GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title:	Integrated Environmental Management of the Río Motagua Watershed		
Country(ies):	Guatemala, Honduras	GEF Project ID:[1]	9246
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5714
Other Executing Partner(s):	Ministry of the Environment and Natural Resources (MARN); Secretariat of Energy, Natural Resources, Environment, and Mines (SERNA/MI AMBIENTE)	Submission Date: Resubmission Date:	31 July 2015 12 Aug. 2015
GEF Focal Area(s):	Multi-focal Areas	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐		Corporate Program: SGP ☐
Name of parent program:	[if applicable]	Agency Fee ($)	506,298

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in $)	
		GEF Project Financing	Co-financing
IW 1: Catalyze sustainable management of transboundary water systems by supporting multistate cooperation through foundational capacity building, targeted research, and portfolio learning; *Program 1: Foster Cooperation for Sustainable use of Transboundary Water System & Economic Growth*	GEFTF	2,000,000	10,680,065
IW 3: Foster Sustainable Fisheries, Restore and Protect Coastal Habitats, and Reduce Pollution of Coasts and LMES; *Program 6: Prevent the Loss and Degradation of Coastal Habitat*	GEFTF	1,096,347	6,161,803
CW 2: Reduce the prevalence of harmful chemicals and waste and support the implementation of clean alternative technologies/substances; *Program 3: Reduction and elimination of POPs*	GEFTF	2,233,105	8,932,420
Total Project Cost		5,329,452	**25,774,288**

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: Improve the integrated management of the Río Motagua watershed and reduce land-based sources of pollution and produced emissions from unintentional formed persistent organic pollutants (U-POPs) to mitigate impacts on coastal-marine ecosystems and the livelihoods of the local populations.

Project Components	Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Co-financing
1. Diagnostic analysis of the Surface Water Resources of the Río Motagua watershed that is shared by Guatemala and Honduras.	TA	1.1. Priority shared issues, including those that directly affect downstream coastal-marine ecosystems, the quality and quantity of water, and barriers for Integrated River Basin Management (IRBM) identified, agreed upon	1.1.1 A Watershed Diagnostic Analysis (WDA), following the Transboundary Diagnostic Analysis/Strategic Action Programme (TDA/SAP) methodology identifying the main shared environmental and water resource issues, finalized and agreed upon: – A technical/scientific document identifying issues related to surface water pollution, (solid	GEFTF	1,179,560 (IW)	6,156,872

[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.

			waste, sedimentation, wastewater, etc.) developed; – Baseline conditions and status indicators of environmental and socioeconomic conditions related to watershed surface water resources determined (watershed hydrologic/land use maps, physiochemical parameters, pollution sources, economic valuation of ecosystems, stakeholder analyses and stakeholder´s participation strategies –including private sector and communities as well as gender analysis); – WDA made available at the national (Guatemala and Honduras), sub-national, municipal, and community levels; – Guidelines for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans for both countries developed,			
		1.2. Regulatory framework supports the IRBM for the shared Río Motagua watershed.	1.2.1. Two (2) national-level proposals for updating the regulatory framework allow synergies for surface water management, including reducing pollution (solid waste, sedimentation, wastewater, etc.) taking into account the regulations and international conventions to which both countries are parties.			
2. Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed (Guatemala and Honduras) is agreed upon for implementation.	TA	2.1. Key priority actions for the management of the Río Motagua watershed defined and incorporated as part of the environmental management strategies for each country.	2.1.1. Binational SAP completed and endorsed at the highest (ministerial) level in each country. – National Strategic Action Plans (NSAP) for sustainable integrated management of the Río Motagua watershed (including reduction of land-based pollution sources) in place; – Local Action Plans and proposal for long-term monitoring system including environmental and socioeconomic indicators for tracking the implementation of the SAP and NSAPs prepared. – 2.1.2 High-level commission established that includes a Technical Committee and promotes permanent dialogue and coordination on Rio Motagua management between	GEFTF	1,015,135 589,780 (IW) 425,355 (CW)	5,168,464

			Guatemala and Honduras. – National and binational subcommittees enable coordination of actions for SAP implementation (including reducing the sources of land-based pollution) with local participation; – International cooperation task group ensures technical, scientific, and economic support for SAP implementation.			
		2.2 Strengthened framework for institutional cooperation facilitates the IRBM of the Río Motagua watershed.	2.2.1 An IRBM Binational Coordination Unit established within the Binational Framework Agreement between Guatemala and Honduras. 2.2.2 Memorandum of Understanding between the countries for the implementation of the IRBM. – Technical and legal guidelines in place; – Work protocols agreed upon and in operation (guidelines for solid wastes and wastewater management, etc.); – Guidelines for reducing land-based water pollution and conducting technical studies in three (3) prioritized municipalities considering the regulatory frameworks of the municipalities in both countries are developed.			
		2.3. Improved national and local capacities for IRBM and monitoring and control of water quality, including reducing pollution from land-based sources (solid waste, U-POPs, and plastics) (at least 2,000 people from national government institutions, municipalities, and members of civil society organizations [COMUDES in Guatemala and Watershed Councils in Honduras] improve their	2.3.1 Targeted institutional capacity building programs for IRBM and reduce land-based pollution: – Environmental Information Systems of the MARN (Guatemala) and SERNA/MI AMBIENTE (Honduras) with capability for using remote-sensing technology to monitor water quality and share information (reduction of solid wastes, harmful chemicals and wastes[4], sedimentation, wastewater, etc.); – Training program strengthens national-, subnational-, and municipal-level capacities for IRBM (Guatemala and Honduras) and the sound			

[4] Harmful wastes: liquid, solid, or gaseous wastes that possess characteristics such as corrosivity, reactivity, explosivity, toxicity, inflammability, as well as the containers, receptacles, packaging, and soils that have been contaminated when they are transferred to another site.

		knowledge and skills in managing sources of coastal-marine pollution that originate from Rio Motagua) (Target will be confirmed during the PPG).	environmental management and reduction of harmful chemicals and waste (Guatemala: staff from the Department of Water Resources and Watersheds [DRHyC] and from eight [8] departmental delegations); – Knowledge exchange program in integrated watershed management to reduce land-based sources of coastal-marine pollution (South-South cooperation); – Binational environmental education program builds awareness and contributes to the reduction of environmental pressures on the Río Motagua watershed, including water pollution sources.			
		2.4. Key institutions in Guatemala incorporate the sound environmental management of chemicals and wastes (U-POPs and plastics) into their management strategies for the Rio Motagua watershed and into monitoring and control activities.	2.4.1. Program for the sound environmental management of harmful wastes (U-POPs emissions reduction alongside the river and plastics disposed near and on surface water bodies by key institutions in place: – Departmental (8) and municipal (3) development plans incorporate the sound environmental management of harmful chemicals and waste; – Information systems and databases of the locations and characteristics of dump sites near surface water bodies that produce U-POPs through open burning and store plastic wastes (public and private sector). 2.4.2. Technical guidelines for the handling, transport, storage, and disposal of wastes. 2.4.3. Monitoring program of human and environmental health effects of U-POPs emissions and plastic wastes disposal, including improved laboratory and analytical competencies developed.			
3. Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and	Inv. & TA	3.1. Sustainable integrated management of water and soil resources reduces pollution of the Río Motagua watershed.	3.1.1 Innovative investments to reduce Rio Motagua water and coastal pollution from land-based sources: – At least six (6) pilot projects with low-cost technology to reduce land-based pollution of water resources (e.g., biodigestors, oxidation ponds, gathering stations for recycled	GEFTF	2,880,974 1,179,560 (IW) 1,701,414 (CW)	13,221,600

scaling-up of successful experiences.			wastes) (specific areas will be determined during the PPG phase); – Program for the sustainable management of contaminated waste in beaches in the Rio Motagua delta/estuary; – At least eight (8) pre-investment studies for the implementation of large-scale infrastructure and equipment for the handling and disposal of land-based pollutants affecting hydrological resources (e.g., solid waste [with cofinancing funds] and plastics [with C&W GEF funds and cofinancing]); – Incentives available (environmental certifications, access to microcredits, accreditation for quality of beaches) for businesses that implement clean technologies and agriculture producers that adopt sustainable production practices.			
		3.2. Eight (8) municipalities in Guatemala implementing best management practices of residues, including the sustainable management of solid wastes and the reduction of open burning (target will be confirmed during the PPG).	3.2.1. Municipal solid waste management practices improved (with cofinancing and C&W GEF funds): – Inventory of domestic waste dumpsites and current practice of open burning; – Guidelines and technical support provided to municipalities for the sustainable management of solid wastes. – Program to implement best management practices (BMPs) of residues, including the reduction of open burning from households in place.			
		3.3. Reduced production of plastic wastes (XX) and of emissions of U-POPs (XX) that result from open burning of solid wastes from dumpsites and other waste-burning activities (targets will be established during the PPG).	3.3.1. At least three (3) pilot projects for the reduction of solid wastes and proper handling and disposal of domestic waste, including elimination of open air burning, contribute to the reduction of dioxin/furan emissions and plastic wastes. – Baseline of disposed plastic wastes and U-POPs emissions in the Río Motagua watershed established. – Protocols for best environmental practices (BEPs) and best available techniques (BATs) to			

			reduce dioxin/furan emissions and plastic wastes; – Cleanup/closure of open air and illegal dumpsites near surface water bodies that are a source of U-POP emissions – Waste separation and plastic recycling program for households and solid waste management facilities; – Strategy for development of new facilities for sound solid waste management and the reduction in U-POPs emissions and other chemical wastes.			
		3.4. Structure and functionality of key ecosystems strengthened.	3.4.1 Rehabilitation (conservation and protection, reforestation, natural regeneration, remediation) of 25 kilometers (km) of riparian ecosystems and 100 hectares (ha) of coastal ecosystems in the watershed in Honduras (targets will be confirmed during the PPG).			
		3.5. Improved experience and knowledge about the management and sustainable use of surface water including determining the investment needs for the IRBM of the Río Motagua watershed.	3.5.1. Best practices documented and experiences shared (media, short videos, etc.) with other IW and CW projects using existing information-exchange platforms. – Systematization of South-South experiences (Honduras-Guatemala) for IRBM of the Río Motagua watershed, including the management of harmful wastes, U-POPs, and plastics; – Plan for scaling-up best practices for managing domestic waste disposal sites in place – Lessons learned documented and shared.			
				Subtotal	5,075,669	24,546,936
				Project Management Cost (PMC)[5] (Including Direct Project Costs: USD$101,513)	GEFTF 253,783	1,227,352
				Total Project Cost	**5,329,452**	**25,774,288**

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Recipient Government	Secretariat of Agriculture and Livestock (SAG), Honduras	Cash	3,096,000
Recipient Government	Secretariat of Energy, Natural Resources, and Environment, (MiAmbiente), Honduras	In-Kind	888,000

[5] For GEF Project Financing up to $2 million, PMC could be up to10% 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.

Beneficiaries	25 municipalities located in the Rio Motagua Watershed, Honduras	Cash	5,117,000
Recipient Government	Ministry of the Environment and Natural Resources (MARN), Guatemala	In-Kind	1,691,000
Beneficiaries	Municipalities located in the Rio Motagua Watershed, Guatemala	In-Kind	2,670,000
GEF Agency	UNDP Country Office, Guatemala	Cash	1,632,288
Donor Agency	Inter-American Development Bank (IADB), Guatemala	Cash	6,230,000
Private Sector	Private Sector	In-Kind	4,450,000
Total Co-financing			**25,774,288**

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 (Guatemala, Honduras)	International Waters		3,096,347	294,153	3,390,500
UNDP	GEFTF	Guatemala	Chemicals and Wastes		2,233,105	212,145	2,445,250
Total GEF Resources					**5,329,452**	**506,298**	**5,835,750**

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

E. PROJECT PREPARATION GRANT (PPG)[6]

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

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[7] (b)	Total c = a + b
UNDP	GEFTF	Regional (Guatemala, Honduras)	International Waters		100,000	9,500	109,500
UNDP	GEFTF	Guatemala	Chemicals and Wastes		50,000	4,750	54,750
Total PPG Amount					**150,000**	**14,250**	**164,250**

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[8]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to the sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins	*One (1) freshwater basin*

[6] 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.

[7] PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

[8] 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.

2. Increase in phase-out, disposal and reduction of releases of POPs, ODP, mercury, and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCBs, obsolete pesticides)	*X metric tons* (Target will be determined during project implementation)

PART II: PROJECT JUSTIFICATION

1. *Project Description*

1.1. The global environmental problems, root causes, and barriers that need to be addressed.

Context

1. The Río Motagua watershed is located on the slope of the Caribbean Sea in southeast Guatemala and northwest Honduras. In Guatemala the watershed covers an area of 15,190 square kilometers (km²) (13.94% of the Guatemalan territory) and 1,524.4 km^2 in Honduras (1.36% of the Honduran territory). The watershed extends from 3,315 meters above sea level (masl) in the western highlands of Guatemala down to sea level, stretching from west to east. In Guatemala, the Río Motagua watershed is one of the key geographic features of the country, due to the water it supplies from the highlands mountains, the Sierra del Merendón, the Sierra de las Minas, and Chuacús. The volume of water it supplies is estimated to be 6,500 million cubic meters (Mm³) annually in Guatemala, and 2,072 Mm³ annually in Honduras The Río Motagua is the longest river in Guatemala, spanning 486 km. There are 10 life zones and seven ecoregions exisiting within the watershed; vegetation in the mid and upper (above 1,200 masl) portions of the watershed is composed of pine-oak forest or pine forest. From 300 masl to 1,200 masl the vegetation is composed of broadleaf tropical and subtropical rainforest, including dry and xeric forests; on the Caribbean coast mangrove forests are present.

2. In Guatemala the Río Motagua watershed (Pfafstetter Level 4)[9] drains through 14 departments (Quiché, Totonicapán, Sololá, Chimaltenango, Sacatepéquez, Guatemala, Jalapa, Chiquimula, Zacapa, Izabal, El Progreso, Jutiapa, Alta Verapaz, and Baja Verapaz) and 95 municipalities, and integrates 563 (23.54%) of the 2,391 (Pfafstetter Level 8) watersheds reported in the country[10]. In addition, the watershed includes 55 protected areas (188,502 ha) with different management categories, including multiple-use areas, national parks, biosphere reserves, private natural reserves, and permanent closure zones protecting springs reserves, cultural monuments, municipal regional parks, and wildlife refuges). In Honduras the watershed drains through three departments (Copán, Ocotepeque, and Santa Barbara) and 22 municipalities and extends from the west to the north of the country. The watershed includes the sub-watersheds of the Río Copán, Río de las Ánimas, Río El Playón, Río Juyamá, Río Monja-Jubuco-Managua, and Río Techin-Tarros. Approximately 5.3 million people reside in the watershed in Guatemala and 350,000 people reside in the watershed in Honduras. Economic activities within the watershed are of high importance for the local and regional economies, particularly in Guatemala. Land use is primarily oriented towards agricultural activities; in the middle and upper portions of the watershed vegetables, fruit products, and coffee are cultivated; in the lower part of the watershed agribusiness activities (sugar cane, oil palm, and rubber) are the most common together with cattle-ranching. In Guatemala, mining and industrial activities are also present in the middle portion of the watershed, where Guatemala City is also located with a population of 2.2 million people. Throughout the entire watershed subsistence agriculture (production of basic grains) is practiced, as well as artisanal fishing on the Caribbean coast.

3. The importance of watershed management in Guatemala is recognized in the country's Constitution through constitutional laws such as the Health Code (DL No. 90-97), and sectoral laws such as the Environmental Protection and Improvement Law (DL No. 68-86), the Forestry Law (DL 101-96), and the Protected Areas Law ((DL 4-89). In addition, there is a diversity of specific sectoral and cross-sectoral policies that guide watershed management. In Honduras watershed management is recognized in the country's Constitution through the Forestry, Protected Areas, and Wildlife Law (Decree 98-2007); the General Environmental Law of 1983 and amendments 2010-2011; the General Waterbodies Law of 2009; the Municipalities Law and amendments 2000; and the Land Use Planning Law of 2004.

Global environmental problem

4. The Río Motagua watershed presents numerous environmental degradation and pollution problems. In Guatemala, these include a) deforestation, which between 2001 and 2006 amounted to more than 87,000 ha and affected 66 of the

[9] Nivel 4 (Pfafstetter), Ministerio de Agricultura Ganadería y Alimentación. (2009). Mapa de Cuencas Hidrográficas a Escala 1:50,000, República de Guatemala Método de Pfafstetter (Primera aproximación). Pag. 6

[10] Fundación para la Conservación de los Recursos Naturales y Ambiente en Guatemala. (2012). Diagnóstico Preliminar de la Cuenca del Río Motagua. Pág. 9.

municipalities within the watershed; b) forest fires, which affect 50 municipalities; c) reduced flows and drying up of tributaries in 47 municipalities; d) erosion, which affects water quality in 39 municipalities; and e) surface water pollution from solid wastes, liquid wastes, and agrochemical by-products in up to 34 municipalities. In addition, the watershed has been affected by drought (30 municipalities); storms and hurricanes (24 municipalities); floods (21 municipalities); and desertification, as a result of the watershed being part of Guatemala's dry corridor. The watershed lacks an integrated land use and environmental management strategy and the majority of the industries, agro-industries, and municipal areas discharge numerous wastes and pollutants into the rivers and streams with little or no control.

5. It is estimated that 66% of the urban wastes produced in Guatemala are not collected, and there is no certainty that there is any proper disposal for the remaining 44% of the wastes. The majority of the wastes are disposed of in streams and/or surficial areas susceptible to runoff, which eventually lead to their deposit in surface water bodies, which is the case of the Río Motagua watershed. In addition, the placement of waste on surfaces that are susceptible to runoff to surface waters represents a risk for pollution of subterranean aquifers due to the scarceness and deficiency of technology to treat leaching. The collection and conveyance system of liquid and solid wastes varies between municipalities, and almost without exception the existing information indicates that there is a lack of adequate infrastructure and lack of interest to solve this deficiency. This is reflected in the lack or inadequate management plans to treat and dispose of solid waste and wastewater in urban and rural areas, including Guatemala City. Poor management of solid waste and wastewater in Guatemala is a problem that includes multiple aspects: a) focus of waste management is limited to final disposition (landfills), without considering other alternatives and prior phases such as transport, use, and storage; b) patterns of consumption that determine the patterns of unsustainable production of wastes; c) lack of conscience and civic-mindedness about the management and disposal of wastes, with no consideration of the impact on the environment and human health; c) absence of recycling programs; and e) lack of information about the magnitude of the problem, including the management of harmful wastes. The improper management of solid waste and wastewater has resulted in the alteration of natural habitat and increased threat to the associated species.

6. The water quality of the Río Motagua watershed is mostly affected by a large number of surficial tributaries containing wastewater that feed into the river. According to Preliminary Situational Analysis of the Río Motagua Watershed in 2012, the water of the Rio Motagua not acceptable for human consumption and the concentration values of the water quality parameters analyzed exceeded the maximum thresholds of the COGUANOR NGO 29-001-98 regulation.[11] Total dissolved solids are found to be below the acceptable maximum threshold (LMA) and the permitted maximum threshold (LMP) as are the concentrations of calcium, chlorides, and magnesium. The concentrations of copper and hardness are not acceptable for ensuring the river's water quality and there are concentrations of cyanide and chromium in the water that suggests it is not suitable for human consumption. This study only analyzed the parameters that measure the quality of the water for potable use; nevertheless, it is assumed that there are other parameters for which data are lacking but which could be found at levels that pose a threat to the environment and human health as well as to plants and animals present in the watershed. In addition, population growth, the expansion and intensification of agriculture, and the growth of the industrial sector have led to an increase in demand and pressure on the watershed's surface water resources.

7. The improper use of chemicals and agro-chemicals has also led to the degradation of soils and the pollution of surface and ground waters in the Río Motagua watershed, as well as the emission of harmful chemicals into the atmosphere. Persistent organic pollutants (POPs) have been used in Guatemala for many years in the agricultural and industrial sectors. POP pesticides were widely used in beginning in the 1960s and one, endosulfan, is still used on various crops in the watershed. The excess of this compound applied to agriculture is deposited in the soil or runs off into waterbodies and leaches into the water table. In addition, plastics used for many purposes are discarded as trash without proper management. The National Inventory of Releases of Polychlorodibenzodioxins (PCDD) and Polychlorodibenzofurans (PCDF) (dioxins and furans) has estimated a total amount of 216 grams (g) of equivalent toxicity (EQT) in 2010 (the base year analyzed), of which 192.55 g of EQT are released to the atmosphere; the majority of processes considered in this inventory are related to open air burning activities that release gases into the atmosphere with traces of dioxins and furans. The soil also receives high amounts of PCDD and PCDF with 15,971 g of EQT, particularly in the areas where wastes containing these toxins are burned.

8. In Honduras, the sound management of solid wastes has received limited attention and there has been little effort to solve problems of human health and environment impact associated with the improper disposal of solid wastes. In addition, the legal framework that regulates solid waste management is dispersed among different legal instruments and the greatest

[11] Analysis based on data from INSIVUMEH obtained from three sampling points during three different years.

authority falls directly back to the municipalities; this presents technical, economic, and organizational deficiencies that translate into operational problems that make waste management inefficient, coupled with the fact that the population is indifferent and does not recognize that there is a problem with how solid wastes are managed. Just 20% (60) of the country's 298 municipalities provide solid waste collection services. In addition, very few municipalities have the basic infrastructure for the proper disposal of solid wastes; most municipalities only make use of dumpsites, with negative impacts on the environment and human health. More specifically, the inadequately managed dumpsites result in the pollution of surface water, groundwater, soils, and the atmosphere, and pose a serious threat to the health of local communities. The majority of the municipalities in the Río Motagua watershed do not have collection systems or proper waste disposal sites, they solely rely on clandestine open-air dumpsites. Solid wastes are also commonly disposed of into slopes, creeks, and/or areas where solid wastes are easily washed out into surface waters. In addition, the lack of proper management of dumpsites results in high volumes of leachates that contribute to surface and groundwater pollution. Within the 22 municipalities in the Río Motagua watershed only Santa Rosa de Copán and Lucerna have a system for solid waste management and proper disposal and treatment. The coastal municipalities of Omoa, Puerto Cortés, San Pedro Sula, and Choloma are affected by the accumulation of the high volumes of solid wastes that flow downstream and are carried out by coastal currents and deposited onto beaches, mangroves, and other coastal areas.

9. There is also deficient sanitation coverage principally in the rural areas, which commonly results in discharges of wastewater into surface waters. Similarly, there are significant sources of organic material from the multiple industries present in the watershed and nutrients (nitrogen and phosphorus) from fertilizers used in aquaculture and agriculture, which impact water quality and accelerate eutrophication processes. The watershed's environmental problems also include forest fires and soil degradation. According to the National Institute of Forest Conservation and Development, Protected Areas and Wildlife (ICF), there were 260 forest fires reported in the departments of Copán, Ocotepeque, and Santa Barbara between 2011 and 2013, which represented a loss of 3,866.62 ha of vegetation. In the rural areas the main productive activity is agriculture, which has resulted in soil degradation and erosion due to lack of proper management, including the excessive use of agrochemicals and clearance of natural vegetation, with soil carried off by rain leading to sedimentation of the watershed's surface waters and coastal areas.

10. **The long-term solution** consists of improving the integrated water resources management of the Río Motagua watershed and reducing land-based sources of pollution (solid wastes, nutrients, wastewater, U-POPs, and plastics) to mitigate impacts on riverine and coastal-marine ecosystems and the well-being of the local populations dependent on healthy aquatic ecosystems**.** This will be achieved applying the TDA/SAP methodology through the following: a) a diagnostic analysis for the Integrated River Basin Management (IRBM) of the Río Motagua watershed that is shared by Guatemala and Honduras, including strengthening planning through the development of technical studies that guide activities and investments within a regulatory framework for IRBM; b) the development of a binational Strategic Action Program (SAP) for the integrated management of the watershed, including the development of an institutional coordination framework that allows the development of joint proposals for the implementation of the SAP, and improved national and local capacities for planning, monitoring, and control; c) the implementation of innovative initiatives for the sustainable integrated management of water and soil resources to reduce pollution (solid wastes, nutrients, U-POPs, and plastics) of the Río Motagua watershed and strengthening the structure and functionality of ecosystems; and d) the reduction of U-POPs as a result of current waste management practices in the Río Motagua watershed, through the implementation of sound municipal solid waste management practices in Guatemala, including reducing open burning practices. Nevertheless, currently there are four barriers that prevent this objective from being met:

1. Limited information and capacity for the integrated management of the Río Motagua watershed	1) There is limited capacity of the environmental institutions in Guatemala and Honduras to jointly generate and share scientific and technical information for the integrated management of the watershed, including information about ecosystems, social and economic aspects, and land-based pollution. 2) There is limited capacity in Guatemala and Honduras to monitor and control the environmental and social/economic conditions of the watershed, including the use of indicators associated with surface water resources for local- and national-level decision making. 3) There are gaps and a lack of complementarity between the existing regulations in Honduras and Guatemala for sustainable management of surface water bodies, including land-based pollution. 4) There is a lack of municipal regulations related to the integrated management of solid wastes, wastewater, and chemical wastes. 5) There is weak interinstitutional coordination between the central government, municipalities, private sector, and the general public in for integrated watershed management.
2. Deficiencies in	1) There is an absence of joint strategic planning (government institutions and municipalities of Honduras and

joint strategic planning for the integrated management of water resources, including pollution reduction	Guatemala) for sustainable environmental management of the watershed, including reduction of the land-based sources of pollution. 2) There is an absence of an institutional framework that allows effective coordination among the government and private sectors (government institutions, municipalities, non-governmental organizations (NGOs), productive sectors, and general population) in the development of a binational strategy for the integrated management of the Río Motagua watershed, including the inexistence of a binational operational mechanism that allows the implementation of the proposed solutions. 3) There is limited institutional and individual capacity at the national and local levels for effective planning, monitoring, and control of water quality, including impacts from land-based sources of pollution. 4) There is a lack of knowledge among municipal officials and the general public about the watershed's environmental problems, including pollution of surface waters (solid wastes, wastewater, U-POPs, and plastics) and a low priority for resolving them. 5) There are no educational programs to raise awareness among the general population about environmental issues and that advocate proper management of solid wastes, wastewater, and harmful chemicals and wastes.
3. Limited capacities for the implementation of alternative technologies and best practices for the integrated management of watersheds	1) There is limited knowledge about available low-cost technologies for the sound management of solid wastes, wastewater, and harmful chemicals to reduce land-based pollution of surface waters and coastal area beaches. 2) There is limited knowledge about BMPs to reduce soil degradation and erosion. 3) There is limited human, physical, financial, and technological resources for implementing low-cost technologies for the integrated management of the watershed. 4) There is a lack of programs to reduce emissions of dioxins and furans from burning practices at open-air dump sites. 5) There are limited human and financial resources for the rehabilitation of riparian and coastal ecosystems affected by solid and harmful wastes. 6) There is a lack of incentives (environmental certifications, access to microcredits, accreditation for quality of beaches) for businesses and the private sector to implement clean technologies (i.e., reduce solid wastes). 7) There is institutional weakness in the evaluation, control, and monitoring of solid wastes and harmful wastes management, including documenting best practices and sharing knowledge.
4. Insufficient efforts to reduce plastic wastes and U-POP emissions	1) There is inadequate management of solid wastes by the watershed's municipalities. 2) There is an absence of inventories of legal and illegal dumps for solid wastes and current practices of open-air burning. 3) There is an absence of best practices and guidelines for reducing solid wastes, including reduced emissions of dioxins and furans and plastic wastes. 4) There have been limited efforts to clean up inadequately managed dump and burning sites that are sources of U-POP emissions and depositories of other harmful wastes. 5) There is a lack of proper infrastructure to manage solid wastes and reduce U-POPs and other harmful chemical wastes.

1.2. The baseline scenario.

11. In Guatemala, through its various agencies, the MARN plans to carry out actions related to reducing land-based sources of pollution in the Río Motagua watershed. First, through the Department of Liquid and Solid Waste Management (DEMARDS) the ministry will continue training technical staff in the municipalities of the Río Motagua watershed in solid waste and wastewater management, as well as provide support and oversight of projects for managing solid waste and wastewater by the private sector and the municipalities. Second, the MARN is currently developing a proposal for a National Policy for Integrated Management of Solid Waste and Wastewater, which is now in the validation phase by related stakeholders and sectors, which will provide guidelines for the actions for the management of water resources in the Río Motagua watershed. Third, through the Office of the Environment and DEMARDS, the MARN is leading an interinstitutional roundtable for the integrated management of solid waste and wastewater, which is formed by MINEDUC, MSPAS, INFOM, SEGEPLAN, MAGA, MEM, ANAM, and CACIF, and which serve an institutional framework for the management of water resources in the Río Motagua watershed. In addition, the MARN is working jointly with the German Agency for Technical Cooperation (GIZ) to develop municipal guidelines for municipal solid waste and wastewater management plans and to develop related municipal regulations in Morazán, El Progreso, and Livingston in Izabal located in the lower Río Motagua watershed.

12. Through the Department of Water Resources and Watersheds (DRHyC), the MARN has increased the number of technical staff charged with monitoring compliance with environmental regulations regarding water quality and wastewater management. The DRHyC has conducted events to socialize the regulations with municipal councils and the general public.

It has provided support for the preparation of the Methodological Guide for Developing Microwatershed Management Plans and for increasing the number of staff for monitoring water quality as well as updating the computer equipment used. In addition to continuing these activities, the department will directly support the municipalities so that they improve the management of water resources and the implementation of works (wastewater treatment plants) into their municipal plans to ensure environmental sanitation.

13. Since 2010, Guatemala has had a National Implementation Plan for POPs (PNI-POP), which has allowed updating POP inventories by sectors, including new chemicals added to the Stockholm Convention on Persistent Organic Pollutants. The Department of Coordination for the Management of Chemical Products and Harmful Waste in Guatemala (DCPQyDP) has trained more than 3,000 people in the public and private sectors, civil society, farmers, electrical sector operators, recyclers, among other groups, in the management of harmful chemicals and other wastes. The DCPQyDP has coordinated actions with other ministries through the Commissions on Persistent Organic Pollutants and the Technical Commission for Coordination and Support for the Management of Harmful Products, Substances, and Chemical Wastes and other related materials. The DCPQyDP will continue training activities for the sound management of chemical products and harmful wastes, oversight and monitoring of businesses that generate POPs and other chemical wastes, and will release technical guidelines to reduce POPs emissions.

14. Investments by the MARN through the central and regional offices of DEMARDS, DRHyC, and DCPQyDP will be on the order of USD $800,000 during the time period of 2016-2020. In addition, USD $12,820 will be invested in the drafting, printing, and distribution of the guidelines and regulations to be developed as part of the MARN-GIZ work agreement. Finally, the national government, municipalities, and private sector will invest USD $6,448,531 in 2015 in the management of solid and liquid wastes in the Río Motagua watershed (i.e., management of landfills and dumpsites, construction of waste treatment plants, and the improvement of the collection and transportation of solid wastes); an additional USD $6,992,441 will be invested for the same purposes during the time period of 2016-2020.

15. In Honduras the Secretariat of Energy, Natural Resources, the Environment, and Mines (SERNA/MI AMBIENTE) is carrying out actions with support from JICA to provide technical assistance to five municipalities in the department of Ocotepeque with the goal of integrating environmental education components, waste management plans, separation and commercialization of wastes, and waste treatment and disposal. These actions are budgeted at USD $100,000 for the time period of 2015-2016. A second phase has been requested to JICA for hospital wastes management in the same municipalities with additional funds of USD $100,000. At the municipal level (25 municipalities) small environmental sanitation projects are being carried out that range from sewer systems, wastewater treatment systems, latrines, micro-watershed management, etc. Investments will be on the order of USD $5.0 million during the time period of 2016-2020.

1.3. The proposed alternative scenario, GEF focal area[12] strategies, with a brief description of expected outcomes and components of the project are presented in the following paragraphs.

16. The project's objective is to improve the integrated water resources management of the Río Motagua watershed and reduce land-based sources of pollution and unintentionally produced emissions from POPs to mitigate impacts on riverine and coastal-marine ecosystems and the livelihoods of the local population. The GEF alternative is directed towards covering the incremental costs of joint actions (Guatemala and Honduras) for the integrated management of the surface water resources of the Río Motagua watershed through four interrelated components that are described as follows.

17. **Component 1 – Diagnostic analysis of the Surface Water Resources of the Río Motagua watershed that is shared by Guatemala and Honduras:** The objective of this component is to perform a strategic and systematic hydrographic evaluation of the Río Motagua watershed so that there is a common understanding about the issues that are currently affecting the watershed's surface water resources, including the land-based sources of pollution. Specifically this component will entail the following: a) A Watershed Diagnostic Analysis (WDA), applying the TDA/SAP methodology, including the availability of technical-scientific information centered around issues related to surface water and pollution; definition of the baseline and indicators about the environmental and social/economic conditions associated with surface water resources (including a gender analysis); dissemination of the results of the DWA to multiple national- and local-level institutional stakeholders, including the local communities living in the Río Motagua watershed and the private sector; and the definition of guidelines for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans for both countries, including those for the potential involvement of the private sector in contributing to

[12] 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.

addressing the issues identified; and b) the development of national proposals that allow the synergistic reworking of the regulatory framework for management of surface waters (i.e., IRBM for the Río Motagua watershed), including land-based pollution (solid wastes, sedimentation, wastewater, etc.) within the context of international regulations and agreements to which both countries are parties.

18. **Component 2 – Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed is agreed upon for implementation:** The results of the DWA will be used as the basis for the development of a binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed (including reducing the sources of land-based pollution), which will include National and Local Strategic Action Plans (NSAP) for the sustainable environmental management of the watershed. In addition, a high-level commission for permanent dialogue between Guatemala and Honduras will be established and which will include national and binational subcommittees for the implementation of the SAP and an international cooperation task group to ensure technical, scientific, and economic support. The binational cooperation will be formalized through a Binational Guatemala-Honduras Agreement and a Memorandum of Understanding between the two countries for implementing the SAP (technical and legal guidelines, work protocols, regulations for reducing surface water pollution, and monitoring and evaluation). This component will also serve to improve national (Honduras and Guatemala) and local (municipalities and communities: COMUDES in Guatemala and Watershed Councils in Honduras) capacities for planning, monitoring, and control of the water quality, including reducing land-based pollution (solid wastes, U-POPs, and plastics). This will include: a) Environmental Information System of the MARN (Guatemala) and SERNA/MI AMBIENTE (Honduras) with capacity for remote-sensing technology to monitor water quality; b) implementation of a training program to strengthen institutional capacity at the national and municipal levels in Guatemala for the sound environmental management of harmful chemicals and wastes; c) South-South cooperation for the exchange of experiences in integrated watershed management to reduce land-based sources of riverine and coastal pollution and raise awareness among the population and contribute to reducing the environmental pressures on the Río Motagua watershed, including the sources of water pollution. By project end, at least 2,000 people from national government institutions, municipalities, and members of civil society organizations will have improved knowledge and skills in managing sources of coastal-marine pollution that originate on land (target will be confirmed during the PPG).

19. This project component will also allow the incorporation of the sound management of harmful chemicals and wastes (U-POPs, and plastics) into the watershed management plans and into the monitoring and control activities of the various institutions in Guatemala that are present in the Río Motagua watershed. At the end of the project eight (8) Departmental Plans and three (3) Municipal Development Plans will have incorporated sound management of harmful chemicals and wastes and will have an information system in place with the locations and characteristics of dump sites near surface water bodies that produce U-POPs through open burning and store plastic wastes in the Río Motagua watershed, and will allow for their monitoring and control. Finally, guidelines will be developed for the handling, transport, storage, and disposal of U-POPs and the final disposal of plastic wastes, and a program for monitoring human health and the environment in the Río Motagua watershed will be developed with support of improved public-sector laboratories.

20. **Component 3 – Innovative initiatives for the IRBM of the Río Motagua watershed generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences:** Innovative initiatives for the IRBM for the Río Motagua watershed will be implemented through this component that will contribute to reducing water and coastal pollution by land-based sources. These initiatives will be located at the midstream and the downstream course in the case of Guatemala (Guatemala City and Zacapa and Izabal Departments), as well as in Honduras (Ocotepeque, Copan, and Cortes Departments). The lessons learned will be communicated along the users of the Rio Motagua Watershed for replication and potential scaling-up. These investments will include at least six (6) low-cost technology pilot projects (e.g., biodigesters, oxidation ponds, recycling/collection microbusinesses, sound management of wastes in beaches in the Rio Motagua delta/estuary, and at least eight (8) pre-investment studies for implementation of large-scale infrastructure and equipment for the management and disposal of land-based pollutants affecting hydrological resources (e.g., solid waste [with cofinancing funds] and plastics [with C&W GEF funds funds and cofinancing]). Incentives such as environmental certifications, access to microcredits, and accreditation for quality of beaches will be made available for any businesses interested in implementing clean technologies as part of their production processes, including agriculture producers that adopt sustainable production practices. This component will also involve the development of improved waste management practices in the Guatemalan municipalities located in the watershed of the Río Motagua as well as the implementation of three (3) pilot projects geared towards the reduction of dioxin/furan emissions that are unintentionally produced and plastic wastes. Improved municipal solid waste management practices, to be funded trough confinancing and C&W GEF funds, will include: a) an inventory of the landfills for solid wastes and current open burning practices; b) the development of guidelines and technical support to

the municipalities to improve solid waste management; and c) the development of a program to implement BMPs of residues, including the reduction of open burning from households. Pilot projects will include: a) establishing the baseline for plastic wastes and U-POPs in the Río Motagua watershed; b) the development of protocols for BEPs and BETs for reducing dioxin/furan emissions and reducing plastic wastes; c) the cleanup and/or closure of open air and illegal dumpsites near surface water bodies that are a source of U-POP emissions; d) a waste separation and plastic recycling program for households and solid waste management facilities, which will be a source of income for local communities and businesses and contribute to the financial sustainability of the project; and e) a strategy for development of new facilities for sound solid waste management and the reduction in U-POP emissions and other chemical wastes. These actions will lead to reduced production of plastic wastes (XX) and reduced emissions of U-POPs (XX) originating from the open burning of solid wastes from dumpsites and other waste-burning activities (targets will be established during the PPG).

21. In addition, 25 km of riparian ecosystems and 100 ha of coastal ecosystems within the Honduran portion of the watershed will be rehabilitated through conservation and protection, reforestation, natural regeneration, and remediation actions (targets will be confirmed during the PPG). The ecosystem rehabilitation activities will contribute to strengthening the structure and functionality of key ecosystems (riparian forests, mangroves, and beaches in the Rio Motagua delta/estuary), including their capacity for water regulation of the Río Motagua watershed. Finally, successful experiences and best practices for the management and sustainable use of water and soil resources to reduce pollution will be systematized and documented so that they may be replicated and scaled-up.

1.4. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing.

Baseline Scenario

22. Although important investments will be made under the "business as usual" scenario, these investments alone will not overcome the barriers that currently prevent improving the integrated water resources management of the Río Motagua watershed (Guatemala and Honduras), and reduce land-based sources of pollution and unintentionally produced emissions from POPs, while mitigating impacts on riverine and coastal-marine ecosystems and the livelihoods of the local populations. The baseline programs include multiple investments that are planned for the 2015-2020 time period.

23. Existing and planned investments for baseline programs and activities for the 2015-2020 time period are estimated at USD $19,453,792. Baseline activities in Guatemala include a total of USD $800,000 by the MARN through its central and regional offices (DEMARDS, DRHyC, and DCPQyDP) to reduce land-based sources of pollution in the Río Motagua watershed and train technical staff in the municipalities of the Río Motagua watershed in solid waste and wastewater management, among other activities. In addition, USD $12,820 will be invested as part of the MARN-GIZ work agreement for the drafting of a guide for developing solid waste and wastewater management plans. The national government, the municipalities, and the private sector will invest USD $13,440,972 in solid waste and wastewater management in the Río Motagua watershed (i.e., management of landfills and dumpsites, construction of waste treatment plants, and the improvement of the collection and transportation of solid wastes). Baseline activities in Honduras include an investment of USD $200,000 by SERNA/MI AMBIENTE/JICA to provide technical assistance to five (5) municipalities in the department of Ocotepeque with the goal of integrating environmental education components, waste management plans, separation and commercialization of wastes, and waste treatment and disposal. Other investments of USD $5.0 million have included small environmental sanitation projects at municipal level (solid waste collection and treatment), and also the government support to do clean campaigns for the affected beaches with solid and hospital wastes since 2013.

GEF Increment to Generate Global Benefits

24. **Component 1**: The alternative GEF scenario will allow a **diagnostic analysis for the IRBM of the Río Motagua watershed that is shared by Guatemala and Honduras.** Incremental financing will be in the amount of USD $7,336,432; USD $1,179,560 will be provided by the GEF and USD $6,156,872 will be provided by co-financing sources. The GEF alternative will include investments from the SAG, MiAmbiente, and the municipalities in Honduras; in Guatemala the GEF alternative will include investments from the MARN, IADB, UNDP, the private sector, and the municipalities.

25. **Component 2**: The alternative GEF scenario will allow the development of a **binational SAP for the integrated management of the Río Motagua watershed that is agreed upon for implementation**. The incremental financing expected for this component is USD $6,183,599; USD $1,015,135 will be provided by the GEF and USD $5,168,464 will be provided by co-financing sources. The GEF alternative will include investments from the SAG, MiAmbiente, and the

municipalities in Honduras; in Guatemala the GEF alternative will include investments from the MARN, the IADB, UNDP, the private sector, and the municipalities.

26. **Component 3**: In addition, the alternative GEF scenario will also allow the implementation of **innovative initiatives for the IRBM of the Río Motagua watershed and generation of knowledge and lessons learned for the replication and scaling-up of successful experiences**. The incremental financing expected for this component is USD $16,102,574; USD $2,880,974 will be provided by the GEF and USD $13,221,600 will be provided by co-financing sources. The GEF alternative will include investments from the SAG, MiAmbiente, and the municipalities in Honduras; in Guatemala the GEF alternative will include investments from the MARN, the IADB, UNDP, the private sector, and the municipalities.

27. Project management costs amount to USD $1,481,135, out of which GEF will provide USD $253,783 and the co-financing sources will provide USD $1,227,352. The GEF alternative has a total cost of USD $31,103,740, 17.1% of which will be provided by GEF (excluding PPG funds).

1.5. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF).

28. The proposed project includes actions that will deliver global environmental benefits related to the maintenance of water resources and regulation of the Río Motagua watershed shared by Guatemala and Honduras. In particular, the project will contribute to reducing transboundary water pollution that negatively impacts downstream ecosystems and livelihoods. The integrated management of water and soil resources will also contribute to maintaining the integrity of key terrestrial and coastal ecosystems (oak-pine mountain forests, rainforest and tropical dry and subtropical forests, mangroves, riparian forests, and beaches) and the conservation of the associated biodiversity of global importance that reside in the Río Motagua watershed. In addition, the project's global environmental benefits include the reduction of POP emissions that are unintentionally produced through burning solid wastes in informal dumps by X g EQT-I / year (X% less than the current level of X g EQT-I / year; baseline and target will be established during the PPG).

1.6. Innovation, sustainability and potential for scaling-up.

29. By promoting holistic and innovation solutions to reduce the pollution of surface waters and soil resources, degradation of riverine and coastal habitat, and the unintentional production and release of harmful chemicals and wastes, the project will contribute to more sustainable efforts within Guatemala and Honduras for the management of the Río Motagua watershed. Innovative investments to reduce water and coastal pollution from land-based sources (solid wastes, wastewater, nutrients, U-POPs, and plastics) will pilot projects with low-cost technologies (e.g., biodigestors, oxidation ponds, and gathering stations for recycled wastes) and pilot projects for the sustainable management of solid waste to reduce emissions of dioxins and furans from burning in open-air dump sites. To ensure that these and other actions continue well beyond the life of the project, an international cooperation task group will be created to ensure technical, scientific, and economic support for the implementation of the SAP for the integrated management of the Río Motagua watershed. In addition, incentives will be available for the private sector (environmental certifications, access to microcredits, accreditation for quality of beaches) to facilitate the adoption of clean technologies for reducing pollution.

30. The sustainability of the project will be further ensured through the active involvement of the wider array of stakeholders in project implementation, in particular local governments (municipalities and municipal councils) and local communities in both countries. This will ensure buy-in of the project and appropriation of the processes for delivering the project outputs and global environmental benefits. Special consideration will be given for the participation of women and indigenous groups within the Río Motagua watershed, which are the among the groups that are most affected by the pollution of surface water, soil, and air in the Río Motagua watershed and play an integral role in implementing solutions to reduce these threats.

31. Through Component 3, the project will be able to document knowledge gained and lessons learned regarding the IRBM of the Río Motagua watershed, which will allow the replication and scaling-up of successful experiences in Guatemala and Honduras, as well as other countries of the Central America Region, including BEPs and BATs to reduce surface wastes and harmful chemicals and wastes.

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

Stakeholder	Role in the project
GUATEMALA	
Ministry of the Environment and Natural Resources (MARN)	The MARN is the GEF Operational Focal Point. It is charged with the creation and execution of environmental policy in Guatemala. The MARN will provide technical guidance during project implementation in activities related to coordination, planning, and implementation of sound solid waste and wastewater management activities and will be responsible for the direction, coordination, execution, and oversight of the project in Guatemala, as well as for maintaining adequate communication with other executing partners, UNDP, and the GEF.
Ministry of Agriculture, Cattle Ranching, and Nutrition (MAGA)	The MAGA is charged with creating and executing policy for agricultural development and the sustainable use of renewable natural resources and their services. It will facilitate specific relevant information (spatial data, studies) and the coordination with institutions, organizations, and the private sector, principally with those agribusinesses in the Motagua watershed, for the reduction of land-based pollution sources.
Secretary of Planning and Programming of the Presidency (SEGEPLAN)	SEGEPLAN is responsible for the design and development of public policies for the Government of Guatemala, as well as their monitoring and evaluation. It will be responsible for guiding the institutions involved so that the project's actions are harmonized with related public policies regarding water resources and waste management.
Ministry of Public Health and Social Assistance (MSPAS)	The MSPAS is charged with the stewardship of the national health system, to improve the health and well-being of the population and to optimize planning, implementation, administration, and evaluation of the systems that deliver health services in the country. The MSPAS will support the project by providing relevant information for decision making, defining key priorities related to reducing pollution caused by solid wastes, wastewater, and harmful chemicals, and participating in the review of related regulations to be developed by the project.
Ministry of Energy and Mines (MEM)	The MEM is charged with developing policy, regulations, and overseeing systems for the exploration, exploitation, and commercialization of oil and minerals; and for proposing and enforcing environmental laws regarding the energy sector. The MSPAS will support the project by providing relevant information for decision making, defining key priorities key priorities for reducing pollution caused by solid wastes, wastewater, and harmful chemicals, and participating in the review of related regulations to be developed by the project.
Ministry of Education (MINEDUC)	MINEDUC is charged with developing and managing educational policy, monitoring the quality and coverage of public and private educational services in Guatemala. MINEDUC will support the development of the binational environmental education program to build awareness and reduce environmental pressures on the Río Motagua watershed, including pollution of surface waters and the unintentionally production of harmful chemicals and wastes.
Municipalities	The municipalities are responsible for the management and disposal of solid and liquid wastes within their jurisdictions. The municipalities will participate directly in the actions aiming at the sound management of solid waste and wastewater, including the development of Local Action Plans. The municipalities will also participate in the development and review of the regulatory framework for the ISWRM of the Río Motagua watershed. In addition, they will coordinate with local community representatives (COMUDES and COCODES) in order to achieve greater involvement local communities and other stakeholders that directly benefit from the project. The capability of municipalities will be strengthened to improve the management of solid wastes and to reduce emissions of POPs un-intentionally produced through open burning of solid wastes from dumpsites.
Private sector	Support from the private sector (industry, agroindustry, agricultural associations, and chambers of commerce) will be relevant for the development and implementation of the regulatory framework for the ISWRM of the Motagua watershed, and for providing information related to the generation and management solid and liquid wastes, as well as harmful chemicals. They will benefit from the implementation of pilot projects with low-cost technologies to reduce land-based pollution of water resources and from incentives to implement clean technologies.
Municipal Development Institute (INFOM)	INFOM's objective is to support the development of the municipalities in Guatemala by providing direct services and granting technical and financial assistance. INFOM is charged with managing policies and strategies for sanitation and potable water as well as the implementation and execution of activities derived from these. INFOM will play a central role in coordinating activities for the participation of municipalities in the project, particularly by providing support and facilitating financing for infrastructure for managing solid waste and wastewater, and reducing emissions of POPs un-intentionally produced through open burning of solid wastes from dumpsites.
Local communities and community organizations	Local communities and community organizations will participate in project activities for the development of Local Action Plans and the implementation of actions for reducing pollution as part of the binational SAP for the integrated management of the Río Motagua watershed. They will be beneficiaries of training for ISWRM. These groups represent the interests of the grassroots stakeholders of the project, including farmers and specific sectors of society such as women and indigenous people (e.g. Quiche, Kakchiquel, Pocoman and Maya Chorti). The

	livelihoods of these stakeholders depend on water quality and the health of aquatic ecosystems in the target areas. They will be consulted, as appropriate, during project preparation, particularly in relation to the location and design of the proposed pilots (a PPG participation plan will be drawn up at an early stage in the project formulation process). A stakeholder participation plan for the implementation phase will also be drawn up during the PPG.
HONDURAS	
Ministry of Energy, Natural Resources, Environment, and Mines (MI AMBIENTE)	MI AMBIENTE is the GEF Operational Focal Point. It is charged with the development, coordination, execution, and evaluation of policies related to the protection and use of natural resources and the environment, protection of biodiversity, the integrated management of water resources, as well as research and control for all forms of pollution. MI AMBIENTE will provide technical guidance during implementation of the project in activities to the ISWRM of the Motagua watershed, including the management of solid waste and wastewater, and the rehabilitation of riparian and coastal ecosystems. It will be responsible for the direction, coordination, execution, and supervision of the project in Honduras, as well as for maintaining adequate communication with other executing partners, UNDP, and the GEF.
General Coordination Secretariat of the Government (SCGG)	This secretariat is responsible for the coordination of public administration, strategic planning within the framework of the Country Vision and National Plan, and the definition of general policies. The SCGG will be charged with assigning resources to achieve the defined objectives and goals of the Annual and Multiannual Strategic Plan through the articulation of the budgetary subsystem and the public investment program. It will also be responsible for the mechanisms and procedures for follow-up and evaluation of the results.
Secretariat of Agriculture and Livestock (SAG)	The SAG coordinates the planning and execution of the Public Sector Agricultural Policy, specifically policy related to land tenure, rural financing, commercialization, silviculture, livestock production, and rural and forest development. The SAG will be charged with developing and executing sustainable agricultural development actions to reduce land-based sources of pollution in the Motagua watershed. It will facilitate specific information about the productive sectors of the region, as well as provide agricultural assistance that guarantees the conservation of soils and coordination with institutions, organizations, and private sector groups dedicated to agricultural production.
Secretariat of Health (SESAL)	The SESAL is charged with serving as the steward of the country's health system, improving the health conditions and wellbeing of the population and optimizing the planning, implementation, administration, and evaluation of the public health delivery systems, including sanitation regulations and the application of the standards concerning the proper management of the wastes generated by health facilities. The SESAL will support the project by providing relevant information for decision making, principally for issues related to the reduction of pollution from wastes generated by health facilities and wastewater, as well as participating and participating in the review of related regulations to be developed by the project.
Secretariat of Human Rights, Justice, Governance, and Decentralization (SDHJGD)	SDHJGD oversees policies related to the management of funds for emergency events, municipal development, and citizen organization. SDHJGD will contribute to the coordination, supervision, evaluation, and auditing of departmental, municipal, and civil society organization (CSO) norms and regulations.
Secretariat of Social Development and Inclusion (SIDES)	SIDES is the governing institution of national social policy, including the planning, administration, and execution of social-themed plans, programs, projects, and strategies, which are oriented towards reducing poverty and extreme poverty. SIDES will support the structuring of an inclusive project and will facilitate the information relevant to the area of influence.
Honduran Social Investment Fund (FHIS)	FHIS contributes to the reduction of poverty in the areas of education, health, basic electrification, roads, social projects, and the development of human capital for which the agency provides services through investments in social development and infrastructure works. FHIS will provide support in strengthening the management capacities of the municipalities and their communities for reducing pollution caused by solid waste and wastewater.
Permanent Commission on Contingencies (COPECO)	COPECO is responsible for the coordination and strengthening of the National Risk Management System (SINAGER) through shared public and private management that is aimed at preventing and reducing risk, emergency response, recuperation from and adaptation to climate change to guarantee life and material and environmental goods for the country. COPECO will provide information relevant to the area with regard to risks, as well as participate in the review and updating of environmental policy.
Autonomous National System of Aqueducts and Sewers (SANAA)	SANAA coordinates activities that ensure efficiency in the use of water resources, including financial and human resources for its management, as well as the evaluation and treatment of wastewater. SANAA will provide relevant information for making decisions with regard to reducing pollution by wastewater, as well as participate in the review of related regulations to be developed by the project.
Honduran	AMHON is an association of municipalities that represents the interests of its unions and associations and

Association of Municipalities (AMHON)	contributes to strengthening municipal capacities for promoting their integrated development. AMHON will facilitate the coordination for the participation of municipalities in the project, will provide information from the municipalities, and will act as the link between them and MI AMBIENTE for the ISWRM of the Motagua watershed.
National Institute of Geology and Mines (INHGEOMIN)	INHGEOMIN is responsible for promoting all mining activities aimed at making better use of mineral resources and their benefits and commercialization in an ecologically sustainable, economically profitable, and socially beneficial manner. INHGEOMIN will support the project by providing information for making decisions related to the priorities around reducing pollution by solid wastes generated by mining activities, specifically wastewater.
National Institute of Forest Conservation and Development, Protected Areas, and Wildlife (ICF)	ICF is responsible for implementing the National Policy of Forest Conservation and Development, Protected Areas, and Wildlife; it develops programs, projects, and plans aimed at managing forest resources ensuring their rational use and sustainable management. ICF will provide relevant information regarding degraded forest areas and will provide technical support the rehabilitation of riparian and coastal ecosystems.
Honduran Institute of Tourism (IHT)	The IHT is responsible for promoting tourism development and in a balanced, sustainable, and responsible manner that will result in generation of jobs, foreign exchange earnings, and local/regional development. It will provide information and statistics about negatives impacts caused by the tourism sector on the environment due to the generation of solid waste and wastewater in the project area.
Municipalities	The municipalities are responsible for the management and disposal of solid and liquid wastes within their jurisdictions. The municipalities will participate directly in the actions aiming at the sound management of solid waste and wastewater, including the development of Local Action Plans. The municipalities will also participate in the development and review of the regulatory framework for the ISWRM of the Motagua watershed. In addition, they will coordinate with Regional Development Councils in order to achieve greater involvement local communities and other stakeholders that directly benefit from the project. The capability of municipalities will be strengthened to improve the management of solid wastes.
Private sector	Support from the private sector (industry, agroindustry, agricultural associations, and chambers of commerce) will be relevant for the development and implementation of the regulatory framework for the ISWRM of the Motagua watershed, and for providing information related to the generation and management solid waste and wastewater. They will benefit from the implementation of pilot projects with low-cost technology to reduce land-based pollution of water resources and from incentives to implement clean technologies.
Local communities and community organizations	Local communities and community organizations will participate in project activities for the development of Local Action Plans and the implementation of actions for reducing pollution as part of the binational SAP for the integrated management of the Río Motagua watershed. They will be beneficiaries of training for ISWRM.
UND Guatemala and UNDP Honduras	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.

3. Gender Considerations. Are gender considerations taken into account? (yes ☒ /no ☐). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

32. The project will ensure the equal participation of men and women in the proposed actions. Usually women are relegated to household tasks and have only minor participation in social issues and positions of leadership and decision making. The project will facilitate the equal participation of men and women. Women have determining roles in household solid waste management and disposal as well as matters of household health; as such, involving them in environmental projects will be very relevant. In addition, women have high participation rates in development projects and as such this will be taken into consideration during all participatory processes. The equal participation of women and men will facilitate the equitable implementation of the project's actions, decision-making, goals and objectives defined by the stakeholders, and adequate representativeness. Special attention will be paid to ensuring an appropriate gender balance in the training and capacity development activities, and the participation of women from low-income households in a pilot waste separation and plastic recycling program, which will provide additional income and useful household items for recycling. To ensure that gender considerations will be mainstreamed into project preparation, a gender specialist will be hired during the PPG phase of the project; in addition, UNDP country gender staff will provide additional support and guidance. The project will be adopting and reporting on the GEF6 GENDER indicators.

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	Level	Risk Mitigation Strategy
Limited coordination and commitment from the governments fail to ensure environmental and financial sustainability beyond the life of the project	M	To mitigate this risk the design of the project includes the development of a robust coordination framework between governments for the implementation of the IRBM of the Río Motagua watershed (Component 2), which will become official through a Memorandum of Understanding to be signed at the highest level in each country. In addition, the project will allow the creation of an international cooperation task group to ensure the technical, scientific, and economic support for the implementation of the SAP. Pre-investment studies of large-scale infrastructure and equipment to reduce pollution will identify investment needs and will more quickly mobilize efforts to secure funding. Finally, the project has a strong capacity building component that will better prepare and build greater commitment from government officials for the IRBM of the Río Motagua watershed.
Limited public interest in reducing pollution and resistance to change current management practices	M	The project will implement a binational environmental education program to build awareness among local communities and other residents of the Río Motagua watershed about the environmental and health threats related to current practices for the management and disposal of solid waste and harmful chemicals; as well as the benefits of an alternative approach that will improve the quality of surface water resources benefiting their wellbeing and the watershed's ecosystems. The project will make incentives available to the private sector and businesses to motivate them to adopt clean technologies for reducing pollution.
Limited willingness or capacity of national authorities to share information and knowledge	L-M	To reduce the risk of lack of willingness or capacity to share scientific and technical information for the integrated management of the watershed, the project will give strong attention under the SAP (Component 2) to the improvement of national capacities for IRBM, including the development of environmental information systems to monitor water quality and share information. Technical and legal guidelines for IRBM and work protocols for reducing land-based water pollution and conducting technical studies will be develop jointly agreed by the two national authorities, which will facilitate information and knowledge sharing.
Climate change	L	The project will reduce pressures on the Río Motagua watershed ecosystems, particularly the effects of pollution (reduction of solid wastes and harmful chemicals and waste.) contributing to build healthier ecosystems that will be more resilient to climate change and variability. Through the rehabilitation (conservation and protection, reforestation, natural regeneration, remediation) of riparian ecosystems and coastal ecosystems the project will contribute to reduce the impacts of floods and landslides and the control of erosion associated to climate change.

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

33. Guatemala and Honduras governments have endorsed the Strategic Action Programme (SAP) for the sustainable management of the shared living marine resources of the Caribbean Large Marine Ecosystem (CLME). UNDP is now implementing GEF funds for catalyzing the implementation of the SAP, whose objective is to facilitate Ecosystem-Based Management of the CLME and the implementation of the Ecosystem Approach for the management of key fisheries. This project, shortly referred to as the CLME+ project, is an umbrella programme meant to enhance cooperation among the region's many stakeholders, and to establish enabling conditions for creating synergies between the many different ongoing and planned projects and initiatives. The proposed intervention will strengthen CLME SAP implementation by applying a 'source to sea' approach to reducing pollution loads to the Caribbean Sea LME and also ultimately contributing to ensure the sustainable and climate resilient provision of goods and services from shared living marine resources.

34. As part of the United Nations Environment Programme's Caribbean Environmental Program (PNUMA), Guatemala and Honduras have participated in the regional project *Caribbean Regional Fund for Wastewater Management* (CReW), which is financed by the GEF. This project is in its fourth year of implementation (2012-2016), within which Guatemala and Honduras have benefited from national capacity-building activities. The objective of the CReW project is to develop financing models to efficiently manage wastewater in the Caribbean, while the project proposed herein will implement pilot projects for the sound management of land-based sources of marine contamination in the Río Motagua watershed. Lessons learned and knowledge will be exchanged between the two projects, which will contribute to achieving projects objectives and the application of the Cartagena Agreement and its protocol for land-based sources of marine contamination by both countries. In Guatemala the CReW project is coordinated through the MARN and in Honduras through the MI AMBIENTE, which facilitate coordination of actions.

35. Coordination will also be established with the project *Guide for Developing Solid and Liquid Waste Management Plans*, which is part of Guatemala's efforts for marine-coastal management. This project was developed by the Department for the Management of Liquid and Solid Wastes of the MARN with the support of the GIZ and the Mesoamerican Reef Leadership Program. This project aims at reducing pollution from solid wastes that area affecting the Mesoamerican Coral Reef. In Guatemala, the MARN will coordinate efforts with the different sectors and stakeholders in the Caribbean region, in particular of the municipalities of Livingston (Izabal Department) and Morazán (El Progreso Department) where pilot initiatives regarding solid waste management will implemented and which are expected to be replicable in the other regions of the country, including in the Río Motagua watershed. The Guide for Developing Solid Waste and Wastewater Management Plans that will be developed under the GIZ will be useful tool for the development of similar plans under the project proposed herein. The DEMARDS of the MARN will be directly involved in the implementation of both initiatives, which will facilitate effective cooperation between the two initiatives.

36. The DCPQyDP is currently proposing four projects related to chemicals and wastes, three of which are financed by the GEF (Cycle 5). The first project financed by the GEF, *Enabling Activities for the Review and Updating of the National Implementation Plan of the Stockholm Convention on Persistent Organic Contaminant*, will begin its implementation in the second semester of 2015; it is national in scope and will last one year. The second project financed by the GEF, *Environmentally sound management and disposal of polychlorinated biphenyl (PCB) - containing equipment and disposal of DDT wastes, and upgrade of technical expertise in Guatemala*, is awaiting approval, is national in scope and will last 3 years. The third project financed by the GEF, *Strengthening of National Initiatives and Enhancement of Regional Cooperation for the Environmentally Sound Management of POPs in Waste of Electronic or Electrical Equipment (WEEE) in Latin-American Countries*, is awaiting approval to begin activities, is national in scope and will last 5 years. The fourth project, financed by the PNUMA and the Secretariat of the Stockholm Convention (SSC), is *Alternatives to Persistent Organic Contaminants (POPs) recently listed in the Stockholm Convention and to New Chemical Products of Annex III of the Rotterdam Agreement in Guatemala, with a focus on Endosulfan, listed in 2011*." This project has been approved to begin in the second semester of 2015, is national in scope, and will last one year. The project presented herein is complementary to the four projects previously mentioned, as it proposes greater specificity and scope to achieve the integrated environmental management of harmful chemicals and wastes in the Río Motagua watershed; it will develop specific baseline information for the Río Motagua watershed related to harmful chemicals and wastes and will implement pilot projects for managing solid wastes and reducing unintentionally produced POPs and other chemical wastes. The DPQyDP/MARN has an institutional coordination platform to achieve the effective coordination and execution of the projects, which is formed by the Commission on Persistent Organic Contaminants and the Technical Coordination Commission and support for the Management of Harmful Products, Substances, and Chemical Wastes through which the implementation and dissemination of the four projects and the project presented herein will be facilitated.

37. Honduras is implementing the GEF *Strengthening the Sub-system of Coastal and Marine Protected Areas* (2015-2018), with the support of UNDP, to promote the conservation of biodiversity through the expansion of the effective coverage of marine and coastal protected areas in Honduras. This project will include the area of influence of the Río Motagua outfall in the municipality of Omoa, specifically in the area of influence of the Cuyamel Omoa National Park that contains coral reefs, mangroves, lagoon systems, wetlands, species of commercial importance and species that are in danger of extinction. Synergies will be established with regard to the evaluation and sources of contamination and also in the proposed pilot actions at the marine-coastal ecosystems to reduce threats as a result of the contamination originating in the Río Motagua watershed.

38. In addition, synergies will be established with the GEF/UNDP project *Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal* (2016-2020), which will allow the following: a) develop institutional capacities and strengthen the legal framework with regard to POPs; b) manage and eliminate POP pesticides, PCBs, and recently listed POPs in an environmentally friendly way; c) reduce emissions of organic contaminants (UPOP) from prioritized sources; and d) create awareness, identify lessons learned, disseminate experiences, monitor the progress of the project, and provide feedback and evaluation. The project will include the municipality of Omoa for financing pilot projects for mapping, identification, and disposal of products and wastes that contain POPs. Actions will be coordinated with the GEF/UNDP project.

6. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes ☒ /no☐). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

39. Guatemala has signed and ratified the Agreement for the Protection and Development of the Marine Environment of the Great Caribbean Region, known as the Cartagena Agreement that was put into force in 1986 jointly with its Protocol Relative to the Cooperation for Combating Oil Spills in the Great Caribbean Region, which includes the FTCM. As a follow-up to compliance with the Agreement, Guatemala presented the National Report to the XIII Meeting of the Agreement Parties in Cartagena in December 2014, which presented the strategies and actions that the country has performed and will perform in compliance with the Agreement. Within these proposed strategies and actions the project presented herein contributes to compliance with the following: a) Development of the appropriate measures to prevent, reduce, and control pollution from land-based sources and activities; b) Development and implementation of adequate plans, programs, and measures; and c) Joint development of subregional and regional programs and measures to prevent, reduce, and control pollution. Guatemala has adopted the CLME SAP at ministerial level.

40. The government of Guatemala signed the Stockholm Convention on Persistent Organic Pollutants on January 29, 2002, and it was subsequently ratified on July 30, 2008. The Stockholm Convention came into force on October 28, 2008. Since that date, the country is obligated to develop a National Implementation Plan (PNI) to address the commitments derived from Article No. 7 (which refers to the development of the Application Plan, which notes that each member country of the Agreement shall develop a Plan for Implementation of the Agreement). Guatemala presented the PNI in 2010, and the project presented herein contributes to Guatemala's compliance with the following strategies: a) Measures to reduce emission from existing deposits and wastes, and b) Measures to reduce of un-intentionally produced POPs.

41. In Honduras, the project is consistent with the Law related to the Country's Vision and National Plan, more specifically this Objective 3, which calls for the sustainable use of resources and to reduce environmental vulnerability. The project is also consistent with the following laws and regulations: a) the General Environmental Law, which promotes the protection, conservation, restoration, and sustainable management of the environment and natural resources; b) the General Water Law, which regulates the sound management of water resources including their protection, conservation, valuation, and use so that water resources are managed in an integrated manner; c) the Climate Change Law, which establish principles and regulations to plan, prevent, and respond to the impacts caused by climate change, and promotes the adoption of best practices aiming at reducing environmental vulnerability and improve resilience; d) the Forestry Law, which has an objective to achieve and perpetuate the maximum direct and indirect benefits that may accrue to the nation from its flora, fauna, water, and soil, and determine and implement a valuation system for environmental goods and services; e) the Health Code, which aims at ensuring the health of the environment and the population; and f) the Solid Waste Regulation, which regulates the management of solid waste, including the prevention, reduction, storage, transportation, treatment, and disposal of wastes in a way that is conducive to their use in order to avoid risks to human health and the environment. The project is also in line with the Ramsar Convention, which was signed in 1993 and ratified by Honduras on June 18, 2017 to ensure the conservation and sustainable use of wetlands; the Cuyamel Ramsar site, a coastal area located in the lower Motagua watershed (Omoa, Cortes). Finally, Honduras has adopted the CLME SAP at ministerial level.

7. Knowledge Management. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

42. Results from the project will be disseminated within and beyond the project intervention area through a number of existing information sharing networks and forums. In particular, the project will participate in and contribute to the GEF's IW:LEARN program including via participation in biennial GEF IW conferences and relevant regional and/or thematic activities under IW:LEARN. The project will commit at least 1% of GEF grant resources to portfolio learning activities through IW:LEARN. In addition, the project will participate, as is relevant and appropriate, in other UNDP-GEF sponsored networks that are organized for senior staff working on projects that share common characteristics. For example, the UNDP-GEF Regional Coordination Unit (RCU) has established an electronic platform for sharing lessons learned among the project managers. The project will identify and participate, as is relevant and appropriate, in scientific, policy-based, and/or any other networks that may be of benefit to project implementation. The project will identify, analyze, and share lessons learned that might be beneficial for the design and implementation of similar future projects. Identifying and analyzing lessons learned is an ongoing process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered no less frequently than once every 12 months. The UNDP-GEF shall provide a format for this exchange and will assist the project team in categorizing, documenting, and reporting the lessons learned. Specifically, the project will ensure coordination in terms of avoiding overlap, sharing best practices, and generating knowledge products of best practices in the area of international waters and harmful chemicals and wastes with the current projects of the portfolio of Guatemala and

Honduras. Knowledge-management activities will be included as part of the project's Monitoring & Evaluation Plan and will be properly budgeted.

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

A. RECORD OF ENDORSEMENT[13] 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)*
Oscar Ernesto Medinilla Sánchez	Minister	MINISTRY OF THE ENVIRONMENT AND NATURAL RESOURCES, GUATEMALA	**07/30/2015**
Rosibel Martínez Arriaga	Director of External Cooperation and Resource Mobilization	SECRETARIAT OF ENERGY, NATURAL RESOURCES, ENVIRONMENT, AND MINES, HONDURAS	**07/29/2015**

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies[14] 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 - UNDP GEF Executive Coordinator		12 August 2015	Jose Vicente Troya – Regional Technical Advisor (Waters & Oceans)	(507)302-4753	Jose.troya@undp.org

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.

[13] 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.

[14] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF