REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND:GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: Sustainable Management and Conservation of Biodiversity in the Magdalena River Basin			
Country(ies):	Colombia	GEF Project ID:[1]	4849
GEF Agency(ies):	IADB	GEF Agency Project ID:	CO-T1412
Other Executing Partner(s):	Fundación Natura (executing agency); Ministry of the Environment and Sustainable Development (MADS); Institute of Hydrology, Meteorology and Environmental Studies (IDEAM); Corporación Autónoma Regional del Río Grande de la Magdalena (CORMAGDALENA);	Submission Date:	2016-07-26
GEF Focal Area (s):	Biodiversity	Project Duration(Months)	60
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐ ➢ For PPP ☐		Project Agency Fee ($):	604,545

A. FOCAL AREA STRATEGY FRAMEWORK[2]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Cofinancing ($)
BD-1	Outcome 1.1: Improved management effectiveness of existing and new protected areas.	Output 1. New protected areas (3) and coverage (34,000 hectares) of unprotected ecosystems. Output 2. New Protected areas (2) and coverage (126,000 hectares) of unprotected threatened species (two species of fish: Boca chico -*Prochilodous magdalenae*- and bagre rayado -*Pseudoplatystoma magdaleniatum*)	GEF TF	2,448,600	4,286,500
BD-2	Outcome 2.2: Measures to conserve and sustainably use	Output 2. National and sub-national land use plans (3) that	GEF TF	3,915,000	20,713,500

[1] Project ID number will be assigned by GEFSEC.
[2] Refer to the Focal Area Results Framework and LDCF/SCCF Framework when completing Table A.

	biodiversity incorporated in policy and regulatory frameworks.	incorporate biodiversity and ecosystem services valuation.			
			Total project costs	6,363,600	25,000,000

B. PROJECT FRAMEWORK

Project Objective: Contribute to the conservation and sustainable use of biodiversity in the Magdalena river watershed through the protection of priority freshwater habitats, improved ecosystem health, governance and strengthening of local capacity.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount ($)	Confirmed Cofinancing ($)
I. Conservation of priority areas in the Magdalena River Basin	TA/I	1.1) At least 160,000 hectares of priority freshwater ecosystems declared as protected areas (5) 1.2) At least two legal instruments (environmental determinants) approved and applied to improve freshwater ecosystem's health. 1.3) Improved management effectiveness (from 35.6 to 50.6) of new and existing protected areas covering 348,377 ha	1.1 At least 5 new protected areas have the technical studies and management plans for the declaration process 1.2 At least 3 planning instruments developed (i.e. ecological connectivity, land cover and use, etc.) for Landscape Conservation Mosaics (500,000 ha) . 1.3 Management Plans for the new (5) and existing (4) protected areas are implemented (including, equipment, facilities, training, governance strengthening, etc.)	GEF TF	2,448,600	7,127,598
II. Ecosystem health management total catches of juvenile	TA	2.1) Freshwater habitats and population (10% reduction of total catches of juveniles *Prochilodous magdalenae* and *Pseudoplatystoma magdaleniatum*) enhanced in priority areas	2.1) Fisheries management plans (3) that include environmental sustainability guidelines developed for Barbacoas, Zapatosa and Ayapel (Mojana System). 2.2 Recovery of critical riparian and watershed habitats implemented for at least 300 hectares (co-financing)	GEF TF	2,300,000	17,113,506

		2.2) Planning instruments (i.e. Basin Management Plan, POMCAs, POTs) for national, regional and local levels, which include the mainstreaming of freshwater ecosystems' health and biodiversity considerations, approved and implemented	2.3 Hydrological models (3) that represent strategic hydro-systems developed and applied to understand the impacts of three main threats to aquatic biodiversity (sediments transfer, free-flow interruptions and environmental flows) 2.4 Technical guidelines for freshwater biodiversity conservation criteria developed and included in at least 3 planning tools in the local (POT), regional (POMCA) and national level (Strategic Plan for Magdalena Basin) 2.5At least 30 staff from environmental institutions at national (ANLA, MADS), regional (CARs) and local (municipalities) levels trained in technologies for ecosystem's health management. 2.6 New and refurbished hydro-meteorological monitoring stations placed along Magdalena river. (co-financing)			
III. Monitoring and evaluation	TA	3.1) Environmental Information System of Colombia's (SIAC) has implemented mechanisms for monitoring freshwater ecosystems and associated	3.1.1) Fresh water ecosystem health monitoring System designed. 3.1.2) Measurement and analysis of key monitoring indicators	GEF TF	1,300,000	758,896

		biodiversity.	conducted, including indicators associated with project's outputs. 3.1.3) Project's communication strategy designed and implemented. 3.1.4) Project evaluations conducted			
				Subtotal		6,048,600	25,000,000
				Project management Cost (PMC)[3]	GEF TF	315,000	
				Total project costs		6,363,600	25,000,000

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME ($)

Please include letters confirming cofinancing for the project Sct with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
National Government	Adaptation Fund - Ministry of Environment and Sustainable Development (MADS)	In-kind	10,075,368
National Government	Adaptation Fund - Ministry of Environment and Sustainable Development (MADS)	Cash	806,773
National Government	IDEAM	In-kind	5,231,365
Local Government	Cormagdalena	In-kind	2,841,104
Local Government	Cormagdalena	Cash	758,896
Local Government	Cornare	In-kind	1,631,764
Local Government	CVS	In-kind	1,044,104
Local Government	CVS	Cash	1,000,00
Local Government	CVC	In-kind	344,000
Local Government	Corpamag	In-kind	87,736
Local Government	Corpamag	Cash	240,000
Local Government	Corpocesar	In-kind	150,000
Local Government	Corpocesar	Cash	500,000
Local Government	Corantioquía	In-kind	144,890
Local Government	Corantioquía	Cash	24,000
National Government	Carsucre	In-kind	58,000
National Government	Carsucre	Cash	62,000
Total Co-financing			25,000,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant	Agency Fee	Total

[3] PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

				Amount (a)	(b)[2]	c=a+b
(select)	(select)	(select)				
(select)	(select)	(select)				
Total Grant Resources						0

[1] In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

[2] Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount ($)	Cofinancing ($)	Project Total ($)
International Consultants	680,000	2,271,000	3,351,000
National/Local Consultants	5,179,000	17,729,000	22,908,000

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF[4]

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

The PIF was approved before Colombia published its 5th National Biodiversity Report to the United Nations Convention on Biological Diversity Biodiversity. The report reinforces the importance of the Project's objectives by highlighting the role of ecosystem services and recognizing the importance of biodiversity for different economic sectors and human wellbeing. It provides a list of threats, or drivers of biodiversity loss, that includes mining, hydroelectric development, overfishing, water pollution and climate change. Moreover, the report points out that the condition of freshwater ecosystems has worsened between 2002 and 2012. The Aichi goals addressed by this project's interventions include (i) Goal 6, which deals with management and use of aquatic biodiversity stocks to avoid overfishing using an ecosystem approach, whose progress is considered low in the report, and (ii) Goal 11, which seeks to increase underrepresented freshwater and terrestrial ecosystems by 17%. In addition, these interventions will provide key outcomes in terms of increasing biodiversity awareness, incorporating biodiversity in strategies that reduce poverty and reducing pollution of freshwater ecosystems, and increasing the amount of new freshwater protected areas.

Furthermore, the project's goals and objectives are in line with the new National Development Plan (NDP, 2014-2018). The previous NDP, also includes biodiversity as a key part of the country's sustainable development strategy, and proposes the implementation of pilot projects incorporating sustainability in priority areas, including the Macizo Colombiano and La Mojana, both in the Magdalena Basin. Moreover, the new NDP mainstreams green growth as an umbrella strategy for the whole plan, since it is expected that all sectors contribute towards the achievement of growth that is economic, environmental and socially sustainable. NDP's objectives include i) low carbon sustainable growth, ii) protecting the nation's natural capital and guarantee sustainable use of it, and improving environmental governance, and iii) reducing vulnerability to climate change and natural disasters and achieving resilient economic growth. These objectives are consistent with this Project's goals. More specific goals include reducing deforestation, improving the number of people who are satisfied with the way the environment is managed and the addition of more than 1,480 environmental monitoring stations.

[4] For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

The Integrated Biodiversity and Environmental Services Management National Policy (PNGIBSE, Spanish acronym) recently issued by MADS, introduced the concept of environmental services and "socio-ecosystems" that look at biodiversity and the interaction between local communities. This project addresses several aspects of PNGIBSE including biodiversity conservation and the upkeep of nature, improving governance and the creation of public values, economic development, competitiveness, quality of life, knowledge, technology and information management, and ecosystem services supply risk management. Under these guidelines, the protection of freshwater ecosystems, along with the implementation of conservation strategies and agreements with local communities, and the development of tools to support the decision making process of the environmental authorities, are priorities in Colombia's environmental agenda. Consequently, these changes have made the project even more relevant and aligned to accomplish the PNGIBSE goals.

A.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

The project PIF included the certification of areas under sustainable land use practices (BD-2, Outcome 2.1 and Output 3) and the development of policies and regulatory frameworks for production sectors (BD-2, Output 2). However, during the design phase, and to improve the project's impacts, it became clear that a more narrow focus on freshwater ecosystems related activities would be required. Work on cattle ranching, deforestation and sustainable production has already been undertaken by two GEF Projects (4772, 3754) as well as a new initiative funded by the British government. In this context, the project will not target terrestrial productive sectors but rather focus on providing guidelines for sustainable management based on freshwater ecosystems health.

A new goal related to the establishment of new protected areas of unprotected threatened species (BD-1, Output 2) was included. The portfolio prioritization process identified that new protected areas (i.e. Barbacoas and Zapatosa) are critical places for reproduction of endemic species such as boca chico (*Prochilodous magdalenae*) and bagre rayado (*Pseudoplatystoma magdaleniatum*), which have been declared Critically Endangered by the Biodiversity Information System of Colombia. The project will address this by supporting the creation of new protected areas, implementing management plans in these critical areas and by improving fisheries management and planning.

A.3 The GEF Agency's comparative advantage: NA

A.4. The baseline project and the problem that it seeks to address:

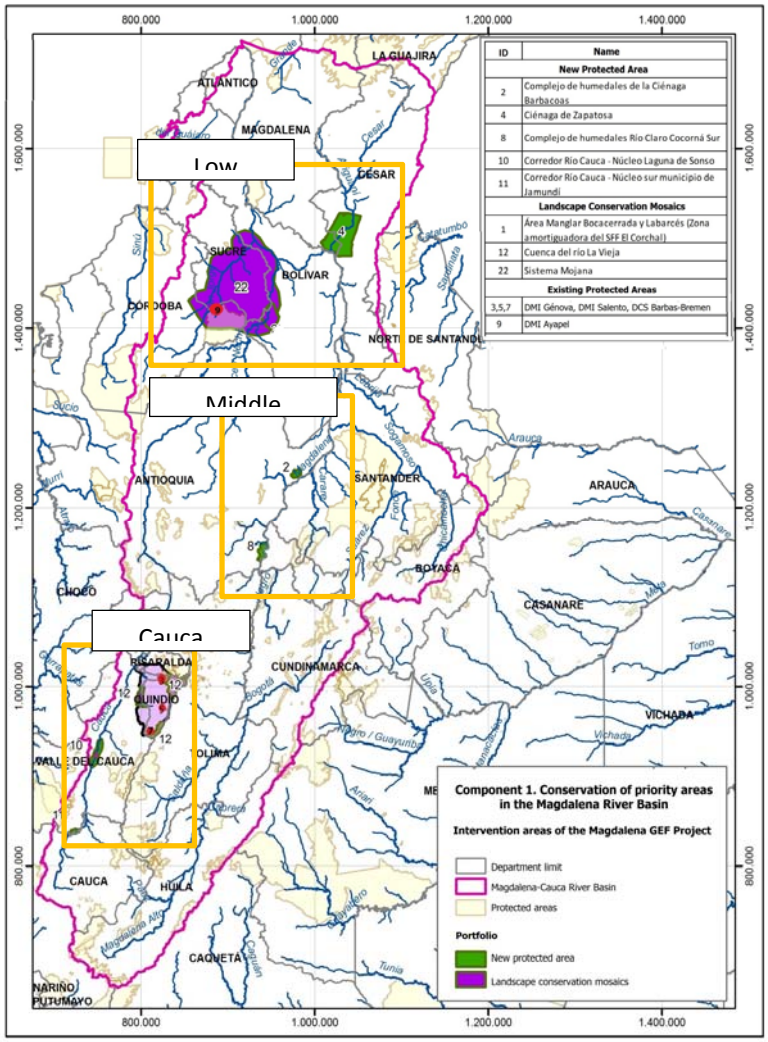
Project Geographic Focus. Starting with the geographic areas identified in the PIF, a further prioritization process was undertaken with the Regional Autonomous Corporations (CARs) generating a conservation portfolio, in which the better-ranked areas were selected for the intervention (see Annex E. Conservation Areas Portfolio). In summary, it identified three geographic clusters, Low Magdalena, Middle Magdalena and Corridor Cauca, each with its own intervention strategy, as shown in Table 1:

Table 1: Conservation strategy and prioritized areas

Clusters	Conservation Strategy	Components Intervention
Low Magdalena	Zapatosa wetland (new PA)	C1: Support new and existent PAs; C2: Hydrological modeling (sedimentation) and fisheries management planning; C3: Monitoring ecosystem health.
	Ayapel wetland (existing PA)	
	Mojana Complex (Conservation Mosaic)	
Middle Magdalena	Río Claro Cocorná wetlands complex (new PA)	C1: Support new and existent PAs; C2: Hydrological modeling (water flow interruption) and fisheries management planning; C3: Monitoring ecosystem health.
	Barbacoas wetland complex (new PA and Conservation Mosaic)	
Cauca Corridor	Sonso Lagoon (new PA)	C1: Support new and existent PAs; C2: Hydrological modeling (environmental
	Jamundi wetland (new PA)	

	DMI Génova (existing PA)	flow); C3: Monitoring ecosystem health.
	DMI Salento (existing PA)	
	DCS Barbas-Bremen (existing PA)	
	La Vieja River Corridor (Conservation Mosaic)	

Figure 1. Conservation portfolio.



While the one of the main instruments to achieve the project's objective of improving the conservation and management of fresh water ecosystems is the creation of new protected areas and improved management of existing ones, in some key areas it is not possible to move forward with a formal declaration process due to social and economic dynamics. For these cases, the conservation mosaics are complementary strategies for managing large areas of high ecological value, with a core area represented by an existing or new protected area (national, regional or local). This conservation mosaics strategy was introduced in 2006 with the GEF project Western Andes's Protected Area Subsystem (GEF ID: 2551) as a means of articulating the country's conservation and development objectives. As a result of the implementation of this concept in the Western Andes project, technical guidelines where developed by the project which were later incorporated into POTs and POMCAs.

<u>Baseline Project</u>

Adjustments were made to the original project strategy and outputs in response to changes in the baseline project. These adjustments were made in order to improve relevance and project's cost- effectiveness. However, the spirit of the original Project remains the same, and the Magdalena River initiative remains relevant in the national context; The improvements to the original proposal took into consideration the national and local contexts, and more emphasis was given to promoting and catalyzing other activities that are being taken by the project's strategic partners that include other government agencies, NGOs, the Regional Autonomous Corporations (CARs) and others.

Since PIF approval, the Adaptation Fund has elaborated guidelines for developing POMCAs (Watershed Management Plan). These plans have already been created for the watersheds included in the project. In addition, The Humboldt Institute has done the macro scale delimitation of wetlands (1:100.000) and for some relevant areas, such as Zapatosa, more detail was used (1:25.000).

Knowing and understanding hydrological dynamics are still priorities for the National Government. For this reason, the National Center for Hydrologic Modeling was launched in 2015, with the support of the Adaptation

Fund and Institute of Hydrology, Meteorology and Environmental Studies (IDEAM). This new institution aims to produce high quality environmental data to support decision-making processes and planning.

CARs have made progress towards identifying conservation areas and developing technical studies required by law for the protected areas' declaration process. This included consultation with the main stakeholders and communities. The project has based its selection of intervention areas upon this work, and CARs will be the main partner in the execution of this GEF project. Moreover, other conservation initiatives in the project´s area have started recently; for example, the GEF project (ID: 3754) will be extended and will be financed by the British Government (US$ 21.7 millions) because of its very positive results addressing cattle-ranching issues. The Consolidation of the National System of Protected Areas Project (GEF ID: 5680) will develop methodologies to measure management effectiveness in regional protected areas, as well as a guide for the design of Management Plans in regional PAs.

Currently, the National Fishing Authority (AUNAP) is implementing a strategy for the sustainable management and competitiveness of artisan fisheries in the Magdalena River, using a broad approach that fosters the development of the communities' self-management capacities. This includes capacity- and investment in fish landing facilities in several harbors, among other activities. This initiative is coordinated with CORMAGDALENA's Action Plan for the recovery of artisan fisheries and the river's hydro-biological dynamic in its flood plain (2015-2018). This plan prioritizes several wetland complexes, including Barbacoas, with the goal of establishing and strengthening at least eight production chains for fish products.

The strengthening of Environmental Information System of Colombia - (SIAC, Spanish acronym) is a priority for the National Government. It is envisioned as an inter-institutional network that will facilitate the generation and exchange of environmental information for decision-making and planning at the national and regional levels. At this time, this system shows lack of understanding regarding freshwater ecosystems and associated biodiversity. There is, however, specific (non-systematic) information on physical and biological variables for most of the project's target areas. It was developed through the use of different methodologies for diverse institutions and purposes. This causes a superficial ecosystem characterization and understanding of its functional ecology, which limits the assessment of its actual state of conservation. For this matter, an interinstitutional monitoring round table was created (2015) in order to structure a framework for environmental monitoring, which aims to define strategic priorities, monitoring goals, protocols, indicators, roles, institutional arrangements, etc.

Institutional Coordination. Fundación Natura, a Colombian NGO with more than 30 years of experience working in conservation projects and finding ways to protect and use biodiversity, will be the executing agency. The Nature Conservancy and the Alexander von Humboldt Institute will now interact with the project as technical partners.

A. 5. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project: NA

The objective of the GEF project remains the same as well as the structure and objective of its components. Given the time period between PIF approval and CEO Endorsement submission, the components' activities have been refined to take into consideration new priorities for the watershed, particularly related to fresh water habitats, the changing nature of the baseline projects, and the linkages that can be achieved by coordinating the activities of the project's components (particularly, the project seeks complementarity between components 1 and 2).

Component 1. Conservation of Priority Areas. While the objective of the component remains the same, the geographic focus has been further refined as indicated in the previous section (A.4) of this document. The type of intervention related to the creation of new protected areas (PAs) has changed, now focusing on a smaller number of PAs, but with a larger coverage (50,000 to 160,000 ha). The declaration of the following five PAs are expected outcomes of the project: i) Zapatosa wetland; ii) Río Claro Cocorná Sur wetlands complex; iii) Barbacoas wetland complex; iv) Cauca River Corridor - Sonso Lagoon; and v) Corridor Cauca – Jamundi. Additionally, the component will work towards the strengthening of the management capacity of four current PAs that cover 188,377 hectares (Génova, Salento, Barba-Bremen and Ayapel). The nine new and current PAs (a total of 348,777 hectares) are part of the prioritized clusters (Low Magdalena, Middle Magdalena and Cauca Corridor) where the

project's activities will occur. These activities include innovative processes, knowledge transfer and capacity-building creation of capacities, in order to enhance ecosystem health.

The new PAs will receive support to complete the technical studies (biological and socio-economic characterization, land tenure analysis, etc.), local communities consultation processes, and the formulation and implementation of management plans. In accordance to law, informative meetings will be held with communities to enhance environmental awareness and agree the conservation strategy for the site, including: boundaries, zoning, permitted uses, community participation instances and management model. Existing PAs will receive support for the implementation of management plans, and in the completion of activities aimed at improving management effectiveness (for example: delimitation and zoning, equipment and facilities, strengthening governance and personnel training).

Additionally, to broaden the scope of ecosystem and biodiversity management beyond the confines of PAs, the conservation mosaic, a more flexible and landscape-oriented complementary instrument, has been included in the Project. This tool will be applied to cover nearly 500,000 hectares, becoming an innovative land management scheme dedicated to protecting the freshwater ecosystems. In this component, the intervention will be focused on building effective land planning and management strategies, while promoting complementarities between the protected areas supported by the project, other SINAP areas and well conserved adjacent private lands. Three conservation mosaics are proposed: i) Mojana System, around the Ayapel Protected Area; ii) La Vieja River Basin that includes three existing protected areas (Genova, Salento, and Barbas-Bremen) and iii) Barbacoas. Conservation mosaics will receive support from the project for the design of territorial planning studies (i.e. ecological connectivity, cover and land use, social dynamics, etc.). Once these studies have been completed, together with the local authorities and local stakeholders, the environmental determinants[5], biological corridors and restoration areas, among others, that will be targeted by the project will be agreed upon. The actions identified by the conservation mosaics will be the basis, and in some cases mandatory, for the Watershed Management Plans (POMCAS) and the Land Use Plan (POT). The implementation of these actions will be developed partially in the component 2.

Component 2. Ecosystem Health Management. The objective of the component remains the same, and while its scope will continue to be both at the basin wide level and in the project specific intervention areas (already defined in section A.4), its activities have been refined to better align the project with current developments and initiatives in the watershed, as well critical priorities. The outputs related to sustainable land management practices are no longer part of this initiative because other initiatives are tackling these issues directly. Additionally, the Adaptation Fund has already developed 10 POMCAS that were originally funded by the Project (output 2.1.1). A first group of actions is aimed at improving and enhancing freshwater habitats, with particular attention given to those wetlands that are important for the reproduction and management of fisheries that includes the "boca chico and bagre rayado del Magdalena", threatened endemic species with significant use and non-use values. These actions will be associated with the protected areas declaration and conservation mosaics within Component 1.

The project will provide funding for: (i) Development of Fisheries' Management Plans for Barbacoas, Zapatosa and Ayapel (Mojana System) PAs. The PA's management plans and actions will be taken into account when creating the fishery plans. An integrated action plan will be performed per area to ensure a better impact and coordinated approach. Additionally to the topcis covered by component 1, the project will support the implementation the fishery management plans with conservation awareness campaigns, training on best practices, community-based patrolling and monitoring. Through co-financing, the fishermen will receive support for the creation of business plans, feasibility study for seccond economic activity in closed season, technical backstopping, marketing, strenghten of the supply chain and other technical assistance, in order to establish a responsible and profitable artisan-fishing model, based on the existing infrastructure and organization; and (ii) Implementation of recovery mechanisms for critical riparian and watershed habitats in at least 300 hectares (co-financing), through a long-term voluntary conservation agreement with landholders –coordinating with component 1-. Areas for habitat

[5] A legal construct in Colombia (*determinantes ambientales*) defined for the purposes of this project as key areas critical for the conservation of threatened species, ecosystems and its services. The type of environmental determinant will then establish how the government will propose to manage the site.

recovery will be prioritized based on the results of the fishery management plans (to improve nursery areas) and conservation mosaics (improved connectivity). The landholders that have to start with a restoration process due to the designation of an environmental determinant or legal compliance (headwater, riparian buffer zone, etc.), will be supported by the project through technical assistance. The CARs and the landowner will finance the investments for forest protection (fences), restoration (planting, nurseries, fences, etc.) and recovery of hydric connectivity (riverbed cleaning). The landowner will commit to keeping these shares for no less than a 10-year period through a bidding instrument (voluntary conservation agreements). When necessary and through the CARs, the project will provide the linkage with other initiatives (projects 4772, 3754) in order to support the improvement of their production systems (mainly cattle ranch,).

The second group of actions seeks to mainstream biodiversity into decision-making processes and planning instruments in the Magdalena River Watershed by generating mathematical models that would improve the understanding of these hydro-systems and the threats to aquatic biodiversity. The project will support the National Modeling Center, led by IDEAM, in integrating ecosystem health into the Center's current modeling efforts and addressing specific geographic areas (complementing activities in component 1). Three areas are considered a priority: Rio La Vieja sub-watershed (conservation mosaic), La Zapatosa (new PA) and Ayapel (current PA). For the first two areas, a better understanding of the links between ecosystem health and hydrological changes is sought, particularly, the relation between water demand (from different economic sectors and human settlements) and environmental flows in La Vieja. For La Zapatosa, an additional focus is the impact of free-flow interruption because of big infrastructure. For Ayapel, the modelling efforts will prioritize the links between ecosystem health and sedimentation patterns in the wetland. The project will finance the technical studies, consultancies, software, satellite images and field data collection.

Studies that translate model results into useful information for decision makers will be generated, as well as technical guidelines to be included in future Land Management Plans - POT, Watershed Management Plans-POMCA and Strategic Plans for the Magdalena Basin. The CARS, ANLA and MADS will be some of the users that will benefit from the models, results and technical guidelines generated by the project. These results will feed into the decision-making processes for granting environmental licenses, water concessions and climate change adaptation plans, among others. In addition, formal training, technology transfer, technical assistance and capacity-building strengthening activities for these institutions are included as part of this Component.

With respect to some of the originally planned activities described in the PIF, the following should be noted. Initially, the project included training for a higher number of staff, however, due to current conditions and scope, the target was reduced. In addition, during the PIF stage, the development of biodiversity and risk mitigation based criteria to improve land use planning was proposed; this action will be addressed using a wider approach, which will include results from strategies for landscape management (Component 1), hydrological modeling (Component 2) and ecosystem health monitoring (Component 3).

Component 3. Monitoring and Evaluation. This component seeks to strengthen the Environmental Information System of Colombia – SIAC, as it relates to aquatic biodiversity and freshwater ecosystems, in order to increase sustainability (and be more cost-effective in its implementation). The SIAC is not an isolated system; it is composed of different sectorial subsystems from regional and national institutions, civil society organizations and universities. Partners for component are: i) the Alexander von Humboldt Institute (IAvH), a technical institution for biodiversity scientific research, including genetic and hydro-biological resources; ii) Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), a public institution that assesses, monitors and manages the scientific and technical information of ecosystems; and iii) National Natural Parks (PNN), the institution in charge of the administration and management of the National Natural Parks System and the Environnmental National System's (SINA) coordination. For this purpose the project, with IAvH´s support, will complete an initial assessment of SIAC to establish the state of the aquatic ecosystem health monitoring. The initial assessment will include a detailed analysis of each system, institutional strengths and weaknesses and recommendations for improvement. Based on the assessment, IAvH will propose, in agreement with system partners, monitoring goals, protocols, indicators, roles, institutional arrangements and an action plan for implementation.

A second group of actions will support the implementation of the SIAC strengthening action plan in order to enhance the measuring of the health of freshwater ecosystems and associated biodiversity. This includes software

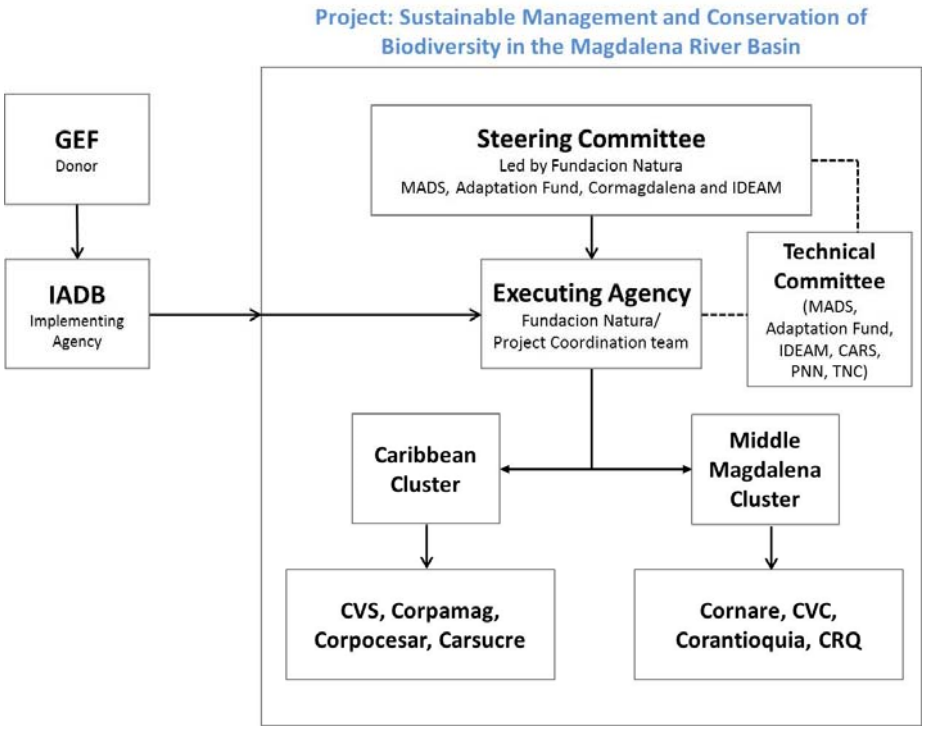
adjustments, equipment, field data collection, short-term consultants and the testing and adjusting of developed protocols if required. Once the system is completed, a monitoring campaign will be launched to establish the state of the aquatic ecosystem health on the new and existing PAs, as well as in the conservation mosaics. Considering the proposed timeframe the monitoring campaign will start the second year of the project, which coincides with the beginning of the field actions on the protected areas and conservation mosaics. This will allow an estimate of the intermediate outcomes for biological conditions, the effectiveness of implemented measures and the project impact. Additionally, there will be coordination with the Project GEF-SINAP (ID: 5680) during the design phase of SINAP´s monitoring system, which will feed into SIAC. Economies of scale are expected and a MoU between key institutions will be signed to ensure commitment and sustainability.

This component will also monitor and evaluate the project's actions and impacts, as described in the M&E Plan. This includes quasi-experimental designs to identify significant changes brought about by the project. Finally, a communication strategy will help disseminate the results.

Project Execution Model. The **Executing Agency** will be Fundacion Natura who is responsible for executing the project and achieving the expected outputs, considering the technical, economic, and environmental and quality standards defined for it. Fundacion Natura has a team of specialists for the implementation and with the project's resources will hire additional support as needed. Additionally, alliances will be established with regional institutions (CARs) to ensure a continuous presence in field and two regional clusters of work (Caribbean and Middle Magdalena) will be created in order to provide oversight the project execution.

Due to the multi-sectoriality of the project and areas of intervention, a **Project Steering Committee** was created. It is comprised of MADS, Cormagdalena, IDEAM, and Adaptation Fund and led by Fundación Natura, whose responsibilities include: supervising the overall development of the project, approving the Annual Work Plans and ensuring inter-institutional coordination among other initiatives.

Moreover, a **Project Technical Committee** composed of technical staff from MADS, IDEAM, Cormagdalena, Adaptation Fund, PNN, TNC and CARS will be created. Depending on the nature of the issues, other organizations may be invited. This committee will be chaired by Fundacion Natura. Its main function is to provide technical advice to the project, supporting the creation of guidelines for action, proposing amendments and improvements to activities as necessary and in compliance with the project results.



Global Environmental Benefits. The project will continue contributing to the same GEB identified during PIF stage. Additional information that supports these GEB is as follows:

i. Each of the selected (new and existing) PAs include threatened species (see annex F).
ii. Particular efforts will focus on the conservation of unprotected threatened species, such as boca chico (*Prochilodous magdalenae*) and bagre rayado (*Pseudoplatystoma magdaleniatum*) in Barbacoas and Zapatosa priority areas.
iii. Increase the representation of protected freshwater ecosystems in Colombia's protected area portfolio from 9.54% to 10.33%.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved and measures that address these risks:

Most risks were dealt with during the PIF phase except for five additional risks that were rated medium or high and are presented here:

Risk	Rating	Mitigation Strategy
Changes in leadership at the CARs and / or administrative procedures (signing of agreements) may delay the implementation of the Project and/or hinder compliance with technical and financial commitments.	medium.	To mitigate this risk, actions aimed at the socialization of the objectives and scope of the program to the (new) authorities of the CARs and other political and institutional bodies involved have been established. Also, organizing activities aimed at informing and having the Steering Committee as advocate with the CARS and other institutions involved in project implementation.
Lack of inter-institutional coordination (National, Regional, and- Local levels). .	high	To mitigate this risk, the project will create a steering and a technical committee composed of all key institutions (related to the Magdalena basin management) from the national, regional and local levels. Including these institutions in the execution model, the project will minimize this risk. Additionally the Project will receive support for coordination with local partners and project strategic planning, among others.
Insufficient commitment/ empowerment/ capacity of stakeholders (fishermen, communities, cattle, sugarcane, other). Conditioning the implementation of Conservation Agreements.	high	This risk is partially addressed in the design stage of the project, where agreements with organizations that are already involved in processes that complement the project are foreseen. To strengthen this commitment the following actions will be undertaken: Awareness Plan for Civil Society Organizations (including fishermen); formalization of agreements with organizations involved in the implementation of the agreements; strengthening their management capacities.
Absence of an approach towards integrated interventions in the basin (infrastructure, hydroelectric, navigability) could affect the ecological structure.	medium.	In order to encourage the consideration of biodiversity criteria and water flow in strategic decision-making regarding the basin, periodic coordination meetings and coordination with other actors and projects operating in the basin will be organized.
Increased impacts of natural hazards (droughts, pests, diseases) intensified by climate change.	medium.	Information on the recurrence and frequency of weather events will be gathered and monitored. Additionally, climate change scenarios will be considered for PA declaration and Management Plans development, in order to reduce vulnerability. In component two, the impacts on biodiversity because of change on water flows (climate change and climate variability included) will be assessed in order to propose adaptive measures that will be included in the planning tools.

A.7. Coordination with other relevant GEF financed initiatives.

The project will coordinated with other GEF initiatives on two levels. The first level includes those projects on where identified specific areas of work, and close coordination were necessary to achieve the projects outputs and outcomes, such as:

(i) Project 5680 - Consolidation of the National System of Protected Areas (SINAP) at National and Regional Levels that will develop methodologies to measure management effectiveness in regional protected areas, as well as a guide for the design of Management Plans in regional protected areas. These tools will be used in the GEF Magdalena project (output 1.1 y 1.3), and will provide feedback (to project 5680) for improving the methodology due to the inclusion of different types protected areas in the testing process. Moreover, both initiatives aim to support the same monitoring systems (SIAC, output 3.1) but in different areas, thus contributing to strengthening the SIAC.

(ii) Project 3554 - *Mainstreaming Biodiversity in Sustainable Cattle Ranching*, which works on the cattle ranching issues. The Magdalena's project with the CARs have agreed with FEDEGAN[6], in order to provide technical support and investment financing for cattle ranchers benefiting from project 3554 and located in the Magdalena project's target mosaic areas, especially with landholders that will pursue a voluntary conservation agreements (VCA) (if the beneficiaries fulfilled the criteria established). Additionally, FEDEGAN will share its experience with sustainable cattle ranching models and arrangements for implementation and funding by the CARs in other target areas.

The second level includes those project that have data, studies, lessons learned and methodologies to be consider as basis for project's execution but not specific coordination mechanism was necessary and defined during the design phase.

(iii) Project 4772 - *Conservation and sustainable use of biodiversity in dry ecosystems to guarantee the flow of ecosystem services and to mitigate the processes of deforestation and desertification*. This project is working on Guarupal, one the main headwaters of La Zapatosa. The land planning tools, cadaster system and environmental management plan, developed by this project will be used in developing the mosaics planning tools as part of component 1 of the Magdalena project. As well, coordination will be implemented in order to include some priorities areas for la Zapatosa, into their restauration actions.

(iv) The project will also coordinate with the PROMAC Project (financed by GIZ) which aims to strengthen the SIAC and support land use planning. Although the PROMAC focuses on terrestrial monitoring, during the project's first year and when the freshwater monitoring goals are completed, coordination will be done through the round table for environmental monitoring which is made up of all the related institutions and initiatives in order to identify synergies and agree on a work plan of collaboration. In subsequent years and upon the opportunities identified, the work plan will be implemented, including performing a monitoring campaigns and sharing information. The tools generated for land planning, outputs and the lessons learned will be analyzed and used to strengthen the planning tools for conservation mosaics developed through component 1 of the Magdalena project.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

During project implementation, the institutional stakeholders will be engaged in many different ways but mainly through the institutional actions of the different CARs (regional environmental authorities) and the steering committee. The CARs are key partners along with CORMAGDALENA, IDEAM and MADS and have significant reach in the field. In addition, the experience of Fundacion Natura as executing agency engaging other local NGO's and communities will play an important role, reaching the different stakeholders in the project through the Project

[6] National Livestock Producer Federation of Colomnbia

Coordination Unit. Moreover, during the design stage local stakeholders (NGOs and community-based organizations) and key coordination instances for the conservation goals and sustainable fisheries management in the project's area were identified, such as Federation of Environmentalist Fisherman of the Cesar Department, Humedales Foundation, Regional Sub System of Protected Areas of the Caribbean, National Environmental Forum and Biodiversa Foundation. Other organizations that will provide technical expertise include: The Nature Conservancy, which will provide technical assistance in Component 2; the Humboldt Institute, which will provide leadership in designing the monitoring system in Component 3; Natural National Parks, a key institution to provide support with Component 1 activities through the National System of Protected Areas - SINAP; and the National Fishing Authority (AUNAP) on issues related to fisheries.

The approach with the mentioned organizations will be defined case by case, most of them are part of the steering and technical committees and formal MoU are requested before the project's implementation start. If it is necessary, other organizations may be part of these committees and specific work plans will be agreed for the matter of interest. For example, to strength the governance, enforcement and compliance in protected areas, a decision-making body must be created with members from government institutions, key local organizations and community representatives.

Careful and extensive work with local communities and economic sectors will be developed in order to agree on the boundaries and the governance model for new PAs , as well as for the establishment of the conservation mosaics. In accordance to law, consultative and informative meetings will be held with communities to improve the understanding of their dynamics, enhance environmental awareness and agree the conservation strategy for each site, including boundaries, zoning - permitted uses and decision-making instances for community participation, among others. The most challenging part will be to reach the agreements that allow the conservation of the key areas and maintain/ improve the life conditions of the communities. However including communities since the beginning advocates self-determination, inclusion and equality, and might avoid conflicts on the declaration process.

For the implementation of the management plans, creating or strengthening governance models of the each PA will be a priority, which includes the rightholders and stakeholders (including local communities and actors entitled because of gender and social equity) participating effectively in PA management. Enforcement and compliance actions will be performed, including increase enforcement capacity (government), increase awareness-raising at local community level, improved leadership and community-based management (promote local respect) and provide basic problem/solution oriented training. When it is possible, local workforce and material will be used.

The project will engage local communities and farmers to be part of the Voluntary Conservation Agreements (VCA), based on current regulatory requirements and the ecosystems services provided the wetlands. The actions identified by the VCA expect to restore 300 ha that will be implemented through cofinancing from local partners and landholders. The landholders will be supported by the project through technical assistance and they will commit to keeping these shares for no less than a 10-year period.

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

Local communities' incomes are declining while natural resources are degraded, particularly in fishing communities, Households in these communities are trying to increase their income reduce their economic uncertainty. Fisheries represent a vital livelihood option and an important protein source for the poor. Millions of people in rural areas are seasonally or occasionally dependent on fisheries-related activities. However, these important resources are threatened by poor management and continued overexploitation.

Local budgetary allocations are rarely directed towards natural resource conservation and weak governance undermines many initiatives. Investment in effective resources management and governance and maintaining ecosystem health, is the major foundation and a prerequisite for supporting and improving livelihoods of small-scale fisheries. In this context, socioeconomic benefits delivered by the project's investments and actions should be significant. First, any efforts directed towards highlighting the role of biodiversity and a thoughtful use of the

territory in a participatory process will yield important socio economic benefits. The declaration of more than 160 thousand hectares as protected areas and the development and implementation of their Management Plans should generate many different benefits, both direct and indirect. This, combined with the promotion of sustainable fisheries will increase food security and protein intake by local populations that are vulnerable from an economic point of view, generating important social benefits.

Protecting these resources will also result in better health for freshwater ecosystems that produce food for many local populations. Furthermore, the implementation of conservation mosaics will allow for the generation of benefits from biodiversity, while preserving critical habitats. Additionally, by uniting catalyzing ongoing processes the project will guarantee the generation of additional benefits with little investment.

Equally important is the positive impact that the project could have in the post-conflict context. Traditionally, it has been observed that once armed groups disappear, an intensive colonization process results in illegal extractive activities. The creation of new protected areas in problematic zones will increase governance and allow for inclusive sustainable development among local communities.

This approach can effectively integrate marginalized groups into the community, allowing them to participate in the process of managing access and providing resources to improve freshwater ecosystems, ultimately increasing their sense of belonging and worth in local communities.

Inclusion of a gender equitable perspective in the design, monitoring, and evaluation of new and existing protected areas supported by the project will be a key implementation issue which will have a positive impact on the social fabric of communities living in those areas. As mentioned before, since the design phase focuses on the prioritization of intervention areas, the results matrix addresses a macro scale. However, during the first year of the project's implementation, the technical studies and baseline will be carried out that will analyze gender related issues and propose detailed actions for its consideration. Moreover, when the social assessment is completed it will consider including indicators in the monitoring system to record progress toward gender equity, such as changes in power relations between men and women, number of woman participating in activities and women's access to resources, etc.

In order to include a gender-based approach, the project will consider the following for every initiative: i) planning and evaluation data will be disaggregated by sex; ii) differences in activities and management styles between men and women will be recognized; iii) identifying the needs, interests, knowledge and behaviors by gender which will shape the conservation initiatives; iv) lead training activities for people who live on or manage the protected areas, about gender issues and their connection with conservation and sustainable land use; v) adjustment of situations and conditions to make women feel more comfortable about participating; vi) incorporate a gender perspective into educational materials; vii) ensure the effective participation of women in the governance model for protected areas, among others.

B.3. Explain how cost-effectiveness is reflected in the project design:

The project design includes different approaches to increase cost-effectiveness. By partnering with the CARs (regional environmental authorities) the project is tapping into a wide and solid network of collaborators, are usually well funded and have presence in and knowledge of the territory. These CARs will also provide significant co-financing further leveraging project resources. This partnership will allow the project have greater impact in the territory at considerably less cost. The project will allocate only 33% of the required amount to finance the PA declaration process due to previous studies developed by CARs. Additionally, the CARs have included resources for habitat restoration and conservation agreements in the action plan (2016-2018) with production sector in the project intervention areas. This provided the Project with significant co-financing (at least by a factor of 5).

New and existing protected areas (PAs), that will be directly impacted by the project comprise close to 350,000 hectares. However, the "mosaics" that the project seeks to promote will include an additional 500,000 hectares, bringing the total area to be impacted by the project to more than 800,000 hectares. Moreover, with the new knowledge generated by the Project, the CARs will be able to target effective actions against the main threats for freshwater ecosystems.

At the same time, the new project strategy takes advantage of existing computational systems for decision-making. Previously, the project was going to develop its own information system. However, adjustments were made to the strategy to take advantage of previous institutional agreements, facilities and outputs generated for the Environmental Information System of Colombia (SIAC) that save $4.3 million[7]. The relevant stakeholder institutions have committed to including new indicators on theirsystem and to cofinance the monitoring camping, during and after the project duration.

The project will link with efforts related to the hydrological model, developed for the Zapatosa, La Vieja and La Mojana system with a total investment of $15 million. Without this hydrological information, equipment and local capacities enhancement provided by IDEAM and Adaptation Fund, the project would not be able to understand the impacts on aquatic biodiversity.

By taking advantage of key partnerships, working with existing initiatives and strong monitoring and evaluation the project strategy will maximize its cost effectiveness.

C. DESCRIBE THE BUDGETED M &E PLAN:

The project's Monitoring and Evaluation plan is incorporated into Component 3 and includes keeping track of the evolution of outputs, outcomes and the project objectives as presented in the Result Framework in Annex A. Monitoring of activities will include oversight of processes and project milestones while the evaluation will focus on the achievement of results and overall project impact based on the stated objective. The project will monitor progress in achieving outputs and outcomes, based on the results matrix.

The IADB has established procedures and tools for project monitoring and evaluation. These include the results matrix, annual work plans and procurement plans. The evaluation plan includes a small-scale impact evaluation to monitor the project's effect on the Barbacoas lagoon, where a series of project activities will be implemented. The results matrix contains a description of the main activities and outputs by project component; for each product, there are indicators and yearly goals to simplify follow-up. The annual work plan includes activities to be executed each year while the progress monitoring report keeps track of project advances.

The executing agency will provide updated financial information and monitoring will be carried out according to the policies and procedures of the Bank and the GEF. Annual reports will be submitted to the Bank and the Steering Committee as well as stakeholders. Evaluation activities will focus on achieving results and the overall impact of the project, in accordance with the milestones set.

Performance evaluations. An external mid-term evaluation will be conducted when 40% of the IADB/GEF resources are disbursed, or 30 months after project start, whichever comes first. The midterm evaluation will determine the progress towards achieving the stated goals, the level of stakeholder involvement, positive changes in the beneficiaries because of the intervention and changes to be made to the implementation strategy.

In addition, a final evaluation will be conducted once 80% of the project resources are disbursed, or in the last three months of the project, and will focus on the same areas mentioned above including conclusions related to the results of the project. The final evaluation will examine the sustainability of project results, which include its contribution to strengthening national and local capacity, and will identify the lessons learned from the project and recommendations for implementation in similar operations. Evaluation costs are included in the project’s budget. The IADB will hold a closing metting to discuss the results of the final evaluation with the executing agency, the steering committee and other relevant organizations. An indicative budget is presented below:

[7] This amount is not included in the cofinancing since it was executed before the eligible period time but it is estimated to be $3.2 million.

Budget Line Item	Cost
Component 3 Coordinator (30%)	50,400
Mid-term evaluation	25,000
Final evaluation	35,000
Impact evaluation	168,900
Total	**279,300**

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

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

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
ADRIANA SOTO	VICE-MINISTER	**MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT**	**03/01/2012**

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
MICHAEL COLLINS- IDB		07/26/2016	Fernando Balcazar	+57-3257000	fernandoba@iadb.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

ANNEX A: PROJECT RESULTS FRAMEWORK

Project Objective	Contribute to the conservation and sustainable use of biodiversity in the Magdalena river watershed through the protection of priority habitats, improved ecosystem health, governance and strengthening of local capacity.

OUTCOMES/ INDICATORS	Unit of Measure	Base (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	Goal	Verification/Assumptions
Outcome 1: Enhanced representation of freshwater ecosystems in the Protected Areas National System of Colombia (SINAP)									
Indicator: Freshwater ecosystems representation in the SINAP.	percent	9, 54%	-	-	-	-	-	10,33%[8]	*Means of Verification:* Progress Report of the National Biodiversity Strategy *Assumptions:* The identified protected areas were declared as such.
Outcome 2: Improved conservation of freshwater ecosystems in the Magdalena river basin									
Indicator 1: New protected areas declared	Ha	-	-	-	80,000	80,000	-	160,000	*Means of Verification:* Administrative Acts declaring the protected area. Fieldwork reports. *Assumptions:* Political will to declare the protected areas is maintained *Comments:* The declaration will be a prerequisite to finance the implementation of the Management Plan
Indicator 2: Legal instruments for conservation (environmental determinants) adopted by the CARs in the mosaics areas	Environmental Determinants	0	-	-	-	1	1	2	Means of Verification: CARs' Administrative Acts adopting the Environmental Determinants (1 per Landscape Conservation Mosaic) Assumptions: Political will to declare the Landscape Conservation Mosaics; and – wherever applicable- a proper coordination between competent CARs within the same Mosaic. *Comments*: Environmental Determinants are directives, guidelines, concepts and regulations that allow proper acknowledgment of the environmental component in the Land Use Plans

OUTCOMES/ INDICATORS	Unit of Measure	Base (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	Goal	Verification/Assumptions
									(POT: Plan de Ordenamiento Territorial) and the River Basin Management and Land Use Plans (POMCA: Plan de Ordenamiento y Manejo de la Cuenca). They are very effective tools to manage the environmentally sensitive areas within the Landscape Conservation Mosaics.
Outcome 3: Improved management effectiveness of new and existing protected areas									
Indicator: Management effectiveness score of the 9 protected areas	Average percent	35,6	-	-	-	-	50.6	50.6	*Means of Verification*: Effectiveness Tracking Tool application (Baseline and final scores) *Assumptions:* High coordination with the GEF-SINAP project. The intervention in the 10 prioritized protected areas continues. *Comments:* The management effectiveness tool will be applied to the 9 protected areas in which the project will intervene (4 existing and 5 new areas). The possibilities to compare the results of the original Effectiveness Tracking Tool and the new Management Effectiveness Tracking Tool to be developed within the GEF-SINAP project should be addressed early on.
Outcome 4: Improved populations of threatened fish species in Barbacoas and Zapatosa.									
Indicator 1. Reduction of total catches of juvenile *Prochilodus magdalenae*	Percent	80	-	-	-	-	-10	70	*Means of Verification*: Field ecological sampling in key sites in Barbacoas and Zapatosa and others key wetlands to be defined in Middle Magdalena. Official informacion from AUNAP. *Assumptions:* AUNAP and CARs' political will and participant fishermen's cooperation *Comments:* Zapatosa and Barbacoas were chosen to measure the indicator. From 2010 to 2013, there was decreased of 6% (average) on the size of catches for both species. The project expects to reverse the process and decrease the juvenile catches by 10%

OUTCOMES/ INDICATORS	Unit of Measure	Base (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	Goal	Verification/Assumptions
Indicator 2. Reduction of total catches of juvenile *Pseudoplatystoma magdaleniatum*	Percent	64	-	-	-	-	-10	54	*Means of Verification*: Field ecological sampling in key sites in Barbacoas and Zapatosa and others key wetlands to be defined in Middle Magdalena. Official informacion from AUNAP. *Assumptions:* AUNAP and CARs' political will and participant fishermen's cooperation *Comments:* Zapatosa and Barbacoas were chosen to measure the indicator. From 2010 to 2013, there was decreased of 6% (average) on the size of catches for both species. The project expects to reverse the process and decrease the juvenile catches by 10%%
Outcome 5: Environmental Information System of Colombia (SIAC) strengthened to monitor freshwater ecosystems and associated biodiversity.									*Means of Verification:* Ecological monitoring systems of the SIAC. Memorandums of Understanding and/or Commitment agreements for the regular updating of the indicators. *Assumptions*: The member institutions of the National Environment System of Colombia (SINA) have the political will to incorporate new indicators in the SIAC. *Comments:* The indicator's goal is tentative; it will have to be updated after the project's ecological monitoring system is designed.
Indicator: freshwater ecosystems health indicators included in the monitoring systems that compose the SIAC	Indicator	0	-	-	-	2	3	5	

Component 1: Conservation of priority areas in the Magdalena River Basin	Unit of Measure	Base (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	Goal	Verification/Assumptions
Output 1.1: Technical studies and management plans for protected areas developed	Plans/ Studies	0	-	1	2	2	-	5	*Means of Verification*: Management Plan documents. Administrative Acts officially approving the Plans. *Assumptions:* The protected areas have been officially declared as such or the essential conditions for the declaration are met. The approval process of the Management Plans requires political will, and the administrative act itself involves elements that are not fully under the project's control; this risk has to be managed appropriately.*Comments:* The output refers to the new protected areas. The existing 4 protected areas already have an officially approved Management Plan.
Output 1.2: Planning instruments for Landscape Conservation Mosaics developed	Instruments	0	-	1	2	-	-	3	*Means of Verification:* Landscape Conservation Mosaics management tools documents. *Assumptions:* (wherever applies) Proper coordination between competent CARs within the same Mosaic. Intervention in the prioritized areas continues. *Comments:* No specific management tool for the mosaics has been defined. Regardless of the type of the environmental/land planning tools developed, they will have to take into account the Mosaic's design, and produce technical guidelines and the Environmental Determinant to be followed in the POTs and the POMCAs
Output 1.3: Management plans for new and existing protected areas implemented	Plans	0	1	2	3	3	9	9	*Means of Verification:* Project's reports. Field inspection reports. CARs' Annual Investment Operative Plans and Annual Management Report *Assumptions:* The Management Plans are officially approved by CARs and include a Program to strengthen management capacities for the protected areas. Co-financing for the Management Plans' implementation continues. *Comments:* The implemention of the Management Plans' actions requires these to be officially approved. The supported actions must be consistent with the Management Plan programming and will correspond to the Action Plan –for management strengthening-. This product includes actions in both the existing and the new protected areas

Component 2: Ecosystem health management	Unit of Measure	Base (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	Goal	Verification/Assumptions
Output 2.1: Fishery management plans that include environmental sustainability guidelines developed	Plans	0	-	-	1	1	1	3	*Means of Verification*: Fishery Management Plan Documents *Assumptions:* Fishermen groups and institutional stakeholders at regional and local level maintain their interest and collaborate in the Plans' development. *Comments:* These interventions to improve the fishery resources and to reduce pressure to them will be carried out in protected areas and in designed landscape conservation mosaics with an officially approved Management Plan,. At those sites, the project can make interventions that contribute to fishery management. The areas are tentatively identified are Barbacoas, Zapatosa; and Ayapel (Mojana System).
Output 2.2: Areas under conservation agreements for recovery of critical riparian and watershed habitats	Ha	0	-	-	50	150	100	300	*Means of Verification:* Project reports. Signed Conservation Agreements. Fieldwork reports. CARs' annual reports. *Assumptions:* Signer groups of the conservation agreements maintain their interest in its implementation. CARs' co-financing is confirmed. *Comments:* Restoration and conservation actions will be co-financed by the CARs
Output 2.3: Hydrological models that represent strategic hydro-systems for conservation developed	Hydrological models	0	-	3	-	-	-	3	*Means of Verification:* Models developed by IDEAM with the project's support. *Assumptions*: IDEAM's partnership and political will to lead the modeling process are maintained. Key aspects of the hydro-systems functioning and variables to be addressed in the models are conceptualized and agreed. *Comments*: The areas tentatively identified for the modeling are Zapatosa (hydrologic regime), Ayapel (sedimentation); and Rio La Vieja (water flow).
Output 2.4: Technical guidelines for fresh water biodiversity conservation developed to be considered in the environmental planning and management instruments	Guidelines	0	-	-	1	1	-	2	*Means of Verification:* Technical studies are based on the model's results *Assumptions*: IDEAM's partnetship and political will to technically lead the modeling process are maintained. *Comments:* Two technical studies will be carried out: (i) to produce technical guidelines on how to apply the models' results in the environmental and land use plans (at least one at the local level –POT-, one at the sub-basin level –POMCA- and one at the basin level - Strategic Plan for the Magdalena Basin-); and (ii) to assess the models' information replicability in other areas of the basin.

Output 2.5: Environmental institutions from the national, regional and local level, trained on ecosystem's health management	Persons	0	-	-	-	30	-	30	*Means of Verification:* Training events reports. Software and models certificates *Assumptions*: The people chosen by the institutions for the training meet the requirements and have appropriate background *Comments:* It is foreseen that staff members of institutions from the national level (MADS, ANLA, etc.), regional level (CARs) and local level (Municipalities, etc.) will be trained.
Component 3: Monitoring and Evaluation	Unit of Measure	Base (2015)	Year 1	Year 2	Year 3	Year 4	Year 5	Goal	Verification/Assumptions
Output 3.1: SIAC Proposal for strengthening designed in order to improve fresh water ecosystem health monitoring	Proposal	0	-	1	-	-	0	1	*Means of Verification:* Proposal of the ecological monitoring system developed *Assumptions*: The member institutions of SINA will cooperate with their monitoring system, and show willingness to host the project's monitoring system. *Comments:* The project will assess the existent monitoring systems of the SIAC, and develop a proposal for a freshwater ecosystems health monitoring system. This system could include indicators to be measured in a specific intervention area of the project (e.g. Barbacoas)
Output 3.2: Ecosystem health monitoring system implemented	% of implementation	0	-	-	10	40	50	100	*Means of Verification:* Data collection results. Fieldwork reports. Project reports. Monitoring system reports. *Assumptions:* National and regional institutions contribute with their counterparts in data collection. *Comments:* Data collection activities will be co-financed
Output 3.3: Project communication strategy implemented	% of implementation	0	-	20	20	30	30	100	*Means of Verification:* Develop the Communication Strategy document. Project reports. Communication and dissemination tools. *Assumptions:* Social and political conditions to disseminate project´s activities remain stable, both at the basin and at the national level. *Comments:* As part of the communication and dissemination activities, a national meeting / forum is anticipated in the last year of the project.
Output 3.4: Mid-term and final evaluation carried out	Reports	0	-	-	1	-	1	2	*Means of Verification:* Evaluation reports. *Assumptions:* Baseline data availability at the project's begining. Ecological monitoring system properly functioning. *Comments:* Impact evaluation will rely partially on the data of the freshwater ecosystems health monitoring system, and will focus on the sustainable fishery intervention.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Subject	Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF	Agency Answer
Germany requests that the following requirements are taken into account during the design of the final project proposal:	The German Government (BMZ) through the German International Cooperation Agency (GIZ) provides support to Colombia through the implementation of the bilateral project PROMAC (Environmental Policy and Sustainable Management of Natural Resources). Within the efforts of donor coordination it is requested that the final project document specifies ways of collaboration/ coordination.	A more detailed explanation may be found in section A7.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[9]

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF:			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF/NPIF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Definition of the structure for Component 1: Conservation for Priority Areas in the Magdalena River Watershed	55,000	56,298	56,298
Consultation workshops	20,000	13,100	13,100
Hydrological modelling	30,000	11,000	11,000
Development of studies and instruments for project implementation	75,000	75,000	75,000
Design of Component 3		11,000	11,000
Rapid Assessment of artisanal fisheries for Barbacoas, Zapatosa and Ayapel wetlands.			13,602
\Total	180,000	166,398	180,000

[9] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

ANNEX E. CONSERVATION AREAS PORTFOLIO.

The Magdalena basin's freshwater ecosystems require a wide range of actions, since their ecosystem characteristics, status, restoration needs, conservation and management are extremely diverse. The Basin boasts remarkable biodiversity; it includes most of the main ecosystems of the Andean region and of the Colombian Atlantic coast, with more than 250 mammal species, 800 bird species, 400 amphibians and more than 215 fish species, including 50 endemic and 30 threatened (TNC, 2015). Consequently, these ecosystems are highly critical areas to conserve threatened species of local and global importance (Annex F).

After a participatory process of identification and prioritization with the CAR and the Technical Committee of the Project, the Conservation areas' portfolio was defined. According to the heterogeneity of the biophysical and social contexts, two management mechanisms were defined:

i) The declaration, planning and management of new protected areas under regional processes and categories as defined by the Decree 2372/2010. Five protected areas were prioritized:

- **Zapatosa** wetland, which plays a vital role in maintaining the hydrological balance in the Cesar and Magdalena rivers, especially the latter, which because of its magnitude could generate a devastating effect downstream. It is also the largest reservoir of fresh water in Colombia and holds one of the most important fisheries in the country.
- **Río Claro Cocorná** Sur wetlands complex; which store water during the rainy season and releases it during the time of the minimum levels. Moreover, these wetlands are essential habitats for fish and migratory birds.
- **Barbacoas** wetland complex; which is part of the biodiversity hotspot Tumbes -Chocó -Magdalena, home to a large number of species, many of which are endemic and critically endangered. Barbacoas is a critical manatee habitat and still has very high fish productivity. In terms of water regulation, the complex plays a key role as one of the largest bodies of freshwater in the basin.
- **Cauca River Corridor - Sonso Lagoon**; which is part of the dry tropical forest ecosystem, including the lagoon and 13 wetlands under local protection by the municipality. These key ecosystems have become the last refuge of importance for exceptional flora and fauna in the plains of Valle del Cauca. In terms of water regulation, Sonso Lagoon and its wetlands play a vital role in controlling the flood damage potential of the Cauca River flood as the main tributary of the Magdalena.
- **Corridor Cauca – Jamundi**; which is part of the dry tropical forest ecosystem in the plains of Valle del Cauca. These ecosystems store sediments and nutrients of the Cauca River, purifying the water used by the aqueduct of the city of Cali.

ii) The implementation of landscape conservation mosaics, defined as networks of protected areas and complementary landscapes that combine different strategies, conservation initiatives and management to promote sustainable use of biodiversity and local development. Three areas were prioritized:

- **La Mojana** complex has an area of 826,385 ha and the project will seek to establish a conservation mosaic on 438,409 ha around the Ayapel wetland. The complex is a high conservation value area but is threaten by the establishment of pastures for livestock and illegal mining. From 2005 to 2010, 15,000 hectares of forest were deforested in critical areas for biodiversity conservation. Currently, there is an only 18% of natural forest in the basin causing major effects on the water quality in the basin. The impacts identified are mercury accumulation on fish species and increasing sedimentation levels.

- **La Vieja River Basin** covers 288,000 ha that includes three existing protected areas: DMI Genova, Salento Barbas Bremen, and the riparian corridor. The project will target 52,712 ha for the establishment of a conservation mosaic. From 2005 to 2010 2,852 ha of forest were lost due to deforestation (IDEAM, 2014), which is alarming considering that less than 20% of the basin is covered by forest. This area is important for the country's economy due to its strategic location with agricultural, industrial and tourist economic activity and it provides water to cities such as Armenia and Pereira. The productivity dynamics of the area impacts the Cauca River, the main tributary of the Magdalena basin, by increasing the sedimentation rate. In this regard,

the implementation of conservation strategies in this region will contribute to the recovery of the Magdalena Basin.

- **Barbacoas wetland** complex and its area of influence covers 44,000 ha, of which the project intends to promote conservation a mosaic in 8,879 ha. This area is an essential habitat for flora and fauna species, including two (2) threatened and endemic fish species: Bocachico (*Prochilodus magdalenae*) and Bagre rayado (*Pseudoplatystoma magdaleniatum*) targets of the project. From 2005 to 2011, 371 ha of forest transformed to a different type of cover (Fundacion Biodiversa, 2014). This happened mainly in riparian areas and headwaters. This change caused by the establishment of new areas for cattle ranching, exacerbated by new access roads, led to the loss of forests and biodiversity causing significant impacts to the regulation of the basins upstream.

Conservation Strategy	Total Area (ha)
New Protected Areas	
Zapatosa wetland	134,488.80
Río Claro Cocorná wetlands complex	13,525.29
Barbacoas wetland complex	7,721.18
Sonso Lagoon	20,947.10
Jamundi wetland	3,285.45
Total (1)	**179,967.82**
Existing Protected Areas	
Génova (DMI)	8,463.17
Salento (DMI)	29,429.39
Barbas-Bremen (DCS)	4,963.20
Ayapel wetland (DMI)	145,522.00
Total (2)	**188,377.76**
Conservation Mosaics	
Conservation Mosaic La Vieja River Corridor (including existing PA: DMI Génova, DMI Salento and DCS Barbas-Bremen)	52,712
Conservation Mosaic: Mojana Complex (including Ayapel wetland DMI)	438,409
Conservation Mosaic: Barbacoas wetland complex (Includes Barbacoas PA)	8,879
Total (3)	**500.000**
Project Intervention Area (Total 1+2+3)	**868.345**

ANNEX F. SPECIES OF LOCAL AND GLOBAL IMPORTANCE.

Area	Species (including local name)	Status IUCN – Red list	Status in IAvH and CVC's Red lists
Mojana	Bocachico (*Prochilodus magdalenae*)		Critically Endangered (CR)
	Bagre rayado (*Pseudoplatystoma magdaleniatum*)		Critically Endangered (CR) (A1d)
	Tortuga Hicotea (*Trachemys callirostris*)		Near Threatened (NT)
	Babilla *(Caiman crocodilus*)		Least Concern (LC)
Zapatosa	Pataló o jetudo (*Ichthyoelephas longirostris*)		Endangered (EN)
	Dorada (*Brycon moorei*)		Vulnerable VU(A2c,d) at national level/ Critically Endangered (CR) at regional level
	Bagre rayado (*Pseudoplatystoma magdaleniatum*)		Critically Endangered (CR)
	Manatí (*Trichechus manatus*)	Vulnerable C1	Endangered (EN)
	Nutria (*Lontra longicauidis*)	Vulnerable (VU)	Vulnerable (VU)
	Oso hormiguero (*Myrmecophaga tridactyla*)	Vulnerable (VU)	Vulnerable (VU)
	Danta *(Tapirus terrestris)*		Critically Endangered (CR)
Barbacoas	Manatí (*Trichechus manatus)*	Vulnerable C1	Endangered (EN)
	Paujil pico azul (*Crax alberti)*	Critically Endangered A3bcd	Critically Endangered (CR)
	Mono araña (*Ateles hybridus)*	Critically Endangered A2cd+3cd	Critically Endangered (CR)
	Blanquillo o bagre blanco (*Sorubim cuspicaudus)*		Endangered (EN)
	Bocachico, (*Prochilodus magdalenae)*		Critically Endangered (CR)
	Bagre rayado (*Pseudoplatystoma fasciatum)*		Critically Endangered (CR)
	Pataló o jetudo, (*Ichthyoelephas longirostris*)		Endangered (EN)
La Vieja	Cotorra Aliazul (*Hapalopsittaca fuertesi*)	Critically Endangered C2a(ii)	Critically Endangered (CR)
	Danta de Páramo (*Tapirus pinchaque)*	Endangered A2cd+3cd; C1	Endangered (EN)
	Cauca Guan, (*Penelope perspicax)*	Endangered B1ab(i,ii,iii,v)	Endangered (EN)
	Perico Paramuno (*Leptosittaca branickii*)	Vulnerable A2cd+3cd+4cd	Vulnerable (VU)
	Oso andino, (*Tremarctos ornatus)*	Vulnerable A4cd	Vulnerable (VU)
	Leopardus tigrinus	Vulnerable A3c	Vulnerable (VU)
	Dinomys branickii	Vulnerable A2cd	Vulnerable (VU)
	Palma de cera (*Ceroxylon quindiuense*)	Vulnerable B1+2c	
	Loro orejiamarillo (*Ognorhynchus icterotis*)	Endangered	Critically Endangered (CR)
Sonso	Bocachico, (*Prochilodus magdalenae)*		Critically Endangered (CR)
	Boquiancha, (*Genycharax tarpon*)		Vulnerable (VU) and Critically Endangered (CR) at regional level (CVC)
	Pato Colorado (*Anas cyanoptera*)		Endangered (EN)
	Nutria (*Lontra longicaudis*)	Vulnerable (VU)	Vulnerable (VU)
	Gato Pardo (*Herpailurus yagouaroundi*)	(LC)	
	Chigüiro (*Hydrochaeris hidrochaeris*)		Endangered (CR) at regional level (CVC-IAvH)
	Armadillo Cola de Trapo (*Cabassous centralis)*	(DD)	Near Threatened (NT)
	Chucha lanuda (*Caluromys derbianus*)	(LC)	
Jamundí	Zorro (*Cerdocyon thous*)	(LC)	

Area	Species (including local name)	Status IUCN – Red list	Status in IAvH and CVC's Red lists
	Bocachico, (*Prochilodus magdalenae)*		Critically Endangered (CR)
	Pataló o jetudo, (*Ichthyoelephas longirostris*)		Endangered (EN)
	Puma yagoaurundi	(LC)	Between endangered and vulnerable (CVC)
	Nutria (*Lontra longicaudis*)	Vulnerable (VU)	Vulnerable (VU)
	Zambullidor chico (*Tachybaptus dominicus*)		Endangered (CR) at regional level (CVC)
	Halcón plomizo (*Falco femoralis*)		Endangered (CR) at regional level (CVC)
	Atrapamoscas apical punteado (*Myiarchus apicallis*)		
	Pato Colorado (*Anas cyanoptera*)		Endangered (EN)
Río Claro	Bocachico, (*Prochilodus magdalenae)*		Critically Endangered (CR)
	Nutria (Lontra longicauidis)	Vulnerable (VU)	Vulnerable (VU)
	Babilla (Caiman crocodilus)		Least Concern (LC)
	tortuga de río (*Podocnemis lewyana*)		Endangered (EN)
	Tortuga Hicotea (*Trachemys callirostris*)		Near Threatened (NT)