
 - Baseline assessments of selected aquifers to inform conjunctive management approach in the SAP.
 - Results of TDA are spread at a national and sub-national levels (regional, local and communities).
 - Set of environmental and socioeconomic indicators on status of surface and ground water resources is determined for use in monitoring SAP and NSAP implementation.

- Set of indicators on water use, supply and quality (surface and underground) is determined for use in monitoring SAP and NSAP implementation..
- Risks and measures for adaptation to climate change and extreme climate events identified.

41. **Component 2 - Strategic planning to strengthen governance for transboundary IWRM in Mira-Mataje and Carchi-Guaitara binational watersheds and aquifers:** Once a common understanding on the main transboundary issues is reached among both countries, it is expected that actions required for achieving IWRM of the Mira-Mataje and Carchi-Guaitara basins are identified and integrated into the binational, national and sub-national development plans. To this end policy, legal, institutional and financial instruments, as well as private sector and community conservation mechanisms for IWRM will be identified and agreed upon. The national strategic plans will outline the priority actions of each country for the management of the transboundary basins. The establishment or strengthening of national inter-ministry committees will be promoted to facilitate the application of the national actions of IMWR and will define the structure and responsibilities of these committees. Also, to outline the financing needs to execute the plans.

42. **Component 2 has the following output and sub outputs:**

2.1.1 Strategic Action Program (SAP): Binational Agreements ministerial adopted by the two countries on the priority actions (governance reforms, investments) to address the transboundary issues identified by the TDA in the Mira-Mataje and Carchi-Guaitara basins.

- Binational Integrated Management Plan of water Resources of the Carchi-Guaitara, and Mira and Mataje transboundary basins formulated and in implementation process.
- National Strategic Action Programs in each country.
- Binational basin council established and river basin councils in each countries technically strengthened (including private sector participation)
- Agreed suite of process, stress reduction and environmental and socioeconomic status indicators to monitor the degree of implementation of the SAP and NSAPs agreed.
- Hydrological, meteorological and water quality monitoring mechanisms for the Carchi-Guaitara, and Mira and Mataje transboundary basins strengthened.

43. **Component 3 - Capacity building at public, private and community level enabling the shared IWRM of Mira-Mataje and Carchi-Guaitara river basins:** Improved individual and institutional capacities in both countries to apply IWRM in the binational basins is a prerequisite to progress towards the conservation and integrated management of surface and groundwater resources including the maintenance of ecosystem functions in the Mira-Mataje and Carchi Guaitara river basins. The strengthening of the capacities of the key national and sub-national actors, will be facilitated through implementing a plan to foster the capacity, carefully designed, including the gender, social inclusion and equity approaches. The topics to deal will include the concept of the IWRM, efficient management of the water resources, land order and the Geographical Information Systems, the assessment of environmental changes, design and implementation of adaptation and mitigation measures to climate change and variability, application of standards and incentives on the quality of water and the environmental monitoring systems to control the quality and quantity of water.

44. **Component 3 has the following output:**

3.1.1 Training of key national and subnational stakeholders in IWRM on the Mira-Mataje and Carchi-Guaitara river basins for strengthening the monitoring and control of water quality and availability:

- Land use planning and territorial GIS,
- Environmental impact assessment,
- Integrated water resource management incorporating climate variability and climate change.
- Application of standards and incentives on water quality.

45. **Component 4 -Innovative interventions for testing the socio-economic and environmental benefits from applying the IWRM at selected sites of the Mira-Mataje and Carchi-Guaitara river basins:** This component

proposes the design and implementation of four (4) demonstrative actions (pilot studies) addressed to promote innovative technologies and approaches for the application of IWRM in specific sites. These pilot projects will try to show that IWRM (founded in the protection of the surficial and underground sources of water) is the most effective alternative for the enhancement of the supply of eco-systemic hydrological services, generation of income from the sustainable and efficient use of water resources and its biodiversity in the Mira-Mataje and Carchi-Guáitara binational basins. The gender, social inclusion and equity approaches are structuring considerations for the development of pilot studies in the territory. The lessons learned while executing the pilot projects (for example, stakeholders, difficulties found, opportunities, etc.) will serve to improve the development of the SAP and the decision-making processes related to IWRM. These pilot studies will be linked to the pre-feasibility studies for projects or works that support IWRM in the binational basins. Finally, the results, experience and lessons of the demonstrative actions will be systematized and the analysis of its applicability in the Mira-Mataje and Carchi-Guáitara basins and will be available for the actors of the area, as well as for other projects through participation in IW:LEARN including international conferences of international waters and the establishment of a website consistent with guidance from IW:LEARN. **With the objective of funding the IWLEARN activities at least 1% of the GEF grant will be going towards supporting it.**

46. Component 4 has the following outputs:

4.1. Four (4) small scale innovative interventions on IWRM for ensuring the provision of hydrologic eco-system services and sustainable livelihoods, preserving traditional knowledge on water and biodiversity management in the Mira-Mataje and Carchi-Guáitara binational river basins.

4.1.1 Two (2) pre-feasibility studies on investments required for the transboundary IWRM in the Mira-Mataje and Carchi-Guáitara river basins during the SAP implementation phase.

4.2.1 Systematization of results, lessons and experience from innovative interventions in the Mira-Mataje and Carchi-Guáitara basins is available for relevant national and subnational stakeholders, as well as for other projects through participation in IW:LEARN, included international conferences of international waters and the establishment of a website that is consistent with the IW:LEARN guides.

4) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCE, SCCF, and co-financing:

47. Without the GEF Project, Ecuador and Colombia will continue working individually in projects for management of the water resources and strengthening of the related legal and institutional framework. Nevertheless, this kind of unilateral management of the transboundary basins is inefficient and is not effective in the context of shared water resources management. In spite of the fact that some studies and actions of collection of information will be done, there will still be an insufficient approach on the underground waters/aquifers, on the way to integrate management of underground and surface waters. On the other side, it is unlikely that the two countries identify common monitoring indicators to assess the environmental impact or that they establish systems to consolidate available information in transboundary environmental and socioeconomic topics. Some training activities on IWRM will be done in each country, nevertheless it is probable that these disperse actions do not have a significant transformation impact on the promotion of the transboundary IMWR and that they do not make part of a strategic, integrated and coordinated plan of development of capacities. At a national level, inter-ministry cooperation will be limited due to the lack of inter-ministry structures to facilitate coordination in IMWR.

48. The Governments of Colombia and Ecuador will carry out substantial investments regarding IWRM, which will be strengthened by financing from GEF to ensure environmental benefits at a global level.

Colombia

Strategic Actor	Thematic of investment	Approximate investment
Environment and Sustainable	Support to the regional environmental authorities in watershed planning for the Hydrographic Basin Districts of the Mira and Guiza rivers. Also,	USD\$ 600,000

Development Ministry	watershed planning for the Hydric Resource PORH (for its Spanish acronym) for the boundary basins in the department of Nariño.	
Autonomous Corporation of Nariño	Formulation and implementation of watershed planning for the Hydrographic Basin Districts of Juanambú, Guáitara, Guiza, Mira and Mayo. Implementation of actions for decontamination and monitoring of surface water quality prioritized in the Department, through co-financing projects of pre-investment and / or investment in the framework of departmental watershed planning. Conservation and uses of biodiversity and its eco-systemic services in the strategic ecosystems (mangles and moorlands) and recovery of ancestral and traditional knowledge for the conservation and sustainable production in the coastal foothills and the Pacific Coast.	US\$ 2,920,000
Governorship of Nariño	Promotion of the conservation and ecological restoration of strategic land and marine-coastal ecosystems. Generation of processes of sustainable development and Green growth in the economic, social and services sectors. Generation of environmental governance and culture. Implementation of actions of the Water Departmental Plan for the binational zone.	US\$ 4,500,000

Ecuador

Strategic actor	Thematic of the investment	Approximate investment
Environmental Ministry of Ecuador	Conservation of biological diversity and the livelihoods of the population through strengthening management and handling of prioritized areas of the SNAP in co-responsibility of regional and local stakeholders.	US\$ 400,000
National Water Secretariat	Implementation of the National Plan for the Comprehensive and Integrated Management of Hydric Resources of Ecuador	US\$ 3,800,000
Prefecture of Carchi	“Design and Implementation of a Border Territorial Development Model for the Enhancement of the Environmental and Life Conditions of the Upper Hydrographic Basin of the Carchi River in Ecuador”. Sub-National Binational Model for Strengthening the Administrative Boards of Water for Human Consumption and Protection of the Hydric Sources” and “Comprehensive Management of the Binational Biological Corridor El Angel, Chiles, Cumbal, Azufral Quitasol	US\$ 4,000,000

49. With the incremental support from the GEF, Ecuador and Colombia will jointly identify the main problems that the Carchi-Guáitara and Mira – Mataje basins are facing, through the development of a TDA. Also, both countries will come to an agreement on the priority measures to carry out through the SAPs for each one of the basins, which must be approved by the highest levels in each country. The National Inter-Ministry Committees will be established to facilitate inter-sector coordination that is vital to progress towards the integrated management of the water resources and to guide the implementation of the NSAPs. **Through the establishment of a binational basin council and technical strengthening of river basin councils in each country, the participation of the private sector (mainly agriculture and mining sectors) will be promoted and enhanced.** A plan of creation of capacities will be developed and implemented to strengthen the key aspects related to the IWRM in both countries and this will be integrated into the current structures and programs for the development of capacities to increase sustainability. Pilot projects carefully selected will offer demonstrations of efficient measures to carry out IWRM in the basins. During the whole project, the exchange of lessons learned and results of the project, will reinforce the impact and replication of the project. The pre-feasibility

studies will assess the financial needs to implement the SAPs and the management plans for the basins in Colombia and Ecuador.

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

50. This proposal includes actions that will contribute to global environmental benefits related to the maintenance of the interconnection of the global water cycle that connects the shared basins and aquifers between Colombia and Ecuador. Besides, it is incremental as it identifies bi and multi-lateral solutions to prevent, mitigate or solve possible conflicts regarding the occurrence, regime of domain, exploitation and contamination conditions of these waters, within the legal frameworks, institutions, uses and users, as well as the environmental conditions of the two countries. The governance conditions of the water resources are complex and the conciliation of views between nations is essential in the maintenance of social peace and the development of societies, economies, cultures and environmental conditions. Integrated management of the transboundary water resources will contribute to the integrity of the ecosystems and the conservation of biodiversity. The expansion of the experiences of the IW component of the GEF on development of capacities for management of the mixed water systems within a geographic area with a strong incidence of the extreme climate phenomenon and opportunities for replication of good practices identified by the project, stresses the importance of the project in terms of its environmental impact and the overall positive demonstration. Besides, the justification to carry out these investments is given by the multiple social benefits (external) associated to the universal access to drinkable water access and sanitation of adequate quality. These are, mainly, health of the population, as a positive force to access education and work, alternative solutions and better environmental conditions that will directly affect the quality of life of the population.

2. Stakeholders. Will project design include the participation of relevant stakeholders from civil society organizations (yes /no) and indigenous peoples (yes /no)? If yes, identify key stakeholders and briefly describe how they will be engaged in project preparation.

Organization(s)	Roles/Responsibility
Ministry of Environment and Sustainable Development (MADS for its Spanish acronym)	Executing Partner. It will be responsible for the direction, coordination, execution, and supervision of the project in Colombia, as well as for maintaining adequate communication with other executing partners, UNDP, and the GEF. It is also the institution proposing the Project to GEF, on behalf of the Colombian government.
Hydrology, Meteorology, and Environmental Studies Institute (IDEAM)	Supply of meteorological and climate information of the zone of the Project, as well as information on the impact of the ENOS phenomena in the department of Nariño, the towns of destination.
United Nations Program for Development (PNUD)	Implementing agency of the GEF that will provide guidance, institutional support, and administrative and technical assistance, as well as national-level theoretical and practical knowledge, for effective project execution. Upon request from the executing partners, UNDP could also provide financial and administrative services for project execution.
National Planning Department (DNP for its Spanish acronym)	Supply of information on the government’s investing priorities on the areas of the Project and the projects of development that have been approved. Participation in the consulting process and field visit with regional and local actors.
Ministries of Foreign Affairs of Colombia and Ecuador	Overall guidance in the formulation of the projects.
Autonomous Corporation of Nariño	Associated in the execution of the Project. Support in implementing the Project, articulation of projects on course and investments that are currently

	being proposed and implementation for the conservation and sustainable use of ecosystems and natural resources in the binational.
Departmental Government of Nariño	Associated in the execution of the Project. Support in implementing the Project, articulation of projects on course and investments that are currently being proposed and implementation for the conservation and sustainable use of ecosystems and natural resources in the binational.
National Water Secretariat of Ecuador (SENAGUA)	Executing Partner. It will be responsible for the direction, coordination, execution, and supervision of the project in Ecuador, as well as for maintaining adequate communication with other executing partners, UNDP, and the GEF. Responsible for elaborating and applying the national Integrated management of water policies and in charge of executing the activities of the Project.
Ministry of Environment of Ecuador (MAE) and National Secretariat of Risk Management of Ecuador.	The government institutions in charge of natural resources and environmental disaster risks, national policies and conceptual and technical guidance for the formulation of the Project. MAE it is also the institution proposing the Project to GEF, on behalf of the Ecuadorian government.
Regional, sub-regional and local governments, including the local authorities of water of Ecuador	Responsible for promoting regional, sub-regional and Integrated local development.
Los The water users, the OSC, including women and organizations of indigenous towns in Colombia and Ecuador.	Relevant organizations of the civil society in the geographic zone of the Project, participating in forums and making decisions on management and use of natural resources.

3. *Gender Equality and Women's Empowerment.* Are issues on gender equality and women's empowerment taken into account? (yes /no). If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

51. Gender equality and empowering of women are among the highest priority mandates of UNDP, in as much as full exercise of women and girls' rights in conditions of equality to men, are basic requirements for the promotion of an inclusive and sustainable development. Gender makes up a transversal axis through every component and activity of this Project. In the transboundary basins there is a large number of women, heads of home and the resilience of the families and the communities depends on a great amount, in the resistance ability of women, the strengthening of women is present in every realm; the project integrates a gender perspective in the protection of the environment from the early stages of the implementation of the project. Gender integration is key for every process of the project of the government and management of binational transboundary Water resources. The cycle of training given through the project ensures direct participation of women and men. As part of the mechanisms of execution of the project, special attention will be paid in guaranteeing adequate gender balance in the training and activities and development of skills. According with GEF-6 Core Gender Indicators, this project will include the follow indicators: 3. Share of women and men as direct beneficiaries of project; 4. Share of convention related national reports incorporated gender dimensions; 5. Percentage of monitoring and evaluation reports that incorporates gender equality/women's empowerment issues and asses results/progress.

4 *Risks.* Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

Risk	Rating	Risk Mitigation Strategy
Lack of commitment in the financial investment and participation of the officers of the institutions.	Medium	One of the main risks in implementation of this project is that national governments do not provide sufficient financial support because of the economic situation, or to issues related to programming and budget prioritization. To address this risk and diversify national funding for the project, partnerships with local

Risk	Rating	Risk Mitigation Strategy
		governments and social and community organizations in the area of influence will be promoted at all stages of project development
Resistance of the local communities to the project	Low	Communication of the objectives of the Project to the community. Participation strategies that allow understanding of the communities of their role and the potential benefits that the project brings.
Institutional priorities of local actors change which may lead to a lack of support for the activities of the Project.	Medium	Active participation in forums and workshops related to every activity of the Project in which the aim is the appropriation by the representatives of the different institutions. Articulation with national environmental policies. A broad broadcasting of results strategy in every sector and with different kinds of actors will contribute to recognizing the importance and need to support the processes that contribute to build sustainable and adapted territories.
Unexpected changes in personnel of the counterpart and thus the institutional capacity for the execution of the foreseen activities in the program is lost	Medium	Direct communication with authorities and consultants, active participation of the community with the purpose of maximizing knowledge and management of information that is generated. Participation of more than one representative per institution will be motivated in collective spaces, to minimize the risk of loss of institutional memory of the process in case of existing changes of officers.
Insufficient incorporation of climate variability and change in IWRM planning and other land planning processes	Medium	The integration of the concept of "CC adaptability" is cross-cutting to all the activities and products of the Project. This project will seek to identify and promote solutions that facilitate adaptation and increase resilience of ecological and socioeconomic systems in the Carchi-Guáitara and Mira – Mataje basins.
Deficient baseline information.	Low	Each country has different methods for obtaining data, quality and quantity of information regarding information on the status of the quality of water and use and management of soil and hydrologic behavior in the context of planning for management of water resources. Having a unified management process of baseline information will facilitate making decisions processes based on information and available knowledge. Its further periodical adjustment is based on the learning processes and the availability of information.

5. *Coordination.* Outline the coordination with other relevant GEF-financed and other initiatives.

52. This project will be coordinated with the GEF Small Grants Program (PPD for its acronym in Spanish), financed by the GEF which has been operating since 1994 in Ecuador and 2012 in Colombia and provides funds for community based initiatives. PPD has the challenge of contributing to the generation of community solutions, practices and models of sustainable environmental management, thus contributing to enhancement of quality of life of the local populations. The Strategy of the Small Grants Program states three main realms of work: i) Strengthening of multilevel alliances, as a way to insert and contribute to territorial environmental management (in prioritized landscapes) and national (learning and policy recommendations; special emphasis will be done in promoting alliances with territorial entities, environmental authorities and important entities of other sectors, so that it strengthens the conservation of biodiversity and its eco-systemic services as support to the livelihoods of the local population; ii) ii) assignment of donations that promote and strengthen community processes of conservation of biodiversity that are being carried out, according to

the priorities and lines of work of the Program and the needs and interests of the local population; and iii) support the strengthening of abilities both of ethnic authorities and / or community, as of the groups and community bases, promoting collaboration and learning among peers. Particularly, the project will exploit lessons extracted from works at the community level and conflict resolution for its application in the work of the pilot projects.

53. The UN-REDD Program in Colombia has the mission of supporting strengthening of the national capacities for preparing the country in the implementation of REDD+. This program works coordinately with the Environmental and Sustainable Development Ministry and the Hydrology, Meteorology and Environmental Studies Institute (IDEAM for its Spanish acronym) and with ethnic and social organizations that represent the communities that depend on the forests, in the development of technical abilities and the strengthening of decision-making abilities on REDD+. Likewise, the program is one of the actors within the institutional scheme that designs the National REDD+ Strategy of Colombia, and its actions are concentrated in obtaining five results: 1. Participation: the indigenous, Afro Colombian and peasant populations are first order actors in the implementation of REDD+. 2. Agricultural and forestry emissions, and levels of benchmark. 3. Monitoring of forests. 4. Multiple benefits, including safeguards. 5. Economic and spatial analysis. This project will be coordinated tightly with the UN-REDD Program to take advantage of the richness of the acquired experience and to ensure that every actions of the CMTHR promoted at a local level take into account the findings in implementing the REDD+ strategy.
54. In the country, the GEF is supporting the “National Plan of Biodiversity to support implementing the CDB 2011-2010 Strategic Plan in Colombia – NBSAP” which has the purpose of supporting Colombia to integrate its obligations with the Covenant on Biological Diversity (CDB for its Spanish acronym) in the national planning processes, in the light of the 2011-2020 Strategic Plan of the CDB. The main result is to integrate the Policy for Comprehensive Management of Biodiversity and its Eco-Systemic Services (PNGIBSE for its Spanish acronym), approved in Colombia in 2012, in the national and sectorial planning and development frameworks, through the formulation, communication and implementation of a Strategic Plan of Action for the PNGIBSE Polity, with a long term vision and in harmony with the global guidelines contained in the 2011-2020 CDB Strategic Plan. The TIMWR will take into account the lessons learned from the NBSAP project to ensure that the actions carried out at the basin level through the project are highly consistent with the plans and policies in the local, regional and national realms.
55. In Colombia and Ecuador, the project will also take into account the relevant data on the climate change scenarios of the Third National Communication on Climate Change (2014-2016), which is financed by GEF.
56. Also in Ecuador, the proposed project will be coordinated with the UN-REDD Program implemented by the Ministry of Environment with the aim of Ecuador completes its preparation phase for the implementation of REDD + mechanism at the national level through the implementation of specific activities that are part of the National Strategy REDD + country. The project is being implemented through a national basis which aim to establish a bridge between the national and regional authorities responsible for the formulation and integration of reducing deforestation policies. Knowledge and information provided by the institutions of deforestation monitoring and lessons learned from the pilot projects will be the tools to ensure effective coordination and monitoring between the institutions participating in the project.
57. In Ecuador, this project will be include related actions and coordinate with the National Biodiversity Strategy (NBD) being developed through a UNDP/GEF project in terms of the conservation and sustainable use of BD. UNDP CO will also determine whether the SAPs will contribute to the implementation of the NBD through the pilot work. In addition, the project will review the main findings of the project for the Updating and Alignment of the National Desertification Plan, which is focused on the Southern part of Ecuador bordering Peru, to identify how IW project actions in the three basins will contribute to reduced desertification.
58. The proposed project will coordinate actions with the Project “Development of Landscape Management Approaches in the National System of Protected Areas of Ecuador to improve the Conservation of Endangered Wildlife World Extinction”, which started in 2014 and will be ongoing until 2018. The aim of this project is to adopt a landscape approach to improve large-scale coordinated institutional actions that allow reducing hunting and illegal trade in wildlife. Furthermore, the project aims to provide alternative sustainable livelihood to communities.
59. This project will be coordinated closely with the GEF- Integrated Water Resources Management in the Puyango-Tumbes, Catamayo-Chira and Zarumilla Transboundary Aquifers and River Basins. The project objective is

strengthening the institutional, policy, legal and scientific-technical capacities to implement Integrated Transboundary Water Resources Management in Puyango-Tumbes, Catamayo- Chira and Zarumilla River Basins and Aquifers, integrating climate variability concerns. It will give special attention to integrating groundwater concerns and opportunities and extreme manifestations of climate variability and change in the area.

60. Lastly, in Ecuador the project will coordinate closely with UNDP Cap-Net as an established UNDP delivery mechanism to enhance national capacities in the area of integrated water resources management. UNDP Cap-Net is a partnership of autonomous international, regional and national institutions and networks committed to capacity development in the water sector and makes available online resources, such as training materials, as well as in-person training sessions on a variety of topics related to water resource management.


PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT⁹ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
 (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
MS. DIANA MARTUCCI LARREA	Environmental Planning General Coordinator	MINISTRY OF ENVIRONMENT	7 JULY 2016
Ms. Claudia Vásquez Marazzani	Head of the Office of International Affairs	MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT	15 JULY 2016

B. GEF AGENCY CERTIFICATION

This request has been prepared in accordance with GEF policies¹⁰ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Adriana Dinu Executive Coordinator UNDP-GEF		20 July 2016	Jose Vicente Troya Regional Technical Advisor (Waters & Oceans)	+507 302 4753	Jose.troya@undp.org

⁹ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

¹⁰ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF