United Nations Development Programme

Project title: Integrated Environmental Management of the Río Motagua Watershed		
Country: Guatemala and Honduras	**Implementing Partner:** Ministry of the Environment and Natural Resources of Guatemala (MARN); Secretariat of Energy, Natural Resources, Environment, and Mines of Honduras (Mi Ambiente+)	**Management Arrangements:** National Implementation Modality (NIM)
UNDAF/Country Programme Outcome: *Guatemala*: a) Impoverished rural populations develop new sustainable economic opportunities to compete in market systems; b) The Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use, and conservation of natural resources, as well as resilience of the community in dealing with natural climate events; and c) Indigenous populations, primarily youth and women, are active citizens and participate effectively in decision making related to development themes at the community, municipal, subnational, and national levels. *Honduras:* Outcome 5 - The poor and vulnerable population to food insecurity in the prioritized regions has increased their production and productivity, access to decent employment, income and sustainable consumption, taking into account climate change and ecosystem conservation.		
UNDP Strategic Plan Output: Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.		
UNDP Social and Environmental Screening Category: Moderate	**UNDP Gender Marker:** GEN2	
Atlas Project ID/Award ID number: 00085087 (Guatemala) 00088100 (Honduras)	**Atlas Output ID/Project ID number:** 00092858 (Guatemala) 00094909 (Honduras)	
UNDP-GEF PIMS ID number: 5714	**GEF ID number:** 9246	
Planned start date: 03/2018	**Planned end date:** 03/2023	
LPAC date: TBD		
Brief project description: The objective of the project is to improve the integrated management of the Río Motagua watershed and reduce land-based sources of pollution and emissions from unintentionally produced persistent organic pollutants (U-		

POPs) to mitigate impacts to coastal-marine ecosystems and the livelihoods of the local population. The project will enhance joint efforts between Guatemala and Honduras for the management of the Río Motagua watershed (17,991 square kilometers), which is under threat by the following: a) surface water and groundwater pollution from unmanaged solid waste, wastewater, and agrochemicals; b) reduced surface water flows and groundwater reserves; c) loss of forest cover due primarily to agricultural expansion, which causes erosion and sedimentation of surface water; and d) floods, drought, and landslides caused by deforestation of riverbanks and areas with steep slopes and by climate change and variability.

The project will apply the Transboundary Diagnostic Analysis/Strategic Action Program (TDA/SAP) methodology through the following means: a) a diagnostic analysis for the Integrated River Basin Management (IRBM) of the Río Motagua watershed in Guatemala and Honduras, which includes 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 SAP for the integrated management of the watershed, which includes the development of an institutional coordination framework that allows the development of joint proposals for the implementation of the SAP, as well as 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 resulting from current waste management practices in the Río Motagua watershed, through the implementation of sound municipal solid waste management practices in Guatemala, including reducing the practice of open-air burning of solid waste.

FINANCING PLAN	
GEF Trust Fund	USD 5,329,452
UNDP TRAC resources	USD 0
Cash co-financing to be administered by UNDP	USD 0
(1) Total Budget administered by UNDP	**USD 5,329,452**
PARALLEL CO-FINANCING (*all other co-financing that is not cash co-financing administered by UNDP)*	
Ministry of the Environment and Natural Resources of Guatemala (MARN)	USD 1,054,129
Asociación Sotz'il	USD 200,000
Wetlands International	USD 50,576
Mesoamerican Reef Fund (MARFUND)	USD 225,453
Foundation for Ecodevelopment and Conservation (FUNDAECO)	USD 800,000
Inter-American Development Bank (IADB)	USD 15,000,000
Municipality of Pachalum, Guatemala	USD 163,002
Municipality of Estanzuela, Guatemala	USD 580,658

Municipality of Los Amates, Guatemala	USD 119,620	
Directorate General of the Merchant Marine, Honduras	USD 29,380	
Secretariat of Agriculture and Livestock (SAG) Honduras	USD 1,514,350	
Gas del Caribe Honduras	USD 2,194,395	
National Institute of Forest Conservation and Development, Protected Areas, and Wildlife of Honduras (ICF)	USD 487,003	
Secretariat of Energy, Natural Resources, Environment, and Mines (Mi Ambiente+) Honduras	USD 2,500,000	
GOAL Honduras	USD 1,000,000	
Municipality of Nueva Frontera, Honduras	USD 10,000	
Municipality of Omoa Honduras	USD 69,310	
Municipality of Santa Rita Honduras	USD 30,000	
UNDP Honduras	USD 1,500,000	
UNDP Cap-Net	USD 500,000	
(2) Total co-financing	**USD 28,027,876**	
(3) Grand-Total Project Financing (1)+(2)	**USD 33,357,328**	
SIGNATURES		
Signature: print name below	**Agreed by Government**	**Date/Month/Year:**
Signature: print name below	**Agreed by Implementing Partner**	**Date/Month/Year:**
Signature: print name below	**Agreed by UNDP**	**Date/Month/Year:**

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LIST OF ACRONYMS

AMSA	Amatitlán Lake and Watershed Sustainable Management Authority
AWP	Annual Work Plan
°C	Degrees Celsius
BATs	Best available techniques
BEPs	Best environmental practices
BMP	Best management practice
BOD	Biochemical oxygen demand
CCAD	Central American Commission for Environment and Development
CDM	Municipal development councils (Honduras)
CEDAW	Convention to Eliminate Discrimination Against Women
CLME	Caribbean Large Marine Ecosystem
COD	Chemical oxygen demand
COCODE	Community Development Council (Guatemala)
CODEDE	Departmental Development Council (Guatemala)
CODEMA	Environmental Development Committee
COGUANOR	Guatemalan Technical Standards for Clean Production
COMUDE	Municipal Development Council (Guatemala)
CONAP	National Council for Protected Areas of Guatemala
CReW	Caribbean Regional Fund for Wastewater Management
CSO	Civil society organization
CW	Chemicals and Waste
DCPQyDP	Department of Coordination for the Management of Chemical Products and Harmful Waste in Guatemala
DEMARDES	Department of Solid Waste Management (MARN)
DIBIO	Biodiversity Division of Mi Ambiente+
DMM	Municipal Women's Offices in Guatemala
DRHyC	Department of Water Resources and Watersheds
DSA	Daily subsistence allowance
EIA	Environmental impact assessment
ENSO	El Niño–Southern Oscillation
EQT	Equivalent toxicity
ERAS	Regional Agro-Environmental and Health Strategy
ERC	Evaluation Resource Center
ERCC	Regional Strategy for Climate Change
FSP	Full-Size Project
FUNDAECO	Foundation for Ecodevelopment and Conservation
g	Grams
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
ha	Hectares
HDI	Human Development Index
IADB	Inter-American Development Bank
ICF	National Institute of Forest Conservation and Development, Protected Areas, and Wildlife of Honduras
IEO	Independent Evaluation Office
IHT	Honduran Institute of Tourism
INAB	National Forest Institute of Guatemala
INAM	Mi Ambiente+ National Women's Institute, Honduras

INE	National Statistics Institute of Guatemala
INFOM	National Institute to Promote Municipalities of Guatemala
INSIVUMEH	National Institute for Seismology, Volcanology, Meteorology, and Hydrology of Guatemala
IRBM	Integrated River Basin Management
ISWM	Integrated Solid Waste Management
IW	International Waters
km^2	Square kilometers
LPAC	Local Project Appraisal Committee
m^3/s	Cubic meters per second
M&E	Monitoring and evaluation
MAGA	Ministry of Agriculture, Livestock, and Food of Guatemala
MARFUND	Mesoamerican Reef Fund
MARN	Ministry of Environment and Natural Resources of Guatemala
masl	Meters above sea level
MAT	Maximum acceptable threshold
mg/L	Milligrams per liter
MINEDUC	Ministry of Education of Guatemala
mm	Millimeters
Mm^3	Million cubic meters
MOU	Memorandum of Understanding
MPT	Maximum permissible threshold
MSP	Medium Sized Project
MSPAS	Ministry of Public Health and Social Welfare of Guatemala
MT	Metric ton
MTR	Mid-term review
NGO	Nongovernmental organization
NIM	National Implementation Modality
NSAP	National Strategic Action Plan
OMM	Municipal Women's Offices in Honduras
PCDD	Polychlorodibenzodioxin
PCDF	Polychlorodibenzofuran
PIF	Project Identification Form
PINPEP	Incentive Program for Small Holders of Land Suitable for Forestry or Agroforestry
PIR	Project Implementation Report
PNAPPS	Honduran National Agroforestry Program for Sustainable Productive Landscapes
PMU	Project Management Unit
POP	Persistent organic pollutant
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant

PRF	Project results framework
PROBOSQUE	Incentive Program for the Establishment, Recovery, Restoration, Management, Production, and Protection of Forests
REDD	Reduce Emissions from Deforestation and Forest Degradation
RTA	Regional Technical Advisor
SAG	Secretariat of Agriculture and Livestock of Honduras
SAP	Strategic Action Program
SBAA	Standard Basic Assistance Agreement
SDG	Sustainable Development Goal
SEPREM	Presidential Women's Secretariat of the MARN, Guatemala
SESAL	Secretariat of Health of Honduras
SICA	Central American Integration System
SNICC	National Information System for Climate Change
SSC	Secretariat of the Stockholm Convention
TAC	Technical Advisory Committee
TDA	Transboundary Diagnostic Analysis
TE	Terminal evaluation
TEQ	Toxic equivalent
ToRs	Terms of reference
SWOT	Strengths, Weaknesses, Opportunities, and Threats
t/year	Tons per year
UGAM/DMP	Municipal Environmental Management Unit/Municipal Planning Office
UNDAF	UNDP Development Assistance Framework
UNDP	United Nations Development Program
U-POP	Unintentionally produced persistent organic pollutant
USAC	University of San Carlos in Guatemala
WDA	Watershed Diagnostic Analysis
WWTP	Wastewater treatment plant

I. DEVELOPMENT CHALLENGE

1. The Río Motagua watershed, with a total area of 17,991 square kilometers (km²), is located on the slope of the Caribbean Sea in southeast Guatemala and northwest Honduras. In Guatemala, the watershed covers an area of 15,111 km² (13.94% of the Guatemalan territory) and 2,890 km² in Honduras (1.36% of the Honduran territory). The watershed extends from 3,296 meters above sea level (masl) in the western highlands of Guatemala down to sea level in the Caribbean Sea, stretching from west to east. In Guatemala, the Río Motagua watershed is one of the key geographic features of the country because of the water it supplies from the Highlands Mountains, the Sierra del Merendón, the Sierra de las Minas, and Chuacús. With more than 500 tributaries and an average daily flow of 216 cubic meters per second (m^3/s), the volume of water it supplies is estimated to be 6,500 million cubic meters (Mm^3) annually in Guatemala, and 2,072 Mm^3 annually in Honduras; the Río Motagua is the longest river in Guatemala, spanning 463.5 km, and is classified as a 6th order river (Figure 1).

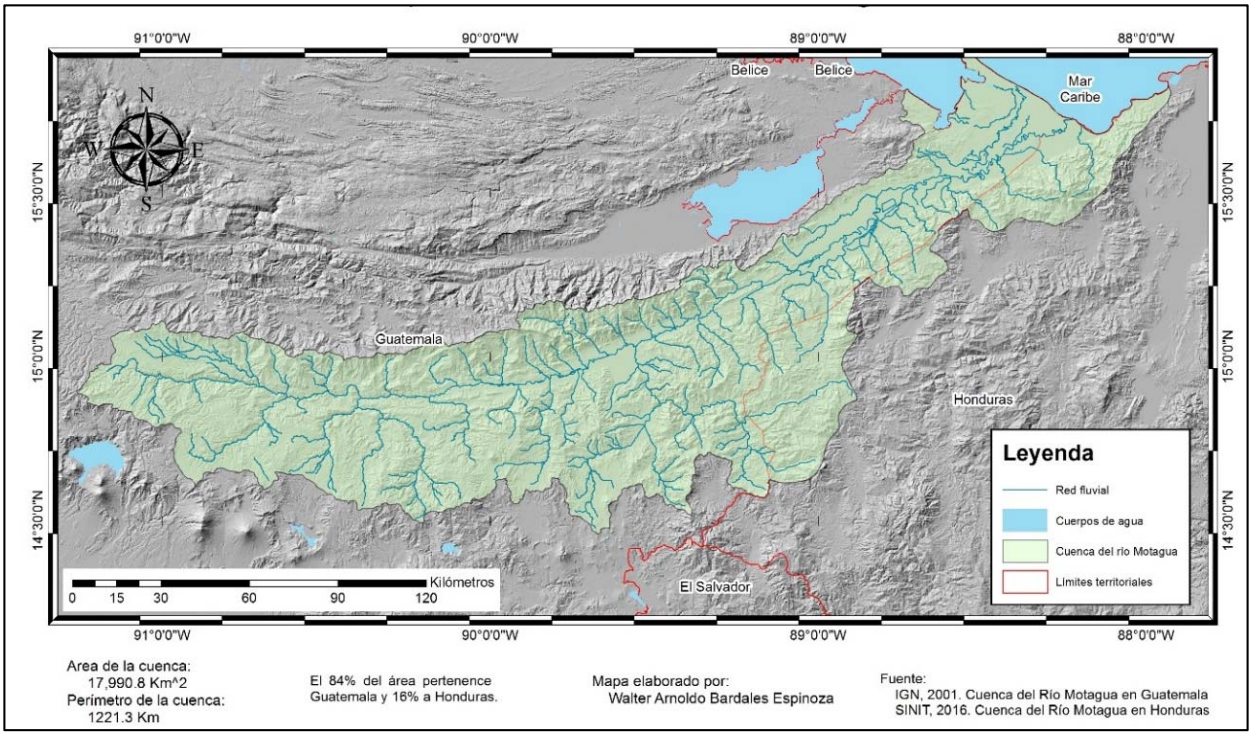


Figure 1 – Río Motagua Watershed.

2. There are 10 life zones and seven ecoregions existing within the watershed; vegetation in the middle and upper (above 1,200 masl) parts of the watershed is composed of pine-oak forest or pine forest. From 300 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. Per the soil classification system of Simmons et al. (1959) and Simmons (1968), the Río Motagua basin has 80 principal soil types, 20 geologic units, and can be divided into four distinct physiographic regions: the Motagua depression, volcanic highlands, crystalline highlands, and sedimentary highlands. The climate in the Río Motagua watershed is driven by the general circulation of the atmosphere, the influence of Caribbean Sea, and characteristics of the geographical position and topography of the watershed with two distinct climatic seasons: the rainy season (May to October) and the dry season (November to April) (National Institute for Seismology, Volcanology, Meteorology, and Hydrology of Guatemala [INSIVUMEH], 2015). In addition, two distinct regional rainfall patterns are observed: the Central Plateau (average temperature of 19.7 degrees Celsius [°C]) and the Motagua valley (average temperature of 28.1°C) have an average annual rainfall from 700 to 1,300 millimeters (mm), while in the Caribbean coastal plain (average temperature from 26.3 to 26.7°C) annual rainfall varies between 3,230 and 3,726 mm.

3. Guatemala covers an area of 108,889 km^2. The country's altitudinal and microclimatic variations and its position within the Americas mean that Guatemala has the greatest number of ecological zones among the Central American countries. Guatemala has been one of the strongest economic performers in Latin America in recent years, with a gross domestic product (GDP) growth rate of 3% since 2012 and 4.1% in 2015. Guatemala has a population of approximately 13.6 million people, and despite having the largest economy in Central America, has one of the highest inequality rates in Latin America. Official figures indicate that 59.3% of Guatemalans live in impoverished conditions. 52% of the country's population living in poverty are indigenous. Guatemala's Human Development Index (HDI) for 2015 was 0.640, which puts the country in the medium human development category, positioning it at 125 out of 188 countries and territories.

4. Honduras has a total area of 112,492 km^2. The tropical location of the country between two oceans and its topographical conditions create a variety of habitats, from cloud forests to coral reefs, which are all favorable for a high biotic diversity. Honduras has a population of approximately 8.6 million inhabitants, 6% of which are indigenous. Honduras is a low middle-income country that faces major challenges, with more than 66% of the population living in poverty in 2016. In 2016, the country's economy grew by 3.7%, according to the latest estimates, and is expected to grow by 3.5% in 2017. Despite the favorable economic outlook, the country faces the highest level of economic inequality in Latin America. Honduras's HDI index value for 2015 was 0.625, which puts the country in the medium human development category, positioning it at 130 out of 188 countries and territories.

5. In Guatemala, the Río Motagua watershed drains through 14 departments (El Quiché, Totonicapán, Sololá, Chimaltenango, Sacatepéquez, Guatemala, Jalapa, Chiquimula, Zacapa, Izabal, El Progreso, Jutiapa, Alta Verapaz, and Baja Verapaz) and 93 municipalities. In addition, the watershed includes 55 protected areas (188,502 hectares [ha]) with different management categories, including multiple-use areas, national parks, biosphere reserves, private natural reserves, and permanent closure zones protecting springs, cultural monuments, municipal regional parks, and wildlife refuges). Of the approximately 4,339,748 million people that reside in the Río Motagua watershed, 51.7% are women and 48.3% are men (94.8% of this total are Guatemalans[1]). 56% of the Guatemalan population living in the watershed live in rural areas and 44% in urban areas. Indigenous peoples account for 46% of the population, which include the Kaqchikel, K´iché, Kekchi, and garifuna groups, many of whom have migrated to urban centers within the region, including Guatemala City. In the Guatemalan portion of the watershed, 59% of the population live in poverty (HDI: 0.48)[2]

6. In Honduras, the watershed drains through four departments (Copán, Cortés, Ocotepeque, and Santa Barbara) and 17 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. 5.2% of the total population of the Río Motagua watershed are Honduran. 54.5% of the Honduran population live in rural areas and 45.5% in urban areas. In the Honduran portion of the watershed, 37% of the population are considered poor (HDI: 0.661).

7. Economic activities within the watershed important 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 bananas) are the most common, along with cattle-ranching (Table 1; Figure 2). In Guatemala, mining and industrial activities are also present in the middle portion of the watershed; Guatemala City, with a population of 2.2 million, is located in this portion of the watershed. Throughout the entire watershed, subsistence agriculture (mainly the production of basic grains) is practiced, as well as traditional fishing on the Caribbean coast.

Table 1 – Land use categories in the Río Motagua watershed.[3]

Land use	**Area (km^2)**	**%**
Crops	4,480	24.9

[1] Estimated based on census data (2012) and population growth projections in Guatemala, census data (2013) and population growth projections in Honduras, and spatial analysis of urban areas within the watershed (IGN, 2001 and SINIT, 2016).
[2] Documentos de Caracterización Departamental, INE. Guatemala (2013).
3 MAGA, 2015 and SINIT, 2013.

Forest	4,714	26.2
Wetlands	342	1.9
Water bodies	144	0.8
Pastures	2,339	13.0
Rocks and lava formations	36	0.2
Urban areas	486	2.7
Low shrub vegetation	5,451	30.3

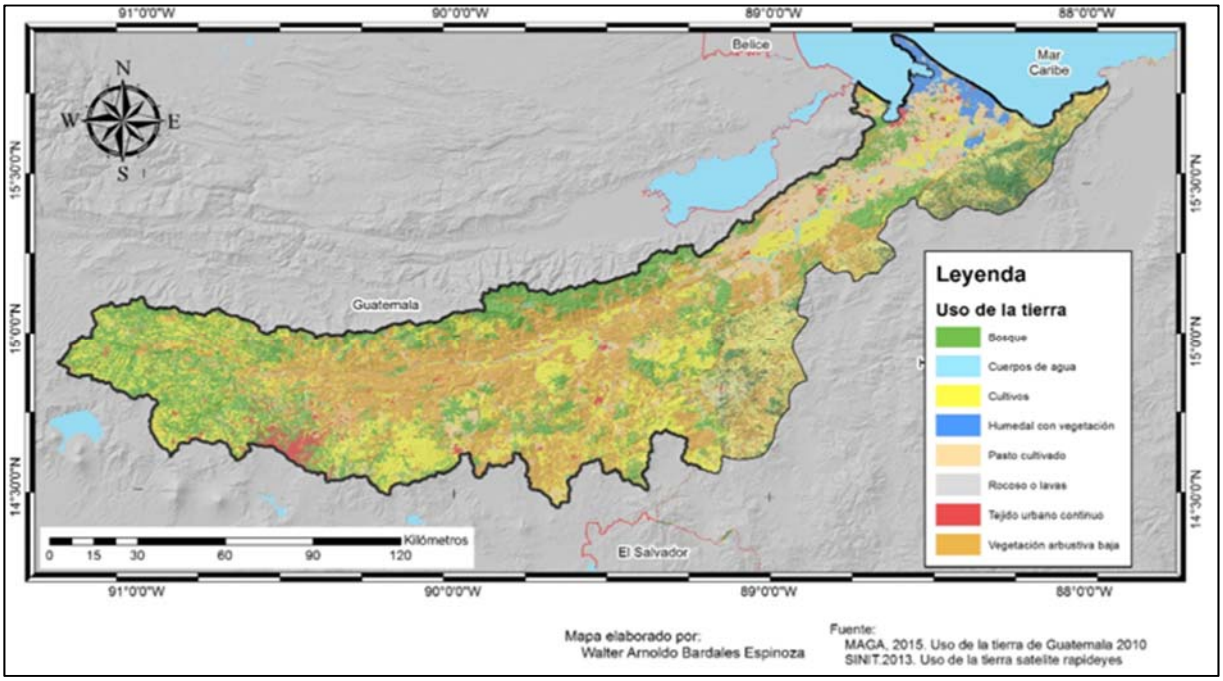


Figure 2: Land use in the Río Motagua watershed.

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

9. Guatemala's legal system for regulating solid waste management, particularly POPs, builds on the National Constitution, which states that, the State, municipalities, and inhabitants of the country will foster social, economic, scientific, and technological development to prevent pollution of the environment and maintain the ecological balance. Related laws include the Health Code (Decree No. 90-97), whose purpose is to preserve the health of the population, and the Environmental Protection and Improvement Law (Decree No. 68-86). There is also legislation for solid waste management that includes the National Policy for the Integrated Management of Solid Waste (Government Agreement No. 111-2005), the Regulation for Hospital Solid Waste Management (Government Agreement No. 509-2001), and the Regulation for the Management of Radioactive Waste (Government Agreement No. 559-98).

Transboundary environmental problem

10. The environmental integrity of the Río Motagua watershed faces multiple threats, resulting in its environmental degradation (Table 2). In Guatemala these threats include: a) surface water and groundwater pollution from unmanaged solid waste, wastewater, and agrochemical by-product disposal in up to 34 municipalities; b) deforestation, which between 2001 and 2006 amounted to more than 87,000 ha and affected 66 of the municipalities within the watershed (the annual rate of deforestation is estimated at 1.5%)[4]; 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) In addition, the watershed has been affected by drought (30 municipalities); storms and hurricanes (24 municipalities); floods (21 municipalities); and desertification, because of the watershed being part of Guatemala's dry ecosystem corridor.

Table 2 - Transboundary problems, threats, and environmental impacts in the Río Motagua watershed in Guatemala and Honduras.

Transboundary Problem	Threats	Environmental Impacts
Surface water and groundwater pollution	– Discharge of untreated domestic wastewater directly into the Río Motagua and its tributaries (just 17.5% of municipalities have a wastewater treatment plant [WWTP], most of which lack proper management) – Discharge of solid waste into water bodies, including plastics – Overuse of agrochemicals (fertilizers and pesticides) – Poor management or lack of solid waste (including plastic waste) collection systems and landfills – Infiltration of untreated wastewater into aquifers	– Water chemistry parameters in surface water above the maximum permissible threshold (MPT): nitrates, phosphates, biochemical oxygen demand [BOD] – Excessive pollutant loading: BOD, chemical oxygen demand (COD), suspended solids, nitrogen, phosphorus, arsenic, and cyanide, affecting plants, animals, and humans – High levels of sedimentation in surface waters
Loss of forest cover	– Agricultural expansion (common throughout the entire Río Motagua watershed) – Forest fires related to burns for agricultural purposes (threat of fire is prevalent throughout the entire Río Motagua watershed except in the coastal area, particularly during the dry season)	– Increased erosion and sedimentation in surface waters – Excess of nutrients in agricultural runoff leading to eutrophication altering natural ecosystems – Increase in landslides affecting infrastructure and agricultural production – Degradation of riverbanks and aquifer recharge areas
Reduced surface water flows and groundwater reserves	– Deforestation in aquifer recharge areas – Inefficient usage of water for human consumption and agricultural activities – Increase in groundwater pumping due to pollution of surface waters	– Seasonal water deficit – Low water flows altering natural ecological processes – Decreased levels of groundwater and possible changes in flow – Potential for saltwater intrusion in groundwater in the lower portion of the Río Motagua
Erosion and soil degradation	– Loss of forest cover	– Reduced soil productivity

[4] INAB (2012) and ICF (2009).

	– Expansion of agriculture and non-sustainable production practices	– Reduced soil fertility – Sedimentation of rivers and creeks leading to reduced water flows
Floods, drought, and landslides	– Deforestation of riverbanks and areas with steep slopes – Natural causes due to extreme climate variability including the El Niño–Southern Oscillation (ENSO), and seasonal heavy rains and tropical storms – Prolonged dry seasons (13% [2,513 km^2]) of the watershed is prone to flooding; 25.1% of the watershed has a high risk of drought, particularly the central Motagua valley; and 6.4% of the watershed presents a high occurrence of landslides)	– Floods and overflowing surface waters particularly in the lower portion of the Río Motagua and its tributaries and coastal zones – Impact to infrastructure, including drinking water distribution systems, and loss of crops – Seasonal water deficit, including drying up of tributaries and reduced potential of aquifer recharge – Damage to ecosystems, including overflows of WWTPs

11. The water quality of the Río Motagua watershed is most affected by many surficial tributaries containing solid waste, wastewater, remnants of agricultural fertilizers, and overloading of organic matter that feed into the river. According to the 2012 Preliminary Situational Analysis of the Río Motagua watershed, the water of the Río Motagua is not acceptable for human consumption and the concentrations of certain water quality parameters that were analyzed exceeded the maximum acceptable threshold (MAT) of the Guatemalan Technical Standards for Clean Production (COGUANOR) NGO 29-001-98 regulation. Total dissolved solids are found to be below the MAT and the maximum permitted threshold (MPT), 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 suggest it is not suitable for human consumption. Data analyzed from water quality bulletins for 2001, 2002, 2003, 2004, 2005, 2006, 2014, and 2015 published by INSIVUMEH indicate the high presence of phosphates (up to 2.5 milligrams per liter [mg/L]) and nitrates (above the MPT of 10 mg/L), and high COD (above the MPT of 10 mg/L); parameters that are indicative of the level of pollution and which poses a threat to the environment and health of the people living within the watershed. In addition, population growth, the expansion and intensification of agriculture, and the growth of the industrial sector have led to increased demand and pressure on the watershed's surface water and ground water resources.

12. The sector that produces the largest amount of wastewater is the domestic sector with 49.5%, followed by the agricultural (37%), industrial (11.5%), livestock (1.5%), and mining (0.5%) sectors. Analysis of water quality carried out by the Ministry of Environment and Natural Resources of Guatemala (MARN) determined high pollutant loading in the Río Motagua due to human activity, including 135,920 tons per year (t/year) of BOD; 1,406,774 t/year of COD; 1,657,546 t/year of suspended solids; 8,155 t/year of nitrogen; 5,640 t/year of phosphorus; 47.6 t/year of arsenic; and 68 t/year of cyanide.

13. It is estimated that 66% of the urban solid waste produced in Guatemala are not collected and there is no guarantee of proper disposal for the remaining 34% of the waste. In the Río Motagua watershed, only between 6 to 25% of households have collection service of solid waste. Most the wastes are disposed of in streams and/or surface water areas susceptible to runoff, which eventually leads to their being deposited in surface water bodies (i.e., the Río Motagua watershed). In addition, the placement of waste on sites that are susceptible to runoff to surface waters represents a risk of pollution of aquifers due to the scarcity and deficiency of technologies to prevent leaching. The collection and conveyance system of wastewater 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 of or inadequate management plans to treat and dispose of solid waste and wastewater in urban and rural areas, including in Guatemala City. 88.38% of the country's garbage dump sites are not authorized and may be considered illegal; the remaining 11.62% are authorized municipal landfills but

there is usually no information about how they are managed, their technical specifications, or if they have approved environmental impact assessments (EIAs). For the Río Motagua watershed, the MARN Department of Solid Waste Management (DEMARDES) has identified 268 informal open-air dump sites have so far; however, this number is believed to be much higher as a complete mapping of informal open-air dumpsites is not yet available. Many of the unmapped open-air dumpsites are believed to be of small size along roads, streams, and rivers in rural areas and in nearby municipal capital cities. Municipal landfills and illegal dumpsites generate leachates and are sources of surface water and groundwater contamination through runoff and infiltration.

14. Poor management of solid waste and wastewater in Guatemala is a problem that includes multiple aspects: a) the focus of waste management is limited to final disposition (dump sites), without considering other alternatives and prior phases such as transport, use, and storage; b) the patterns of consumption that determine the patterns of unsustainable production of wastes; c) a lack of conscience or civic-mindedness about the management and disposal of wastes, with no consideration of the impact to the environment and human health; c) the absence of recycling programs; and d) the 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.

15. The improper use of chemicals and agrochemicals has also led to the degradation of soils and the pollution of surface water and groundwater in the Río Motagua watershed, as well as the emission of harmful chemicals into the atmosphere. 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 water bodies 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) estimated a total amount of 216.2 grams (g) of equivalent toxicity (EQT) in 2010 (the base year analyzed), of which 192.55 g of EQT[5] are released to the atmosphere (89% of all releases); most 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 16.0 g of EQT, particularly in the areas where wastes containing these toxins are burned.[6]

16. In Honduras, the environmentally sound management of solid waste has received limited attention and there has been little effort to solve problems of the human health and environment impacts associated with the improper disposal of solid waste. In addition, the legal framework that regulates solid waste management is dispersed among different legal instruments and the greatest authority falls directly back onto the municipalities; this presents technical, economic, and organizational deficiencies that translate into operational problems that make waste management inefficient, coupled with indifference due to the lack of knowledge of some part of the population on the problems caused by inappropriate solid waste management. 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, bringing negative impacts to the environment and human health. More specifically, the inadequately managed dump sites result in the pollution of surface water, groundwater, soils, and the atmosphere, and pose a serious threat to the health of local communities. Most of the municipalities in the Río Motagua watershed do not have collection systems or proper waste disposal sites; they solely rely on illegal open-air dumpsites. Solid wastes are also commonly disposed of into slopes, creeks, and/or areas where the waste is 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 water and groundwater contamination. 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 high volumes of solid wastes that flow downstream and are carried out by coastal currents and deposited onto beaches, mangroves, and other coastal areas. There is also deficient sanitation coverage principally in the rural areas, which

[5] Estimates conducted during the PPG phase of the project suggest that emissions have increased up to 225.6 g EQT/year (this new values will be used as baseline information for the project).
[6] MARN. http://marn.gob.gt/paginas/Inventario_COPs_no_intencionales.

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 production 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 through runoff leading to sedimentation of the watershed's surface waters and coastal areas.

Long-term solution (i.e., development challenge) and barriers to achieving the solution.

17. The Río Motagua watershed lacks an integrated environmental management strategy to reduce the numerous discharges of wastes and pollutants into the rivers and streams and to sustainably use the watershed's natural resources. Because of the threats the Río Motagua watershed is currently facing, both surface water and groundwater quality and quantity are being compromised, as well as its ecosystems and inhabitants.

18. 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, unintentional produced POPs [U-POPs], and plastics) to mitigate impacts on riverine and coastal-marine ecosystems and the wellbeing of the local populations dependent on healthy aquatic ecosystems. This will be achieved applying the GEF's Transboundary Diagnostic Analysis/Strategic Action Program (TDA/SAP) methodology through the following: a) a diagnostic analysis for the Integrated River Basin Management (IRBM) of the Río Motagua watershed in 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 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-air 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 sources of 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, the private sector, and the public for effective integrated watershed management.
2. Deficiencies in joint strategic planning for the integrated management of	1) There is an absence of joint strategic planning (government institutions and municipalities of Honduras and Guatemala) for sustainable environmental management of the watershed, including reduction of the land-based sources of pollution.

water resources, including pollution reduction	2) There is an absence of an institutional framework that allows effective coordination among the government and private sectors (government institutions, municipalities, nongovernmental organizations [NGOs], production sectors, and the public) 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 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 public 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 environmentally 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 best management practices (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 dumpsites. 5) There are limited human and financial resources for the rehabilitation of riparian and coastal ecosystems affected by solid and harmful wastes. 6) Businesses and producers do not make use of available of incentives to implement clean technologies (i.e., reduce solid wastes) and sustainable production practices, are not aware of their existence, or incentives are simply not available. 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. 8) There is a lack environmental education programs to inform and change attitudes among the general population about the management and disposal of wastewater and domestic solid waste.
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. 6) Lack of public awareness about the toxicity of U-POP emissions to human health and the environment.

II. STRATEGY

19. The objective of the project is to improve the integrated management of the Río Motagua watershed and reduce land-based sources of pollution and emissions produced by U-POPs to mitigate impacts on coastal-marine ecosystems and the livelihoods of the local populations. This will be achieved through four interrelated Outcomes:

1. Diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed that is shared by Guatemala and Honduras;
2. Binational SAP for the IRBM of the Río Motagua watershed (Guatemala and Honduras) is agreed upon for implementation;
3. Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences; and,
4. Knowledge management and monitoring and evaluation (M&E).

20. **Project Outcome 1** will entail a strategic and systematic hydrographic evaluation of the Río Motagua watershed (i.e., Watershed Diagnostic Analysis [WDA]) so that there is a common understanding between Guatemala and Honduras about the environmental issues that are currently affecting the watershed's surface water and groundwater resources, including the land-based sources of pollution. The WDA, which will apply the GEF's TDA/SAP methodology, will identify, quantify, and establish the prioritized environmental and water-related problems of the Río Motagua watershed that are transboundary in nature; technical-scientific information centered around issues related to surface water and groundwater pollution will be collected and analyzed, engaging and consulting all key stakeholders in the watershed. In the case of Guatemala, information regarding pollution resulting from domestic waste dumpsites and current practices of open-air burning practices will be part of the WDA; this information will be collected through Outcome 3. This will include analyzing the immediate, underlying, and root causes of surface water and groundwater pollution and other environment-related problems; characterizing the socioeconomic consequences of these problems; and identifying the specific practices, locations, and production activities that are the main sources of such problems and for which the participation of all key stakeholders is integral to providing solutions. Baseline conditions and status indicators of environmental and socioeconomic conditions related to watershed surface water and groundwater resources will also be defined. Environmental indicators will include the development of watershed hydrologic/land use maps, assessment and monitoring of surface water and groundwater physiochemical parameters, pollution sources, and the economic valuation of ecosystems, etc.; stakeholder analyses, existing stakeholder participation strategies in watershed management including local governments, the private sector, and local communities and organizations, as well as a gender analysis, will provide relevant baseline information for defining indicators of socioeconomic conditions.

21. Once the WDA is completed, results from the analysis will shared with multiple national- and local-level institutional stakeholders, including the local communities living in the Río Motagua watershed and the private sector. These results will be used to define the guidelines for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans for both countries; this activity will be completed independently of the SAP. This will provide information and facilitate decision making to resolve water environmental issues at the local level in both countries, as the municipal governments are key players in providing solutions locally to land-based pollution problems, and to strengthen local capacities for planning for IRBM.

22. **Project Outcome 2.** The WDA will provide the factual basis for the formulation of the SAP, which is a negotiated policy document endorsed at the highest level (ministerial) in each country. The SAP encompasses a suite of agreed legal, policy and institutional reforms, and priority investments, required to invest the priority transboundary issues identified through the WDA. In addition, the SAP is a strategic planning document that establishes clear priorities for acting to resolve the prioritized transboundary problems (i.e., addressing transboundary concerns with global benefits) identified in the WDA, as well as for promoting IRBM and outlining key investments required for the IRBM of the shared watershed and its aquifers. To facilitate the implementation of the SAP, a High-Level Commission to establish permanent dialogue between Guatemala and Honduras will be established and will include national and binational subcommittees. The commission will consist of representatives

from the Foreign Ministries of Guatemala and Honduras, the focal points of the MARN and Mi Ambiente+ to the project, representatives of the municipalities in which the pilot projects will be implemented, United Nations Development Program (UNDP) officials, among others. Among its role in the project, the Commission will be instrumental in guiding the implementation of the project's Stakeholder Participation Plan and Gender Action Plan. In addition, national and binational technical subcommittees will provide technical support to the High-Level Commission. During the Project Preparation Grant (PPG) phase, Technical Advisory Committees (TACs) were established in Guatemala and Honduras to provide technical support in the final design of this Full-Size Project (FSP). These TACs will continue to operate during project implementation and will assume the roles of national and binational technical subcommittees. The High-Level Commission will also have the support of an international cooperation task group to ensure further technical support, as well as scientific and economic support. The group will provide strategic guidance to meet the project's objectives for environmental and financial sustainability for SAP implementation.

23. Outcome 2 will also include the development of two (2) national proposals for the synergistic reworking of the regulatory framework for managing surface water and groundwater resources (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. This will include an assessment of current legal and institutional frameworks of both countries and the identification of gaps, and drafting a document with recommendations to adjust and harmonize the frameworks at the national, regional, and local levels. Proposals will be shared with key institutional stakeholders in both countries including Official Delegates of the Foreign Ministries of Guatemala and Honduras, which will provide legal and regulatory support for the drafting of the proposals. Since effective interinstitutional and intersectoral coordination will be essential for the IRBM of the Río Motagua watershed, the proposals will also be shared with other stakeholders at the national (e.g., MARN, Secretariat of Energy, Natural Resources, Environment, and Mines [Mi Ambiente+]) and local levels (e.g., watershed authorities, watershed councils, and municipalities) in both countries. The binational cooperation for the IRBM of the Río Motagua watershed and the implementation of the SAP will be formalized through a Binational Framework Agreement between Guatemala and Honduras and a Memorandum of Understanding (MOU), which will include binational work protocols and plans to address the priority transboundary problems.

24. National (Honduras and Guatemala) and local (municipalities and communities: municipal development councils [COMUDES] in Guatemala, and municipal development councils [CDM] 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), will also be improved. This will include upgrading the Environmental Information System of the MARN (Guatemala) and the Environmental Geoportal and the ICF/Mi Ambiente+ with capacity for remote-sensing technology to monitor water quality. Municipalities and the key institutions within the Río Motagua watershed will have access to these information systems and will be able to provide information linked to key indicators. Institutional capacity building will also include implementation of a training program at the national and municipal levels in Guatemala for the sound environmental management of harmful chemicals and wastes, and South-South cooperation for the exchange of experiences in integrated watershed management to reduce land-based sources of riverine and coastal pollution. Finally, activities to raise awareness among the population will contribute to reducing the environmental pressures on the Río Motagua watershed, including the sources of surface water and groundwater pollution.

25. Outcome 2 will also incorporate the environmentally sound management of harmful chemicals and wastes (U-POPs, and plastics) into the SAP, watershed management plans and into the monitoring and control activities of the various institutions in Guatemala and Honduras that are present in the Río Motagua watershed. At the end of the project the departmental development plans of Izabal, Zacapa, Chiquimula, Jalapa, El Progreso, Guatemala, Chimaltenango, and El Quiché, and the municipal development plans of El Quiché, Zacapa, and Izabal, will have incorporated considerations to reduce and eliminate the burning of solid wastes in legal and illegal dumpsites and will have an information system in place with the locations and characteristics of dumpsites near surface water bodies that produce U-POPs through open burning and stored plastic wastes in the Río Motagua watershed. This will allow environmental authorities to achieve more effective monitoring and control. Finally, guidelines will be developed for the handling, transport, storage, and final disposal of plastic wastes. A program for monitoring human

health and the environment in the Río Motagua watershed will be developed with support from two improved public-sector laboratories.

26. **Project Outcome 3** will test the aspects outlined in the WDA/SAP. Although the full implementation of the SAP is beyond the scope of this FSP, innovative initiatives for the IRBM for the Río Motagua watershed will be implemented that will provide experience, lessons learned and knowledge for reducing river and marine-coastal pollution from land-based sources. These initiatives will include the implementation of six pilot projects (three in Guatemala and three in Honduras) with low-cost technology to reduce land-based pollution of water resources in the upper, mid, and lower/coastal parts of the Río Motagua watershed. A summary of the pilot projects is presented in Table 4 and their location within the watershed is shown on Figure 3. The lessons learned from their implementation will be shared with stakeholders of the Río Motagua watershed for replication and potential scaling-up as part of Outcome 4 of the project's strategy. Innovative initiatives will also include 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 and plastics). Incentives such as environmental certifications, tax benefits, and cash payments will be made available for businesses interested in implementing clean technologies as part of their production processes, including agriculture producers who adopt sustainable production practices. This will include incentives associated with programs such as the COGUANOR (NTG 150001); the Incentive Program for the Establishment, Recovery, Restoration, Management, Production, and Protection of Forests (PROBOSQUE); the Incentive Program for Small Holders of Land Suitable for Forestry or Agroforestry (PINPEP), both in Guatemala; and the Clean Production National Policy (2009) and its National Strategy and Action Plan in Honduras, as well as through the adoption of ISO 14000 standards and environmental management system certification promoted by the National Center for Clean Production.

27. Component 3 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 in Guatemala aimed at reducing U-POP emissions and plastic wastes. Improved municipal solid waste management practices will include an inventory of the landfills for solid wastes and current open-burning practices through the establishment of a permanent information system that will facilitate updating and exchanging information to support decision making at the muncipal level; this information will be included as part of the WDA in Guatemala. In addition, guidelines and technical support for the municipalities to improve solid waste management will be provided during the life of the project, emphasizing aspects related to enhancing collection and transportation systems, recycling materials and sorting solid wastes at the source, management of biodegradable portions of the waste including composting, and final disposal of leftover waste, avoiding the need for the open-air burning of any material. The development of a program to implement BMPs of residual wastes, including reducing the practice of open burning by households, will follow the concept of "reduction, reuse, and recycling" in the implementation of simple and targeted practices for managing urban solid waste and reducing household open-air burning. It will also include legal reforms at the municipal level, educational campaigns, and changes in cultural behavior to improve and make BMPs more effective.

28. The pilot projects will be used to develop protocols and municipal regulations to promote best environmental practices (BEPs) and best available techniques (BATs) for reducing U-POP emissions and reducing plastic wastes. These include the eradication and/or closure of open-air and illegal dumpsites near surface water bodies that are a source of U-POP emissions; solid waste separation, starting at the source; and plastic recycling programs 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; through three pilot initiatives the project will increase the amount of marketable recycling material practices, which currently amounts to only 5% in weight; in addition, consideration will be given to a bottle bill/redeemable container initiative. Pilot projects will also allow the construction and operation of new facilities or reconditioning of existing infrastructure for sound solid waste management and the reduction of U-POP emissions and other chemical wastes. A summary of the pilot projects is presented in Table 4 and their locations within the watershed are shown on Figure 3.

29. Outcome 3 will also allow the rehabilitation of riparian and coastal ecosystems within the Honduran portion of the watershed through conservation and protection, reforestation, natural regeneration, and remediation actions. The ecosystem rehabilitation activities will contribute to strengthening the structure and functionality of

key ecosystems (riparian forests, mangroves, and beaches in the Río Motagua delta/estuary), including their capacity for water regulation.

30. **Project Outcome 4** provides the necessary means for M&E of project results to inform adaptive management and improve the implementation of the project. A mid-term review (MTR) will be conducted between the second Global Environment Facility (GEF) Project Implementation Report (PIR) and third PIR, and the terminal evaluation (TE) will be conducted by independent evaluation teams and compiled into reports. Outcome 4 will also enable consolidation of best practices and lessons learned resulting from the implementation of the project, and will support the dissemination of lessons learned and experiences at the local (other municipalities and watersheds in Guatemala and Honduras) and national levels, to other countries in Latin America and the Caribbean, as well as at global level through the participation in the biennial GEF International Water Conferences.

31. The project design takes into account the assumption (i.e., Theory of Change) that achievement of the proposed outcomes relies on the willingness of the governments of Guatemala and Honduras, the institutions that represent them, and key national and local stakeholders to overcome the identified barriers that limit capacities to jointly generate and share scientific and technical information, develop strategic planning, and implement solutions to environmental transboundary. The project strategy builds upon the active participation of public, private, and civil society partners in both countries and is expected to result in the development of an integrated binational water resources management strategy for the Río Motagua watershed to reduce land-based sources of pollution (solid wastes, nutrients, wastewater, U-POPs, and plastics) and to mitigate impacts to surface water and groundwater resources, river and coastal-marine ecosystems, and the well-being of the watershed inhabitants. The interrelated outcomes described above will be the means by which this will be achieved (see also Figure 4).

32. The proposed project 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 binational water pollution that negatively impacts downstream ecosystems and livelihoods (i.e., 1,799,080 ha under the IRBM approach in the Río Motagua Watershed in Guatemala and Honduras). In addition, the project's global environmental benefits include the reduction of U-POP emissions produced through open-air burning of solid wastes in informal dumpsites, including the reduction from 109,500 metric tons (MT)/year to 87,600 MT/year of plastic wastes and reduction from 225.6 grams of toxic equivalents (gTEQ)/year to 180.5 gTEQ/year of U-POP emissions. Also by project end, at least 56 municipal landfills in Guatemala will be using sustainable solid waste management schemes (reduction in open-air burning), and 250 ha of riparian forests will be rehabilitated for protecting water resources and improving the habitat of local fauna and flora. This will be achieved with equal participation by men and women, which will ensure that both men and women benefit equally from the project and that the concerns and experiences of women as well as men are an integral part of the development, implementation, and M&E of the project.

33. The project's strategy follows closely the WDA/SAP process, which involves assessing the transboundary problem (through the WDA), formulating a strategic plan of governance reforms and investments with robust indicators (through the SAP), commencing implementation of the actions identified in the SAP, and monitoring the outcomes, both short-term and long-term. It includes actions to address objectives of the GEF International Waters (IW) Focal Area and the Chemicals and Waste (CW) Focal Area. More specifically, the project is framed within IW Objective 1 (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); IW Objective 3 (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); and CW Objective 2 (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).

34. The project is also aligned with the UNDP Development Assistance Framework (UNDAF) 2015-2019 for Guatemala, which supports the achievement of the following: a) Impoverished rural populations develop new sustainable economic opportunities to compete in market systems; b) The Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use, and conservation of natural resources, as well as resilience of the community in dealing

with natural climate events; and c) Indigenous populations, primarily youth and women, are active citizens and participate effectively in decision making related to development themes at the community, municipal, subnational, and national levels. The project is also aligned with the UNDAF 2015-2019 for Honduras, which supports the achievement of Outcome 5: The poor and vulnerable population to food insecurity in the prioritized regions has increased their production and productivity, access to decent employment, income and sustainable consumption, taking into account climate change and ecosystem conservation.

35. In addition, the project is part of UNDP's effort to support the progress of Guatemala and Honduras towards achieving the Sustainable Development Goals (SDGs). In particular, the project will contribute to achieving the following SDGs: Goal 1: End poverty in all its forms everywhere; Goal 5: Achieve gender equality and empower all women and girls; Goal 6 (6.6): Ensure access to water and sanitation for all; Goal 12 (12.2): Ensure sustainable consumption and production patterns; and Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.

Selection of pilot sites and pilot project actions

36. Meetings were held in Guatemala and Honduras with stakeholders, including the TACs established in each country to supervise the final project design. For these meetings, municipal authorities and local stakeholders were brought together to build consensus about the pilot project sites for the implementation of low-cost technology to reduce land-based pollution of water resources (GEF IW Focal Area), and for the reduction of solid waste and the proper handling and disposal of solid waste to reduce dioxin and furan emissions and plastic wastes (GEF CW Focal Area). The initial identification of the sites was achieved using a multi-criteria evaluation, which included a threat assessment (hydrologic, human and climatic impacts), local interest, and opportunities for success. Political approval was then sought and obtained to confirm the selected sites. In Guatemala, the TAC approved the following sites: Municipality of Pachalum (IW/CW), Municipality of Puerto Barrios (IW), Municipality of Estanzuela (IW/CW), and Municipality of Los Amates (CW). In Honduras, the selected sites are: Municipality of Santa Rita (IW), Municipality of Nueva Frontera (IW), and Municipality of Omoa (IW). After the approval of the sites, each municipality was visited to hold consultations with local authorities and to discuss the scope, activities, and cost of each pilot project, including cofinancing. A summary of the pilot projects is provided in Table 4; the complete description of each pilot project is attached as an annex to this Project Document.

Table 4 – Summary of pilot projects

Pilot Project	Location	Number of direct beneficiaries	Project objective
1. Municipality of Pachalum (IW)	Upper part of the Río Motagua Watershed, Guatemala	10,000	Reduce the contamination of the Río Motagua watershed caused by direct discharge of untreated domestic wastewater through biodigestion treatment, and the promotion and use of treated wastewater to irrigate agricultural crops while generating local and global environmental benefits in the municipality of Pachalum
2. Municipality of Puerto Barrios (IW)	Lower part/coastal area of the Río Motagua watershed, Guatemala	20,197	Restore and ensure the conservation of the water recharge area in the Cerro San Gil Water Spring Protected Reserve as a water source to conserve aquatic ecosystems, biodiversity, recreational use, and sustainable consumption of the beneficiary communities in the municipalities of Livingston, Puerto Barrios, Santo Tomás de Castilla, and Morales

3. Municipality of Estanzuela (IW)	Middle part of the Río Motagua Watershed, Guatemala	9,358	Rehabilitate the wastewater stabilization ponds as part of an integrated wastewater management and reduce contamination produced by organic matter in liquid waste through bioremediation; reuse treated water for agricultural purposes; and increase environmental benefits in the municipal capital of Estanzuela
4. Municipality of Pachalum (CW)	Upper part of the Río Motagua Watershed, Guatemala	10,000	Design and implement a participatory and inclusive system for solid waste management, which will contribute to the reduction of emissions of dioxins and furans and plastic waste
5. Municipality of Estanzuela (CW)	Middle part of the Río Motagua Watershed, Guatemala	9,358	Design and implement a comprehensive, participatory, and inclusive urban solid waste management system to eliminate illegal dumpsites and the consequent reduction of emissions of dioxins and furans and plastic wastes
6. Municipality of Los Amates (CW)	Lower part of the Río Motagua Watershed, Guatemala	3,178	Design and implement a comprehensive, participatory, and inclusive urban solid waste management system aimed at reducing gaseous emissions of U-POPs (dioxins and furans) and plastic wastes through the construction and operation of the final disposal site
7. Municipality of Santa Rita (IW)	Middle part of the Río Motagua watershed, Honduras	4,800	Improve the quality of water resources and the health of aquatic ecosystems in the Municipality of Santa Rita, Copán through the construction and operation of a domestic wastewater treatment plant, generating global and local environmental benefits
8. Municipality of Nueva Frontera (IW)	Lower part of the Río Motagua Watershed, Honduras	4,527	Reduce environmental contamination caused by soil erosion and increase the capacity of water recharge areas through a participatory and sustainable reforestation initiative in the Piladeros Mountains
9. Municipality of Omoa (IW)	Lower part/coastal area of the Río Motagua watershed, Honduras	33,947	Restoration of critical ecosystems through the sustainable management of coastal marine resources and strengthening of the governance and capacities of local authorities and strategic partners for the integral management of the Río Motagua Delta

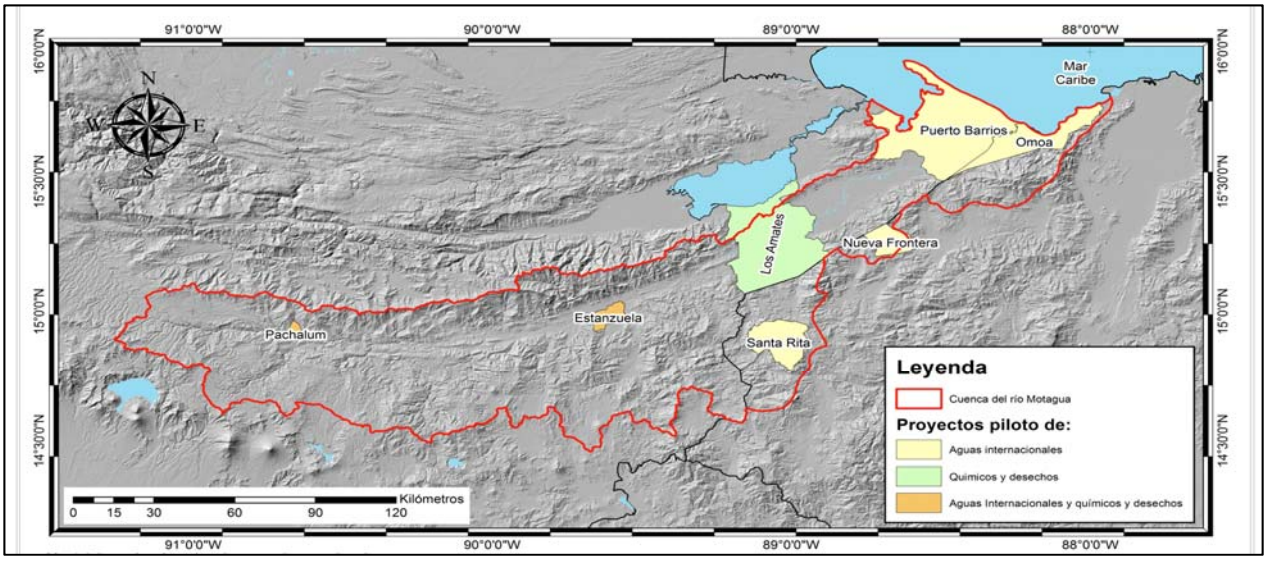


Figure 3 – Location of the municipalities in the Río Motagua watershed where the pilot projects will be implemented.

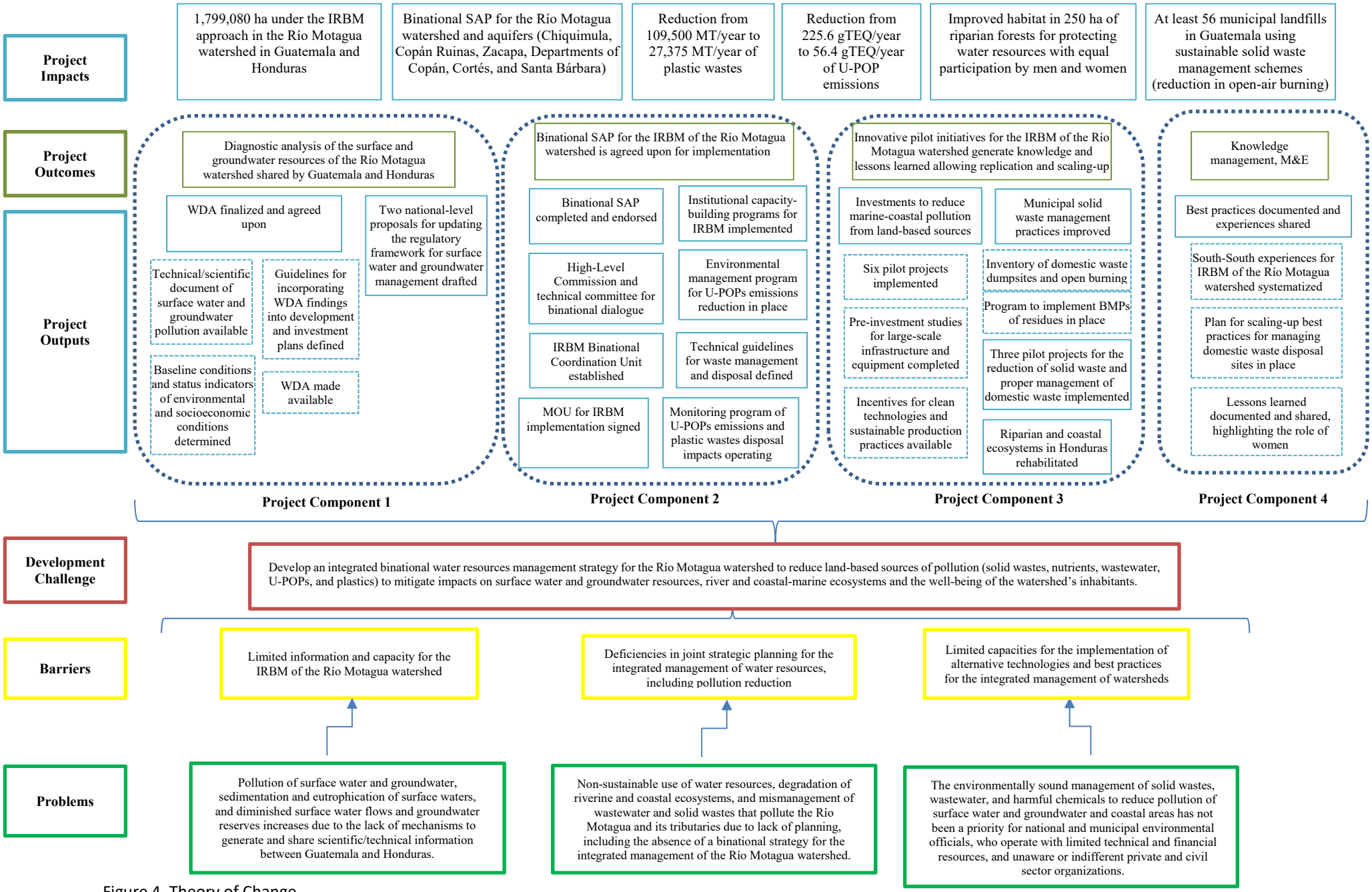


Figure 4. Theory of Change

III. RESULTS AND PARTNERSHIPS

i. Expected Results:

37. The project outputs that will support the achievement of the project's four (4) outcomes are the following:

Outcome 1. Diagnostic analysis of the Surface and Groundwater Resources of the Río Motagua watershed that is shared by Guatemala and Honduras.

Output 1.1. A WDA, following the TDA/SAP methodology identifying the main environmental water resource issues in both countries, finalized and agreed upon.

38. The complete WDA of the Río Motagua watershed will be performed through this output. The process will require workshops to be held with national and local stakeholders who intervene directly and indirectly in actions around the IRBM of the Río Motagua watershed. These workshops will apply the TDA methodology, which consists of a participatory analysis to identify and prioritize the problems and threats of the Río Motagua watershed; environmental impacts and the socioeconomic consequences of these problems; and the immediate, underlying, and root causes of each problem, including the identification of specific practices, sources, locations, and sectors leading to environmental degradation or the threat of degradation. The results of the WDA will serve as the scientific and technical basis to design and implement the SAP, under which national strategic programs will be developed and which will consist of activities implemented to provide the solution to the problems identified in the WDA.

- A technical/scientific document identifying issues related to surface and groundwater pollution, (solid waste, sedimentation, wastewater, etc.) developed.

39. The following will be performed under this activity: a) an inventory of the specific or diffuse contamination sources including plastics, b) an inventory of wells that details their hydraulic characteristics and stratigraphic lithology profiles, and c) identification of the water recharge areas or implementation of the methodology used by the National Forest Institute (INAB). For the analysis of water quality and the quantity of water resources, the implementation of this methodology requires the collection of current data and analysis, the design of a network of sampling points, and the monitoring of all of the sampling points during one year. For the analysis of land use, cover, and pressures on water resources, a geospatial analysis will identify current forest management programs (e.g., Reduce Emissions from Deforestation and Forest Degradation [REDD], PROBOSQUE, PINPEP, the forest restoration strategy, etc.) and the principal pressures caused by changes in land use. Field visits to collect information from municipalities will be conducted, and the databases of natural resources managed by institutions such as INAB, INSIVUMEH, National Council for Protected Areas (CONAP), Ministry of Agriculture, Livestock, and Food (MAGA), Ministry of Public Health and Social Welfare (MSPAS) in Guatemala and Secretariat of Agriculture and Livestock (SAG), ICF, Honduran Institute of Tourism (IHT), and Secretariat of Health (SESAL) in Honduras, and the municipalities in both countries, will be analyzed. A hydrogeological study will be performed, which at a minimum will contain the following information: well locations, static water levels, dynamic water levels, flow, and water chemistry. The threat of climate change to the Río Motagua will also be assessed.

- Baseline conditions and status indicators of environmental and socioeconomic conditions related to watershed surface and groundwater resources determined (watershed hydrologic/land use maps, physiochemical parameters, pollution sources, economic valuation of ecosystems, U-POPs emissions, plastic waste, stakeholder analyses and stakeholder´s participation strategies –including private sector and communities as well as gender analysis).

40. Based on the information collected from official agencies and partial outputs of the Río Motagua WDA, the environmental indicators and socioeconomic conditions associated with the water resource will be determined. These indicators will serve to provide a comparison against the project baseline identified during the project formulation stage, including U-POP emissions and plastic wastes. The indicators should be agreed upon among those participating, along with the MARN and Mi Ambiente+, to achieve integrated monitoring of the project.

- WDA made available at the national (Guatemala and Honduras), sub-national, municipal, and community levels.

41. Under this activity, the project will disseminate information drawn from the results of the WDA. These results shall be socialized using different methods and focused on the targeted public and private stakeholders established by the Project Binational Unit and its national sub-committees. The results will be disseminated to the groups identified in the Stakeholder Plan and the Gender Action Plan so that the project's actions are appropriated. Comparison of the results of the WDA will be considered an activity to promote inclusion and joint decision-making. Given that the results will include specialized technical information, the data should be systematized through different materials (trifold brochures, videos, and executive summaries that allow any reader to understand the findings and results).

- Guidelines for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans for both countries developed.

42. In consensus with the national sub-committees and the Project Team, guidelines will be developed for incorporating the results of the WDA into the planning processes undertaken by the Municipal Councils of the Río Motagua watershed. This will serve to provide information and facilitate decision making to resolve water environmental issues at the local level in both countries. The MARN (Guatemala) and Mi Ambiente+ (Honduras), through their sub-national committees, the Project Team, and the municipalities participating in the project, will create a culture of planning that facilitates conditions that favor IRBM of the Río Motagua watershed. This process will require education, training, and guidance throughout the life of the project, and will place special focus on the initial and mid-point stages when lessons learned from the implementation of pilot projects in prioritized municipalities (Component 3) are identified; these lessons learned will promote replication of the project in other municipalities within the watershed.

Outcome 2. Binational SAP for the integrated management of the Río Motagua watershed (Guatemala and Honduras) is agreed upon for implementation.

Output 2.1. Binational SAP completed and endorsed at the highest (ministerial) level in each country.

43. The Binational SAP will allow the environmental authorities of Guatemala and Honduras and the experts that make up the TACs in each country, including the identified stakeholders and sectors, to identify the prioritized actions required to address the main threats, including climate change. This strategic plan will serve as the planning tool for the actions that will be implemented in each country, defining the mutually agreed upon priorities for actions to address the key binational problems identified in the WDA, promoting IRBM, and outlining key investments required for the sustainable integrated management of the Río Motagua watershed and its aquifers, with consideration given to the needed reforms to the regulatory framework at the binational, national, and local levels (Output 1.2). This analysis will serve as the principal of technical and analytical basis to identify the strategic actions that are required and that should be included in the binational SAP and the NSAPs to facilitate IRBM. The binational SAP will be constructed in a participatory manner and its considerations will be incorporated into national social, environmental, and economic development plans. A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis for IRBM will be carried out in the Río Motagua as a complementary activity to the WDA.

- National Strategic Action Plans (NSAP) for the sustainable integrated management of the Río Motagua watershed (including reduction of land-based pollution sources) in place.

44. The SAP will serve as the basis to produce the NSAPs; the results of the WDA and the SAP document and its national versions will undergo a socialization and communication process to ensure the active participation of the many interested parties. A participatory process that establishes mechanisms of inclusion for the different sectors, including the development of a system for monitoring and follow-up, will have special relevance. The strategic partners within each pilot project (Component 3), as well as the stakeholders of other ongoing or planned initiatives with which the project will establish partnerships, will also be considered. To enable the conditions for developing the SAP as a framework for the project and territorial planning, the Binational Project Coordinator and the technical staff will reach out to the TACs of each country so that they are informed of the process that will be developed to produce these documents. The MARN and Mi Ambiente+, together with the advisors designated by the Foreign Ministry of each country, will lead this process.

- Protocols for 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.

45. The development of protocols for Local Action Plans will require consensus from a) key stakeholders, including the municipalities, Community Development Councils (COCODES), and Water Committees in Guatemala, b) Water User Associations in Honduras, and c) civil society organizations (CSOs), or those who by institutional mandate must participate in monitoring and follow-up activities of the local action plans. The development of sub-watershed-level plans, in the case of Honduras, at the municipal level or "mancomunidad," and in the case of Guatemala, at the municipal level (Environmental Development Committees [CODEMAS] and Municipal Development Plans), will serve as tools to establish sub-watershed-level interinstitutional coordination mechanisms between local stakeholders coordinated by the municipalities and stakeholders from civil society, business and academic sectors, etc.; as well as coordination with stakeholders involved in the development and implementation of national-level development plans related to competitiveness, agriculture, health, environment, water resources, renewable energy, and the management of aquifers. Involving stakeholders working in these issues will be critical for ensuring the interinstitutional and intersectoral coordination the project needs to enable innovative actions that have the potential to be replicated, and which will be necessary to address environmental problems in the Río Motagua watershed in an integrated manner considering actions at the municipal, subnational (departments), and national levels. The Binational Project Coordinator, technical staff, and relevant stakeholders will jointly develop a proposal for long-term monitoring, follow-up, and evaluation to measure progress and the impacts of the project's prioritized actions. This monitoring system will be approved by the TACs of each country and focal points will be appointed for follow-up on the system that is designed.

Output 2.2. High-level commission established that includes a Technical Committee and promotes permanent dialogue and coordination on Rio Motagua management between Guatemala and Honduras.

46. A High-Level Commission/Project Board will be created, and which will consolidate the coordination actions that are already established by Guatemala and Honduras through the Foreign Ministries and Ministries of Environment in both countries in recent years, that addresses and guides strategy and policy for the project to achieve the IRBM of the Río Motagua watershed and SAP implementation. This High-Level Commission initially will consist of representatives from the Foreign Ministries of Guatemala and Honduras, the focal points of the MARN and Mi Ambiente+ to the project, representatives of the municipalities in which the pilot projects will be implemented, representatives from local stakeholder groups relevant to IRBM, technical representatives of the UNDP offices in Guatemala and Honduras, the project's Principal Advisor (i.e., Binational Project Coordinator), and the two technical coordinators from Guatemala and Honduras. The High-Level Commission will be charged with facilitating dialogue to seek solutions to environmental problems in the Río Motagua watershed through the project and into the future; and to seek complementary actions with other donors, projects, initiatives, and partners who may intervene in actions in the watershed. The High-Level Commission will ensure that an institutional arrangement between both countries for the IRBM of the Río Motagua watershed endures in the years following. The institutionalization of this agreement is an official requirement that should be established during the first months of the project. Participation in the High-Level Commission should consider the project's Stakeholder Participation Plan and Gender Action Plan to ensure the open and effective participation of the stakeholders and sectors

- National and binational subcommittees enable coordination of actions for SAP implementation (including reducing the sources of land-based pollution) with local participation.

47. During the initial stages of the implementation of the project, the Principal Advisor, in conjunction with the MARN and Mi Ambiente+, will define the coordination mechanisms to create the binational sub-committee (TAC). Official representatives from the TACs in Guatemala and Honduras, which were established during the PPG, will form this sub-committee. Within this sub-committee a mechanism to ensure a flow of communication will be established to achieve the project's outputs, to ensure that the pilot projects generate best practices that will be replicated, and so that the lessons learned serve to facilitate actions in other municipalities of the watershed. The binational sub-committee will undertake strategic decision-making to guide the Principal Advisor and the Technical Staff in project implementation. The national subcommittee (or TAC) will provide technical input and guidelines at the national and local levels regarding aspects that must be integrated into implementation of the SAP. The TACs were established during the PPG and will continue to operate during project implementation and will have roles as national

subcommittees for enabling coordination of actions for SAP implementation in each country. The national sub-committees in each country will involve relevant local stakeholders (municipal authorities, CSOs, NGOs, and the private sector) to ensure coordination at the local level in implementing the SAP.

- International cooperation task group ensures technical, scientific, and economic support for SAP implementation.

48. An international cooperation task group will be established at the beginning of the project to ensure technical, scientific, and financial support for SAP implementation. Strategic alliances will be created among a group of cooperating agencies that provide technical and financial support to partners at the local and national levels. This will also ensure the complementarity of actions between initiatives that have support from other donor agencies and this GEF-funded project. The international cooperation task group will include members from universities and research groups from the two countries working in environmental and sustainable watershed management, as well as relevant technical staff from MARN and Mi Ambiente+. The project's Principal Advisor, jointly with MARN and Mi Ambiente+ focal points and UNDP Guatemala and Honduras counterparts, will be the principal facilitators of this intersectoral/interinstitutional coordination effort. The group will provide strategic guidance to meet the project's objectives for environmental and financial sustainability for SAP implementation, including the pilot projects and other actions to be implemented in the Río Motagua watershed. The group will facilitate coordination among other relevant stakeholders of the government, academia, and civil sectors; special attention will be give to promoting joint activities with the business and private sector of both countries as part of a strategy to gain financial sustainability for SAP implementation.

Output 2.3. Two (2) national-level proposals for updating the regulatory framework allow synergies for surface and groundwater management, including reducing pollution (solid waste, sedimentation, wastewater, etc.) taking into account the regulations and international conventions to which both countries are parties.

49. A review will be performed of the current legal and institutional frameworks of both countries to make the necessary adjustment for creation of the culture of IRBM of the Río Motagua watershed. This review will require a concrete analysis of the international, national, and regional legislation as well as municipal ordinances focused on water resources, specifically those related to surface water and groundwater, solid waste and wastewater management, and erosion and sedimentation. The activities performed will involve a review of the legal and institutional frameworks, which stems from the need to identify gaps and propose recommendations to adjust those regulatory frameworks that will be focused on promoting synergies between stakeholders and sectors for managing water surface and groundwater resources. This review will result in the development of conclusions and a document with recommendations to make adjustments to harmonize the frameworks at the national, regional, and local levels. In addition, a socialization process will be developed to communicate the findings at the different levels. This process will be tied to an initial training program for the participants of the national sub-committees and the binational committee. Professional experts in legal and regulatory frameworks, as well as the Official Delegates of the Foreign Ministries participating in the TACs of Guatemala and Honduras will serve as the relevant technical staff to guide the Project Team in achieving this output. The following institutions from both countries will also be involved in the development of proposals for updating the regulatory framework: a) Guatemala: the Legal Advisement Office, the Water Resources Department, the Gender Unit, and the Multicultural Unit from the MARN; the Diplomatic Unit and Border Unit (Bilateral Policy) from the Ministry of Foreign Affairs; b) Honduras: the Environmental Management Department and the Water Resources Department, the Transparency Unit, the Gender, and Planning, Analysis, and Management Unit from Mi Ambiente+; the Sub-Secretariat of Forest Policy (Sovereignty and Borders) and the International Cooperation Division.

50. A review of the international and national legal and institutional frameworks will facilitate the following:

a) The identification of gaps that will need to be analyzed and adjusted to create the necessary synergies for the IRBM of the Río Motagua watershed. Structures existing within the institutions that will establish these institutional synergies should be analyzed. It is vitally important that this analysis identifies and makes recommendations for establishing solid synergies with long-lasting institutional relationships for IRBM. Solutions will be proposed to overcome barriers for the laws, policies, or regulations in which counter-positions or contradictions against reaching these synergies exist.

b) The analysis shall produce a document containing the recommendations for addressing gaps and adjusting the regulatory framework in both countries. These findings will be socialized among all members of the TACs in Honduras and Guatemala, as well as the High-Level Commission (Output 2.2).

c) The proposed adjustments to the legal and institutional frameworks, which will include an analysis of stakeholder and their roles, will be produced considering that the IRBM for the Río Motagua watershed must secure long-term relationships between countries to achieve common objectives for integrated environmental management.

d) Harmonization of the regulatory framework at the national levels for implementing IRBM.

51. Effective interinstitutional and intersectoral coordination will be needed for the IRBM of the Río Motagua watershed. For this reason, the socialization of the proposals for updating the regulatory framework will include targeted communication actions such as: a) workshops with key stakeholders for the socialization of technical information; b) production of documents with findings and proposals and their distribution at the local level (municipalities); c) establishment of specialized technical roundtables at the local level with different stakeholders (e.g., watershed authorities, watershed councils); and d) the design and implementation of a training program to develop specialized workshops for the Legal Departments or Units of the MARN and Mi Ambiente+ that include specific issues derived from the WDA and other outcomes from project implementation. The Project Team shall create strategic alliances with the relevant partners included in the project's organizational structures, stakeholders that have provided good intention letters or co-financing letters to the project, as well as with the municipalities where the pilot projects will be implemented (Component 3) and where specific project activities will be performed in both countries.

Output 2.4. An IRBM Binational Coordination Unit established within the Binational Framework Agreement between Guatemala and Honduras.

52. In line with the binational nature of the project, a Binational Coordination Unit will be established between Guatemala and Honduras to generate joint actions for the IRBM of the Río Motagua watershed. This Binational Coordination Unit will support the High-Level Commission (Output 2.2.) in guiding policy-related short-, medium-, and long-term actions. This Binational Coordination Unit will serve as the unit of governance that promotes coordination between Guatemala and Honduras to implement actions that are based on the work performed by the existing TACs and their role during project implementation (i.e., national sub-committees). The Binational Coordination Unit will follow the framework that is part of regional integration efforts like the Central American Integration System (SICA) and the Central American Commission for Environment and Development (CCAD) and regional strategies such as the Regional Strategy for Climate Change (ERCC), the Regional Agro-Environmental and Health Strategy (ERAS), and others.

53. A Binational Framework Agreement will operationalize the relevant actions for coordination between the countries. The Ministry of Foreign Affairs of each country and its Legal Advisors, together with the MARN and Mi Ambiente+, will work with the project's Principal Advisor to establish the binational work protocols and plans for follow-up in line with the project's M&E system. The agreement will focus on providing the necessary guidelines to maintain good governance regarding foreign policy and the sovereignty of each country, for promoting joint actions to implement binational efforts to ensure the IRBM of the Río Motagua watershed, and outlining the operation mechanisms of the IRBM Binational Coordination Unit. These guidelines will be agreed upon through a participatory mechanism involving the High-Level Commission, the Binational Committee (Guatemala and Honduras), and the project team, with support from both countries' UNDP offices. This agreement will serve as a long-term institutional agreement for the IRBM of the Río Motagua watershed; in addition, it will include the establishment of a data-sharing mechanism between Guatemala and Honduras that will improve and consolidate practices and protocols for the exchange of data on water quality and other ecosystem components, contributing to the coordinated or harmonized monitoring of the water and marine-coastal resources present in the project's intervention area. In the case of Honduras, the data-sharing mechanism will provide the opportunity for the reactivation of the water geoportal under the administration of the MiAmbiente+.

Output 2.5. Memorandum of Understanding between the countries for the implementation of the IRBM.

54. The establishment of the High-Level Commission (Output 2.2), the Binational Coordination Unit, and the signed Framework Agreement (Output 2.3) for the IRBM of the Río Motagua watershed will provide the basis for signing of a MOU that reflects the policy, strategic, technical, financial and operational guidelines for IRBM. This MOU will closely follow the technical and legal guidelines defined in the Framework Agreement to produce the local, national, and binational work protocols that are necessary to address the implementation of the project regarding IRBM, solid waste and wastewater management, and other associated issues. This will include developing guidelines for reducing land-based water contamination and conducting technical studies in three prioritized municipalities considering the regulatory frameworks of the municipalities in both countries, which will serve as a model for developing similar protocols for the rest of the municipalities in the watershed.

55. The High-Level Commission and Binational Coordination Unit will establish the simple mechanism for communication to create the MOU, and will schedule periodic meetings to follow-up specifically on commitments arising from the MOU. The Binational Project Coordinator and his/her team will become involved in the follow-up of the MOU commitments and evaluation of the impact of the MOU and its actions. Both countries shall sign the MOU with witnesses present, including relevant partners and UNDP, as well as representatives from the international cooperation task group (Output 2.3).

Output 2.6. Targeted institutional capacity building programs for IRBM and reduced land-based pollution.

- Environmental Information Systems of the MARN (Guatemala) and 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, sedimentation, wastewater, etc.).

56. The project will improve the capacity of the MARN and Mi Ambiente+'s Environmental Information Systems for using remote-sensing technologies to monitor land-based pollution and water quality and share technical information related to IRBM and land-based pollution reduction (solid wastes, harmful chemicals and wastes, sedimentation, wastewater, etc.). In Honduras, the Environmental Geoportal and the Water Geoportal of the ICF/Mi Ambiente+ will be upgraded to enhance the capacity of these systems to serve as information management platforms for IRBM implementation and monitoring of land-based pollution. This includes developing environmental/IRBM indicators; improving capacity to generate maps and analyze information; and establishing mechanisms to feed the databases, validate the data, and strengthen the existing structure to adequately manage information and reporting. ICF/Mi Ambiente+ staff will be trained to survey, validate, and analyze data and administer the upgraded Geoportal. In addition, the capacity of the municipalities and the key institutions within the Río Motagua watershed will be improved to gain access to the Geoportal and provide information linked to key indicators. In Guatemala, an analysis of the National Information System for Climate Change (SNICC) will be developed with the same objective. This will also include training MARN staff in information management and reporting, and facilitating access of the municipalities and key institutions in the Río Motagua watershed to the SNICC so that they can share and use IRBM-related information and monitor land-based pollution. The Environmental and Climate Change Information Management Unit of the Vice-Ministry of Natural Resources and Climate Change will be charged with guiding the facilitating the process. Lessons learned from the implementation of pilot pojects (Output 3.1 and Output 3.3) will provide valuable informatition, including indicators, that will feed into the environmentl information sytems contributing to the monitoring of IRBM and reduced land-based pollution.

- Training program strengthens national-, subnational-, and municipal-level capacities for IRBM (Guatemala and Honduras) and the sound 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).

57. The project will also develop a training program to strengthen national-, sub-national-, and municipal-level capacities for IRBM (Guatemala and Honduras) as well as sound environmental management and reduction of harmful chemicals and waste (i.e., U-POPs and plastics) in Guatemala, which will be targeted to staff from the DRHyC and from eight departmental delegations. The program will be developed based on the analysis and training needs conducted during the PPG using UNDP's Capacity Development Scorecard. The principal training needs for the government institutions of Guatemala and Honduras were identified as the following: a) IRBM planning; b) development of wastewater management plans; c) development of environmental legislation and regulations related to surface water and groundwater contamination and solid waste management; d) development of

infrastructure for environmental management, including alternatives for WWTPs, especially in areas with a high water table, flood zones, or areas close to the ocean and vulnerable to climate change and variability; landfill construction, operation, and closure, including new technologies for solid waste treatment and the construction and operation of composting facilities; e) development of environmental education programs; and f) specialized technical knowledge such as wastewater and runoff infiltration and their effects on the water table, energy use of wastewater, unregulated contamination in legislation on wastewater (e.g., hydrocarbons, etc.). At the local level, the principal training needs of the municipalities and CSOs (COMUDES in Guatemala and Watershed Councils in Honduras) are the following: a) integrated planning for the management of solid wastes and wastewater; b) development of legislation to regulate services such as waste collection, solid waste management, wastewater treatment, and sewer systems; c) development of infrastructure for environmental management, including alternatives for WWTPs; d) landfill construction, operation, and closure, including new technologies for treatment of solid waste and construction and operation of composting facilities; e) implementation of environmental education programs for the general public; d) specialized technical knowledge, including the management of organic wastes in communities, composting, and selection of solid wastes at the source; and f) administration and financing related to IRBM. A single training program will be developed with two components: a) IRBM to reduce the contamination of surface water and groundwater in Guatemala and Honduras; and b) reduction of U-POPs and plastics in Guatemala. Lessons learned from the implementation of pilot pojects (Output 3.1 and Output 3.3) will be used as input for training activities.

58. Implementation of the training program will include the following: a) definition of the specific training objectives, identification of the targeted stakeholders, outlining the implementation plan and timeline, and prioritization of topics and associated learning materials; b) training methodology, including the training tools to be used (e.g., whether the trainings will be carried out in modules, formal courses, workshops, online training, field visits, laboratory visits, or information exchanges); c) conducting training sessions; d) evaluation of the training program using the UNDP Capacity Development Scorecard and targeted surveys to training participants; and d) establishment of partnerships that will lend sustainability to the process. The training program will benefit 1,808 people: 212 technical staff and 1,596 members of the general public. Of this total, 1,140 (63%) are men and 668 (37%) are women. In Guatemala, the MARN will be the party responsible for the training program through its Watershed and Strategic Programs Department, the Gender Unit, the Social Participation and Development Department, the Department of Chemical Products, Department of Solid Waste, and the National Coordination Department. In Honduras, the Environmental Management Department, the Water Resources Department, and the Business and Environment Unit of Mi Ambiente+ will serve as the responsible parties.

- Knowledge exchange program in integrated watershed management to reduce land-based sources of coastal-marine pollution (South-South cooperation).

59. The project will also implement a knowledge exchange program for IRBM to reduce land-based sources of coastal-marine pollution. This will include identifying best environmental management practices in the Río Motagua watershed to carry out site visits and information exchange learn and exchange experiences about BMPs, including visits to pilot project initiatives (Output 3.1 and Output 3.3). At least two information exchange experiences will be carried out, one in Guatemala and one in Honduras, with at least 30 people from each country. The parties responsible for carrying this out will be MARN (Guatemala), Mi Ambiente+ (Honduras), and the Project Coordination Unit.

- Binational environmental education program builds awareness and contributes to the reduction of environmental pressures on the Río Motagua watershed, including water pollution sources.

60. A last component for building institutional capacity for IRBM implementation and reducing land-based pollution will be a binational environmental education campaign to build awareness for the reduction of environmental pressures on the Río Motagua watershed and associated coastal areas. This will include building awareness among municipalities' technical staff (women's offices, municipal authorities, environmental offices), leaders of social organizations (COCODES and Water Committees in Guatemala and Water Users Associations in Honduras); staff from key institutions within the Ministries of Education, Public Health, Governance, and the Judiciary; and youths from middle and high schools (10 to 18 years old) in both countries. The Green Schools Program will serve as the basis for the environmental education in Honduras; in Guatemala, the training materials will be

aligned with the Ministry of Education's (MINEDUC) National Curriculum. In both countries, environmental education program will be complemented with the awareness-raising campaigns addressed to schools and the general public that will be implemented through pilot initiatives (Output 3.1 and Output 3.3).

Output 2.7. Program for the sound environmental management of harmful wastes (reduction of U-POP emissions along the river and plastics disposed of near and in 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.

61. As part of the program for the sound environmental management of harmful wastes (reduction of U-POP emissions and elimination of open-air burning plastics), eight departmental plans (Izabal, Zacapa, Chiquimula, Jalapa, El Progreso, Guatemala, Chimaltenango, and El Quiché) and three municipal plans (El Quiché, Zacapa, and Izabal), will incorporate considerations to reduce and eliminate the burning of solid wastes in dump sites in the Río Motagua watershed, and making use of lesssons learned from the implementation of three pilot initiatives for the reduction of solid wastes and proper handling and disposal of domestic waste, including elimination of open air burning (Outpu 3.3). Open-air burnings will be prohibited and mechanisms will be defined to strictly penalize the offenders, especially those who illegally dispose of waste in unauthorized sites. In addition, illegal dumpsites will be closed to avoid burnings and the harmful environmental impacts derived from them. Incentive mechanisms to prevent these inadequate practices will be combined with command and control mechanisms as established in the three pilot initiatives for the reduction of solid wastes and proper handling and disposal of domestic waste. These measures will be included in the departmental and municipal development plans, which will result in the development of the necessary environmental standards and regulations, including punitive consequences for the offenders. These plans will also strengthen capacities in their respective municipalities and departmental governments (with support from the Departmental Development Councils [CODEDES], the National Institute to Promote Municipalities [INFOM], as well as the MARN and MSPAS) to enforce and control illegal activities and practices and gain technical support from national environmental authorities.

- Information systems and databases of the locations and characteristics of dump sites near surface water bodies that produce U-POPs through open burning and storage of plastic wastes (public and private sector).

62. The project will strengthen and update existing information systems and databases within the MARN with information on the locations and characteristics of dump sites near surface water bodies that produce U-POPs through open-air burning and storage of plastic wastes in the Río Motagua watershed. Specifically, the project will provide support to the DEMARDES, the Division of Chemical and Harmful Wastes, and the Department of Watersheds so that all their databases are linked under the MARN's Environmental Information System; this will facilitate the sharing of information on solid wastes through this information management platform as well as the coordination of all related monitoring and control activities, including closing illegal dumpsites and open-air burning sites. In addition, the project will provide training to personnel from these MARN offices and equip them with the necessary hardware and software for information management, data processing, and reporting. Collaboration with other institutions related to waste management will be strengthened, such as with the National Statistics Institute (INE) and the Municipal Statistics Unit from the INFOM.

Output 2.8. Technical guidelines for the handling, transport, storage, and disposal of wastes.

63. Currently there are some technical guidelines in place for the handling, transport, storage, and disposal of wastes associated with the National Policy for Wastewater and Solid Waste Management, the Municipal Code, and the Health Code of Guatemala. However, there are only brief references in these regulations to solid waste management; thus, there is a need to develop a more complete set of technical guidelines. To this end, with support from solid waste management experts, the project will review and update the existing regulations (technical guidance) within the institutions responsible for the integrated management of wastewater and solid waste to include the following: a) technical aspects of Integrated Solid Waste Management (ISWM) such as the density of the solid waste, types of transport, treatment plants for composting, options for final disposal, and sustainable consumption, reduction, reuse, or recycling; b) social and cultural aspects of solid waste management such as environmental education and awareness and mechanisms for participation of key ISWM stakeholders; and c) financial aspects of solid waste management such as sources of financing and investment, mechanisms to establish

rates of services, mechanisms to recover costs and unpaid services, and incentives to promote the recovery, recycling, and/or treatment of wastes. The project will work closely with MARN, MSPAS, INFOM, and the COGUANOR to agree on additional technical guidelines and a draft proposal for consideration and incorporation as part of the existing regulations.

Ouput 2.9. Monitoring program of human and environmental health effects of U-POP emissions and plastic wastes disposal, including improved laboratory and analytical competencies developed.

64. The project will facilitate the creation of a monitoring and control team under the MARN for legal and illegal open-air dump sites, which will allow the coordination of actions with local and sub-national environmental authorities and with national laboratories to track the generation of U-POPs through open-air burn practices and assess the health effects on humans and the environment caused by U-POP emissions and plastic wastes disposal, focusing initially on the Río Motagua watershed and eventually on other areas of the country. Currently there are two government laboratories that provide related environmental information services: the Amatitlán Lake and Watershed Sustainable Management Authority (AMSA-Vice presidency) and the Department of Chemical Sciences and Pharmacy Laboratory of the University of San Carlos in Guatemala (USAC). The project will strengthen the capacity of these government laboratories to collect and analyze data and assess quantitative levels of human and environmental exposure to U-POP emissions and to recommend best BATs and BEPs to reduce releases of U-POPs. Much of the project support will be related to overcoming large deficiencies in monitoring U-POP emissions and plastic waste disposal in large areas like the Río Motagua watershed, as these laboratories are responsible for monitoring these and other watersheds around the country and have limitations to respond to all needs. The project will assess the necessary resources, such as staff, equipment, and training needs for effectively addressing the specifics of the effects from these contaminants, and will develop specific strategies jointly with the MARN and laboratories to address these needs. The laboratories will coordinate efforts with other institutions and laboratories such as the MSPAS and accredited hospitals to determine the effects on human health and the environment by U-POP emissions and plastic waste disposal in households and other dumpsites.

65. Monitoring activities will employ technical guidelines for the handling, transport, storage, and final disposal of urban solid waste developed under Output 2.7 and the information systems and databases of the locations and characteristics of dump sites near surface water bodies that produce U-POPs through open burning and storing plastic wastes in the Río Motagua watershed that will be developed under Output 2.6. In addition, the project will closely monitor implementation through Component 3 of the three pilot projects for the elimination of open-air burning for reduction of dioxin and furan emissions and plastic waste, so that lessons learned from these initiatives will be taken into consideration in the implementation of the monitoring activities.

Outcome 3. Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences.

Output 3.1. Innovative investments to reduce Rio Motagua water and coastal pollution from land-based sources.

66. This output consists of implementing six pilot projects in Guatemala and Honduras to reduce surface and groundwater pollution, increase aquifer recharge through ecological restoration actions, rehabilitate coastal ecosystems, manage contaminated waste on the beaches of the Río Motagua delta/estuary, and optimize availability of water resources. A focus on gender will be applied so that women, women's groups, and women's empowerment groups participate in specific activities to develop the pilot projects. In addition, their participation will be sought in environmental education programs implemented through innovative investments and to maintain inclusive participation and sensitivity to gender issues. The project will involve groups that will contribute to the sustainability of specific actions to replicate best environmental practices throughout the watershed. Part of the innovative investments in the project will be directed towards developing pre-investment studies to develop infrastructure that will help to mitigate contamination of water resources from solid waste in the watershed, as well as to develop incentives to reduce this contamination. The national sub-committees and the International Cooperation Task Group (Output 2.2.) will play an important role in the project, seeking innovative solutions and sustainability mechanisms to achieve the IRBM of the Río Motagua watershed.

- Six (6) pilot projects with low-cost technology to reduce land-based pollution of water resources (e.g., biodigestors, oxidation ponds, control of soil erosion).

Pilot Project 1: Reducing domestic wastewater pollution through biodigestion and promoting the reuse of treated water in the municipality of Pachalum (Guatemala).

67. This pilot investment will reduce the environmental impact from untreated wastewater on the Río Motagua watershed and promote the use of treated wastewater by local farmers for irrigation purposes, while improving water quality and enhancing the health of aquatic ecosystems. The following project objectives will contribute to mitigate the levels of pollution in the Río Motagua watershed: a) mechanisms of governance for the integrated management of wastewater and proper use of treated water; b) construct and operate a wastewater biodigestion treatment plant; c) strengthen capacities of key stakeholders on the adoption best practices for the use of treated wastewater and final disposal wastewater; and e) knowledge management and M&E to systematize and disseminate lessons learned.

Pilot Project 2: Protection and restoration of water recharge areas in the Cerro San Gil Water Spring Protected Reserve, which provides potable water for the municipalities of Livingston, Puerto Barrios, Santo Tomás de Castilla, and Morales (Guatemala).

68. This pilot investment will restore and protect the water recharge area, as it is highly important for water users in the Department of Izabal within the Río Motagua watershed. To meet this goal, actions such as ecological restoration and participatory management models will be developed. These actions will also serve to regulate the water cycle and its quality, and harness the springs as sources of potable water, tourism, and scenic beauty. The project will achieve the following: a) restoration of water recharge areas at the Cerro San Gil Water Spring Protected Reserve; b) protection of water recharge areas with local participation; and c) knowledge management and M&E to systematize and disseminate lessons learned.

Pilot Project 3: Rehabilitation of domestic wastewater stabilization ponds to reduce organic matter pollution through bioremediation and generate environmental benefits for the Municipality of Estanzuela, middle part of the Río Motagua Watershed (Guatemala).

69. This pilot investment will rehabilitate wastewater stabilization ponds as part of IRBM and reduce contamination produced by organic matter in wastewater through bioremediation (e.g., natural attenuation, bioaugmentation, and biostimulation); reuse treated water for agricultural purposes; and increase environmental benefits in the municipal capital of Estanzuela. The pilot project will support the municipality's compliance with the national legal framework for wastewater management (Government Accord 236-2006). To achieve this, the pilot project will establish the following strategic outcomes: a) establishment of the pilot project's system of governance and management; b) rehabilitation of the stabilization ponds for domestic wastewater treatment through bioremediation; c) building of capacities among stakeholders to implement a wastewater management municipal ordinance, including the adoption of best practices for using treated water and managing domestic water; and d) knowledge management and M&E to systematize and disseminate lessons learned.

Pilot Project 4: Reducing domestic wastewater pollution and delivering environmental benefits in the municipality of Santa Rita, middle part of the Río Motagua watershed (Honduras).

70. This pilot investment will reduce domestic wastewater pollution to improve the quality of water resources and the health of the aquatic ecosystems in the middle part of the Río Motagua watershed. To achieve this, the pilot project will establish the following strategic outcomes: a) strengthening of local governance mechanisms for integrated environmental management; b) construction and operation of a WWTP; c) capacity building among stakeholders for the socialization, adaptation, and adoption of best practices for the use of treated wastewater; and d) knowledge management and M&E to systematize and disseminate lessons learned.

Pilot Project 5: Reforestation to reduce contamination through runoff in the municipality of Nueva Frontera, Department of Santa Barbara (Honduras).

71. This pilot investment will foster participatory management aimed at reducing environmental contamination through runoff caused by loss of forest cover, promote forest recovery to increase water recharge, and support knowledge management through a M&E system that will systematize and disseminate lessons learned among project's key partners. These strategic interventions will be aimed at regulating water flow and thereby enhancing the sustainable use of springs that serve as water sources for rivers and potable water for local populations and

tourism opportunities. To this end, the pilot project establish the following strategic outcomes: a) local participatory management to reduce environmental contamination caused by soil erosion; b) restoration of forest cover to reduce contamination from sedimentation in water caused by erosion and the increased capability of aquifer recharge areas; and c) knowledge management and M&E to systematize and disseminate lessons learned.

Pilot Project 6: Governance and integrated restoration management of critical marine coastal ecosystems through the implementation of a multi-institutional model that promotes environmental and local economic benefits in the munipality of Omoa (Honduras)

72. This pilot investment will contribute to the restoration of critical ecosystems through actions for the sustainable management of coastal marine resources and strengthening of the governance and capacities of local authorities and strategic partners for the integral management of the Río Motagua Delta. This will be achieved through a integrated model that includes participatory and inclusive local governance to promote the restoration and recovery of critical mangrove ecosystems and beaches.

- 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 cofinancing funds]).

73. The project will facilitate the development of pre-investment studies for constructing large-scale infrastructure and assessing the equipment needed for the management and final disposal of land-based pollutants that affect water resources in selected sites, and will provide training for their operation. This will include creating a supervisory committee that will draft the terms of reference (ToRs) for developing the pre-investment studies; the supervisory committee will include the Binational Project Coordinator and MARN representatives. As a first step, a prioritization analysis for the selection of the sites and needs for large-scale infrastructure construction will be completed. This will be followed by the technical and operational pre-feasibility study for each investment and alternative solution, as well as environmental and social safeguard assessments (including EIA requirements). The results, including a financial and economic feasibility estimation of each investment (cost recovery/income generation assumptions of the project; overall project cost including capital, operations, and maintenance; financial risks; and identification of economic benefits of each investment), will be presented to the supervisory committee and validated through participatory workshops. Adjustments to the pre-investment studies will be made as needed and a management plan for the treatment processes to be used for the handling and disposal of land-based pollutants will be outlined for each planned investment.

74. Finally, the supervisory committee will identify the next steps for the implementation of large-scale infrastructure and equipment for the handling and disposal of land-based pollutants affecting hydrological resources, including: a) an assessment of the resources required to complete the preparation process for each investment; b) identifying the parties responsible for completing next steps; c) determining the roles, responsibilities, and training needs of the involved parties in each case; and c) establishing the timeframe for completing the preparation process.

- Incentives available (environmental certifications, tax benefits, cash payments) for businesses that implement clean technologies and agriculture producers that adopt sustainable production practices.

75. The project will make economic and/or environmental incentives available to businesses that implement clean technologies and to agricultural producers who adopt sustainable production practices. Incentives for the implementation of clean technologies in Guatemala will follow the policy guidelines of the Clean Production National Policy (Governmental Agreement No. 258-2010) and the Environmental Law (Decree No. 68-86 and subsequent reforms: Decree Nos. 75-91 and 90-2000), which state that incentives will be provided to companies implementing clean technologies to prevent deterioration of ecosystems, water, watersheds, and land degradation. In addition, the project will adopt the Guatemalan Technical Standards for Clean Production (COGUANOR, NTG 150001), which specifies the requirements and procedures for establishing Cleaner Production Voluntary Agreements between the public and private sectors. The incentives may include tax credits for business that implement BATs and BEPs based on applications approved by the MARN. In addition, the project will also make use of PROBOSQUE and PINPEP), which will provide cash incentives to farmers who adopt sustainable production practices that contribute to reducing land-base pollution, including reforestation of river banks, more efficient use of fertilizers/pesticides, and natural

forest management for the protection of surface waters sources (springs and water sources) and groundwater recharge areas. Incentives will also be available for pilot intitiatives to be implemented through Output 3.1.

76. In Honduras, the project will also make incentives available in line with the Clean Production National Policy (2009) and its National Strategy and Action Plan, and the General Environmental Law (Decree No. 104-93). Incentives may include tax, market, and financial incentives. In addition, the project will work with Mi Ambiente+ and other authorities to reduce subsidies that may produce harmful environmental effects, such as exemptions from payment of water fees that contribute to increasing water use and discharges from treatment plants, and encourage subsidies for activities that have a positive environmental impact. The project will also involve the National Center for Clean Production, a private initiative that promotes business environmental responsibility and clean production including the adoption of ISO 14000 standards and environmental management system certification. Finally, the project will promote the use of incentives currently being developed as part of the Honduran National Agroforestry Program for Sustainable Productive Landscapes (PNAPPS), which will promote restoration and reforestation, sustainable production practices, and integrated watershed management. These incentives are also part of the National Restoration Program to be implemented by Mi Ambiente+. Incentives will also be available for pilot intitiatives to be implemented through Output 3.1.

Output 3.2. Municipal solid waste management practices improved (with cofinancing and CW GEF funds).

- Inventory of domestic waste dumpsites and current practice of open-air burning

77. This output will entail the establishment of a permanent information system that allows the effective exchange of information for updating records about domestic waste dumpsites and current open-air burning practices. The project will make use of the existing database that, although incomplete and not regularly updated, provides a preliminary baseline for the project. Gaps in the existing data will be assessed (identification of municipalities that are not well represented), and technical requirements (e.g., hardware and software, training for data collection and maintenance) for updating and implementing the information system will be identified. This information system will operate within the information platform of INFOM's Environmental Information System and articulated with the information systems for environmental planning and management in each municipality (Municipal Environmental Management Unit/Municipal Planning Office–UGAM/DMP) within the Río Motagua watershed. With the participation of the local environmental authorities (UGAM), the domestic waste dumpsites and current open-air burning practices will be updated and the information will be made available to all municipalities to support decision making for improving solid waste management and the eradication of open-air burning practices.

78. The establishment of a permanent information system and inventory will be completed in close coordination with the MARN (National Coordination Unit, Department of Informatics, and DEMARDES) and the participation of MSPAS, INE, and local NGOs and local community members, including women, who will play an active role in the identifying domestic dumpsites and open-air burning sites and practices.

- Guidelines and technical support provided to municipalities for the sustainable management of solid wastes.

79. The project will also allow the development of technical guidelines for sustainable management of solid wastes at the municipal level using as a basis existing manuals previously developed by the MARN for this purpose. These guidelines will focus on aspects related enhancing collection and transportation systems, the recycling materials and sorting solid wastes at the source, management of biodegradable portions of the waste including composting (collection, waste separation, sizing and mixing, and biological decomposition), and final disposal (landfill) of left over waste, preferably inert material and avoiding the need for the open-air burning of any materials particularly plastics. Above all, it will be emphasized that burning solid waste at low temperatures results in emissions of U-POPs (dioxins and furans) because of incomplete burning and that these emissions are considered toxic to plants, animals, and humans. The development of guidelines and technical support provided to municipalities for the sustainable management of solid wastes will also consider the lessons learned and new knowledge derived from the implementation of three pilot projects for the reduction of solid waste and proper handling and disposal of domestic waste (see Output 3.3.)

- Program to implement BMPs of solid waste, including the reduction of open burning from households in place with the participation of women.

80. The project will design a program for the implementation BMPs for solid waste management in the Río Motagua watershed that will include simple and targeted practices for managing urban solid waste and reducing open-air burning from households, as well as more expansive actions such as legal reforms at the local level, educational campaigns, and changes in cultural behavior to improve and make BMPs more effective. BMPs will be promoted among the 56 municipalities of the Río Motagua watershed that are legally responsible for managing urban solid waste and among their urban population (users of sanitary services and many of which practice open-air waste burning domestically and illegal dumping of solid wastes).

81. The program will also include the participation of the municipal and national and sub-national government institutions that play indirect and direct roles related to solid waste management at the departmental level, such as the Departmental Governments, the CODEDES, and offices of the MARN, MSPAS, and MAGA. The project will develop mechanisms to ensure adequate and efficient institutional coordination for the design and implementation of the program. To fill the current gaps in regulatory law and the punitive process for offenses, the Judicial and Legislative branches should be involved, as well as the Public Prosecutor's Office. Other participating stakeholders include, INFOM, the private sector and NGOs related to environmental issues (especially solid waste management).

82. The objectives of the program to implement BMPs of waste objectives include: a) reduction of improperly disposed waste; b) increase in the reuse and expanded recycling of waste, including the management/sorting of solid wastes at source; c) promotion of the processing and treatment of wastes; d) widening of the scope and efficiency of public services provided for solid waste management; e) elimination of illegal landfills; f) reduction of open-air burning; and g) strengthening the capacities of municipal authorities to enforce related-regulations. The BMPs program will also consider budgetary and financing needs to effectively implement action and improve the sanitary services provided by the municipalities. It will also include a technical support strategy and training of local, departmental, and national government officials to implement BMPs, including municipal technical/administration and operations personnel, CSOs and local communities (including women and women-based organizations), and the private sector (businesses, industries, etc.).

83. Baseline information that will be collected as part of the program includes the following: a) current systems used for managing urban solid waste in each department and its municipalities, including local regulations, technical specifications, and collection, transportation and final disposal mechanism in place; b) characterization and generation of urban solid waste, including the main solid waste producers and users of sanitary services, existing solid waste management practices and volumes produced; c) existing conditions and options for the use of solid wastes, including the production of compost and co-processing and the final disposal of rejected material; and d) the level of knowledge about urban waste solid management among the stakeholders and needs for implementing BMPs.

84. The program to implement waste management BMPs will address the most frequent problems arising in municipal public sanitary services, such as poor coverage, continuity, and quality of services; environmental and human health impacts from improper waste disposal; the financial sustainability of solid waste management services; and lack of awareness among the population about sound solid waste management practices.

Output 3.3. 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.

Pilot Project 1: Integrated management of urban solid waste in the municipal capital of Pachalum, department of El Quiché, Guatemala.

85. The purpose of this pilot project is to design and implement an integrated management system for urban solid waste based on a participatory and inclusive approach. This system will include the elimination of unauthorized dumpsites and the means for reduction of emissions of U-POPs (dioxins and furans) and through minimization of plastic waste in waste municipal site plastic waste. The project will entail building and operating the existing municipal site for final waste disposal, and the construction of facilities for processing urban solid waste. To this end, the pilot project will establish the following strategic outcomes: a) construction and operation of the final disposal site for solid waste allows the reduction of U-POPs and plastics; b) design and implementation of legal and technical/administrative tools to ban illegal dumpsites; c) adoption of best practices to reuse treated solid waste and plastics including: i) increase amount of marketable recycling material practices, which currently amounts to only 5%

in weight; ii) composting of at least 50% of biodegradable organic materials; iii) co-processing: controlled incineration of 20% of flammable materials; and iv) minimize landfill burial practices (only 25% of remaining wastes); and d) knowledge management and M&E.

Pilot Project 2: Integrated management of urban solid waste in the municipal capital of Estanzuela, department of Zacapa, Guatemala.

86. The objective of this pilot project is to design and implement a comprehensive, participatory, and inclusive urban solid waste management system aimed at eliminating illegal dumpsites and the consequent reduction of emissions of dioxins and furans and plastic waste. The project will address the reconditioning and operation of the existing final disposal municipal site. In order to implement an integrated approach for managing urban solid waste, the pilot project includes the following outcomes: a) solid waste management tools and reconditioning of the infrastructure for urban solid waste management; b) adoption of best practices for the reuse of treated urban solid waste, including plastics; and c) knowledge management and M&E.

Pilot Project 3: Integrated management of urban solid waste in the municipal capital of Los Amates, department of Izabal, Guatemala.

87. The objective of this pilot project is to reduce emissions of U-POPs (dioxins and furans) and plastic waste using a participatory approach for integrated solid waste management, aimed at improving sanitary conditions and quality of life in the municipality. This project will demonstrate that waste and other contaminants in the municipality can reduced using solid waste integrated management tools; awareness-raising campaigns about best practices in the reuse of treated solid waste; municipal regulations for illegal dump sites; and documentation and dissemination of lessons learned from the pilot project. The project will be implemented jointly by the MARN and the municipality of Los Amates and its strategy (outcomes) will include: a) construction and operation of the final disposal site reduces U-POPs and plastics; b) design and implementation of legal and technical/administrative tools to ban illegal dumpsites; c) adoption of best practices to reuse treated solid waste and plastics including: i) increase amount of marketable recycling material practices, which currently amounts to only 5% in weight; ii) composting of at least 50% of biodegradable organic materials; iii) co-processing: controlled incineration of 20% of flammable materials; and iv) minimize landfill burial practices (only 25% of remaining wastes); and d) knowledge management and M&E.

Output 3.4. Rehabilitation (conservation and protection, reforestation, natural regeneration, remediation) of 250 ha of riparian ecosystems in the Río Motagua watershed in Honduras.

88. This output will focus on the restoration of 250 ha of riparian forest of the Río Motagua, using native species of the region. This will be carried out through the Biodiversity Division (DIBIO) of Mi Ambiente+. A plan will be developed to rehabilitate the riparian ecosystems through reforestation with native species only[7], and will identify potential areas for ecosystem restoration within the watershed in Honduras. As part of the rehabilitation plan, the project will strengthen municipal and local nurseries, which will supply the plant material (approximately 120,000 saplings) for reforestation and restoration activities. The strengthening of the municipal and local nurseries will also include the development of financial strategies and plans for the sustainability for the nurseries and the production of seedlings for future local rehabilitation initiatives.

Outcome 4. Knowledge management and M&E

Output 4.1. 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.

89. The project's Communications Expert, in coordination with MARN (Guatemala) and Mi Ambiente+ (Honduras), will annually systematize the experiences of IRBM that result from the joint effort by the two countries for project implementation, in order to disseminate the knowledge and experiences gained using existing national,

[7] GEF Policy: SD/PL/03 (updated on February 19, 2015) - Agency Minimum Standards on Environmental and Social Safeguards, which among the Key Principles for GEF Operations states that "The GEF shall not finance the introduction or use of potentially invasive, non-indigenous species."

UNDP, and GEF information-exchange platforms. The systematization of experiences will also support adaptive management so that the project integrates the achievements and weaknesses during implementation of the activities in the new programmatic cycles of the project as well as other initiatives. As such, the key to the project's effectiveness is found not only in impacts at the level of the prioritized sites in the Río Motagua watershed, but also in ensuring that the lessons learned and the construction of knowledge is systematized and disseminated at the sub-national (other watersheds within Guatemala and Honduras), national (Guatemala and Honduras), and regional (Central America) levels, with the goal that these are inputted into the development and implementation of similar initiatives within the context of South-South cooperation.

- Plan for scaling-up best practices for managing domestic waste disposal sites in place.

90. To ensure replication and scaling-up of the project's outcomes, a plan will be developed focusing on lessons learned and knowledge gained during project implementation for the IRBM of the Río Motagua watershed, with particular attention given to the implementation of pilot projects for the reduction of solid wastes and proper handling and disposal of domestic waste. The plan will include the methods to be used, the organizational roles involved in scaling-up, and the expected scope of the scaling-up effort (e.g., various municipalities within the Río Motagua watershed, and municipalities in other watersheds in Guatemala and Honduras). The potential for scalability will be assessed, including stakeholders and beneficiaries' interests, the organizational structures needed, information gaps, and financial feasibility, among other aspects. The project team, in coordination with MARN (Guatemala) and Mi Ambiente+ (Honduras), will draft the scaling-up plan, which will include the proposed actions, timetable for implementation, roles and responsibilities, costs of scaling-up, and M&E.

- Lessons learned documented and shared, highlighting the role of women in the project.

91. The project will identify lessons learned related to the implementation IRBM of the Río Motagua watershed and the management of harmful wastes, as well as those that result from the implementation of similar efforts led by the project's main partners. This effort will bring forth useful lessons and successful experiences that will result in the reduction of land-based sources of pollution, emissions of U-POPs, and the reduction of plastic waste. Identifying the lessons learned and best practices will help to: a) guide future actions; b) guide dialogue at the national, sub-national, and local levels with regard to policies and strategies for catalyzing sustainable management of transboundary water systems and reducing prevalence of harmful chemicals and waste; and c) improve the impact of the projects and programs financed by GEF.

92. The identification and systematization of lessons learned include: a) approaches to ensure the effective participation of national, regional, and local public and private stakeholders in the development of strategies that harmonize the protection of the environment with economic development; b) working with local governments, the private sector, and the general public to ensure their commitments to implement sustainable production practices to reduce negative impacts on surface and groundwater resources and minimize the production of solid wastes, including eliminating illegal dump sites and open-air burnings ; c) the implementation of pilot projects with low-cost technology to reduce land-based pollution of water resources; d) the implementation of pilot projects for the reduction of solid waste and proper handling and disposal of domestic waste; and e) the incorporation of gender aspects into IRBM and solid waste management.

93. In addition, a project website will be set up based on the IW:LEARN guidance to share project results, lessons learned, documents, other outputs produced (such as the TDA, SAPs, and pilot initiatives), and maps and awareness-raising materials, among others. Links will be included to the websites of relevant institutions such as the MARN and MiAmbiente, to increase access to project information, which will facilitate replication and scaling-up of good IW practices. The project will fund the participation of the project's binational coordinator and a designated participant from each of the two countries in biannual International Waters Conferences in 2019 and 2021. These actions will lead to the creation of a community of practice on IW issues in Guatemala and Honduras. In addition, the project will document best practices and share these with other projects throughout the world. In addition, the project will make use of the IW:LEARN information-sharing tool established for the GEF International Waters program.

94. 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. 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 will be 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.

ii. Partnerships:

95. Guatemala and Honduras governments have endorsed the 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 program 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.

96. As part of the United Nations Environment Program's Caribbean Environmental Program, 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.

97. 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 are 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 be 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.

98. The Department of Coordination for the Management of Chemical Products and Harmful Waste in Guatemala (DCPQyDP) is currently implementing three projects related to chemicals and wastes, two of which are financed by the GEF (Cycle 5). The first 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 second 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, approval in May 2017, is national in scope and will last 5 years. The third project, financed by the PNUMA and the Secretariat of the Stockholm Convention (SSC), is Alternatives to 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 three 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 DCPQyDP/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 three projects and the project presented herein will be facilitated.

99. Honduras is implementing the GEF Strengthening the Sub-system of Coastal and Marine Protected Areas (2015-2018) project, 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.

100. 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 (U-POP) 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.

iii. Stakeholder engagement:

101. During the project preparation stage, a stakeholder analysis was performed to identify key stakeholders at the national and local levels in both countries, assess stakeholders' interests in the project, to conduct capacity assessments, and define their roles and responsibilities for project implementation. As a result of this effort, a Stakeholder Engagement Plan for the project was developed where the roles and responsibilities of the main participants in the Project are clearly identified; the Plan is included in Annex K to this project document.

iv. Mainstreaming gender:

102. According to the project objective and the proposed actions, it is categorized as *Gender responsive: results addressed differential needs of men or women and equitable distribution of benefits, resources, status and rights but do not address root causes of inequalities in their lives.*

103. The project will incorporate gender considerations into all phases of its life cycle, using the Gender Strategy and Action Plan (Annex L) designed specifically to ensure that the concerns and experiences of women as well as men are an integral part of the development, implementation, and M&E of the project.

104. This strategy will be developed following an analysis of the principal barriers that women face in Guatemala and Honduras, as well as the identification of opportunities for inclusion.

105. The inclusion of gender considerations respond directly to the UNDP strategy for gender equality and the GEF Gender Policy and Action Plan that are in accordance with the commitment to the Convention to Eliminate Discrimination Against Women (CEDAW); the Beijing Platform for Action; the Millennium Development Goals; Sustainable Development Objectives; the UN Declaration on Elimination of Violence against Women; the

International Conference on Population and Development; Resolution Nos. 1325, 1889, 1820, 1888, 1960, 2106, and 2122 of the UN Security Council; UN Framework Convention on Climate Change; the Hyogo Framework for Action; commitments to the effectiveness of support; and various regional commitments.

106. The project "Integrated Management of the Río Motagua," takes a concrete path within the GEF Action Plan for Gender Equality (2014) to ensure the inclusion of gender issues. To ensure this, GEF has established gender equality and the strengthened institutionality of gender as safeguards.

107. The project will include actions for strengthening and ensuring the participation of the Gender Units from its executing agencies, the MARN (Guatemala) and Mi Ambiente+ (Honduras). These agencies will integrate the High-Level Commission and Technical Assistance Committees from both countries. For example, the Presidential Women's Secretariat (SEPREM) of the MARN and the Mi Ambiente+ National Women's Institute (INAM) will be invited to serve as supportive agencies specializing in this area. The Municipal Women's Offices in Honduras (OMM) and the Guatemala (DMM) will also participate in the various components of the project to incorporate specific actions to include gender equality.

108. Incorporating the gender focus into environmental issues and the focus on IRBM is one of the commitments undertaken by Guatemala and Honduras through a series of legal agreements regarding the environment and gender. In addition, there are national and institutional policies that set forth strategies and actions geared towards reducing inequality, incorporating women into opportunities for participation, and decision making in environmental and natural resource themes. Women play a vital role in environmental management, and IRBM is important for women's inclusion and participation, as it is critical for achieving the results of the project as well as ensuring the sustainability of the processes.

109. The Río Motagua watershed is characterized by high levels of contamination due to the improper disposal of domestic and industrial solid waste and wastewater and hazardous chemicals. Because of the characteristics of the area and the vulnerability of women in this region which is characterized by poverty and social conflict, the project will develop mechanisms to prioritize the active participation of women in the project activities and at the different levels of decision making so that they are not excluded from making decisions relevant to IRBM, the develop plans between the two countries, and national, departmental, and municipal strategic plans. The focus of the strategy and action plan will be placed on the following activities to counter the abovementioned problems:

- Active participation by women in the different municipal, departmental, regional, and national platforms for discussion. These platforms will consider their aspirations, opinions, principal problems, and proposals for the IRBM of the Río Motagua watershed.
- Active consultation with women's at the local in both countries, including representatives of women's organizations and women's municipal offices.
- Participation of women, youth, and children in specific project activities with the guidance of the OMM and DMM, including environmental education and awareness raising campaigns, and through the identification of innovative solutions to environmental management with regard to wastewater and solid waste in the prioritized municipalities.
- Compilation of the experiences of the participation of men and women in the project, especially those innovative activities that have integrated a gender focus.
- Design of financial support mechanisms that ensure access for women and address the specific barriers to access.
- Methodologies to ensure adequate training of women in technical and scientific topics related to IRBM and management of solid waste; these will be evaluated to determine compliance with women and men's expectations. Special attention will be paid to identifying issues for women and men regarding the use of their time and defining schedules and distance to training sites.

110. During its initial phase, the project will carry out training on gender issues and will socialize and update the project's Gender Strategy and Action Plan, especially with the organizations and institutions participating in the TACs in each country. This will serve to outline its implementation and ensure the necessary resources are available. Project staff, including the Principal Advisor, the national coordinators, technical support staff, and consultants, will be responsible for implementing the Gender Strategy and Action Plan; this responsibility will be included in their

terms of reference. Tools will be developed to compile data disaggregated by sex, age, and occupation of those within the national institutions, municipalities, local organizations, etc., who will participate in the training, consultation, and sensitization processes so that reliable records on populations that are directly impacted are in place.

111. At the mid-term point of the project, progress in implementing the Gender Strategy and Action Plan will be evaluated to ensure that the necessary adjustments are made to be able to achieve anticipated results, especially with regard to women's participation in the project.

v. South-South and Triangular Cooperation (SSTrC):

112. South-South cooperation will be promoted as part of the planned activities for Outcome 4. The experience of joint project implementation between Guatemala and Honduras will be systematized and made available at the subnational (other watersheds within Guatemala and Honduras), national (Guatemala and Honduras), and other Central American countries. In addition, South-South cooperation will be promoted through the GEF's IW:LEARN program by sharing information with other countries, project managers, and stakeholders implementing similar projects.

IV. FEASIBILITY

i. Cost efficiency and effectiveness:

113. The adoption of a joint integrated management approach by Guatemala and Honduras that will address the threats to the Río Motagua watershed is more cost-effective and environmental, socially, and financially sustainable than the exclusive implementation of individual actions by each country. By developing a SAP complemented by NSAPs, prioritized actions to reduce the most pressing transboundary problems that would otherwise compromise water quality and quantity will be identified. A Binational Commissions for the transboundary basin will facilitate the implementation of harmonized approaches and reduce duplication of efforts, thus maximizing the impact of the resources invested. In addition, the multifocal nature of the project (IW and CW) will maximize the impact of GEF resources, that if invested through separate initiatives could results in the delivery of more limited environmental benefits.

114. GEF funding will build on these national baseline investments to ensure global environmental benefits. Significant co- financing has been committed for the project in the amount of USD 25,774,288, with GEF funding being allocated strategically toward actions that lead to: a) a common understanding between Guatemala and Honduras about the issues that are currently affecting the watershed's surface and ground water resources and their continual monitoring; b) joint strategic planning and binational agreements for action to resolve the priority transboundary problems; c) institutional structures and capacity to facilitate these actions; and d) on-site pilot initiatives to increase both country's experience with IBRM. In addition, the criteria used to identify several of pilot investments, relied on the availability of economic and logistical resources to contribute to IRBM, thus increasing the cost effectiveness of the project interventions at the local level. Pilot project experiences and lessons learned will contribute to cost-effective up-scaling and replication of project results.

ii. Risk Management:

115. As per standard UNDP requirements, the Principal Advisor will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual Project Implementation Report (PIR). The detailed risk management strategy for the project is included in Annex H.

iii. Social and environmental safeguards:

116. The overall project risk categorization is **moderate risk**, given that an Indigenous Peoples Participation Plan will need to be developed during the first year of project implementation and the risk pose to project outcomes due to potential impacts of climate change. Final consultations with indigenous peoples in Guatemala will be conducted during project implementation and the threat of climate change will be part of the WDA. Risk mitigation and risk assessment measures will be fully incorporated into the UNDP Risk log (see Annex H) and presented to the Local Project Appraisal Committee (LPAC); the complete social and environmental assessment is included in Annex F to this project document. The Risk log will be updated in the Atlas system for the duration of the project, as necessary. Environmental and social grievances during implementation would be reported to the GEF in the annual PIR.

iv. Sustainability and Scaling Up:

117. By promoting holistic and innovation solutions to reduce the pollution of surface water, groundwater, 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., biodigestion, stabilization ponds and bioremediation, and reforestation of aquifer recharge areas) and pilot projects for the sustainable management of solid waste to reduce emissions of dioxins and furans from burning in open-air dumpsites. 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, tax benefits, cash payments) to facilitate the adoption of clean technologies for reducing pollution.

118. 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 and groundwater, soil, and air in the Río Motagua watershed and play an integral role in implementing solutions to reduce these threats. Consultations were conducted with the indigenous groups particularly during pilot projects preparation through the Municipal Councils. Final consultations with indigenous peoples in Guatemala will be conducted during project implementation as part of a Indigenous Peoples Participation Plan.

119. Through Component 4, 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.

V. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): Goal 1: End poverty in all its forms everywhere; Goal 5: Achieve gender equality and empower all women and girls; Goal 6 (6.6): Ensure access to water and sanitation for all; Goal 12 (12.2): Ensure sustainable consumption and production patterns; Goal 15 (15.1, 15.2, 15.3, 15.4, 15.5, 15.9, 15.a): Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.					
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document. Guatemala: a) Impoverished rural populations develop new sustainable economic opportunities to compete in market systems; b) The Urban and Rural Development Councils system and related government institutions work together to develop policies and investments that promote the protection, responsible use, and conservation of natural resources, as well as resilience of the community in dealing with natural climate events; and c) Indigenous populations, primarily youth and women, are active citizens and participate effectively in decision making related to development themes at the community, municipal, subnational, and national levels. Honduras: a) A Honduras that is productive, creates opportunities and dignified work, and that makes use of its resources in a sustainable manner and reduces environmental vulnerability.					
This project will be linked to the following output of the UNDP Strategic Plan: Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste; Output 2.5: Legal and regulatory frameworks, policies, and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity, and ecosystems in line with international conventions and national legislation.					
	Objective and Outcome Indicators **(no more than a total of 15 -16 indicators)**	**Baseline[8]**	**Mid-term Target[9]**	**End of Project Target**	**Assumptions[10]**
Project Objective: Improve the integrated management of the Río Motagua watershed and reduce land-based sources of pollution and produced emissions from unintentionally formed persistent organic pollutants (U-POPs) to mitigate impacts on coastal-marine ecosystems and the livelihoods of the local populations.	Indicator 1: Number of people benefiting from strengthened quality of life through solutions for management of natural resources, ecosystems services, chemicals and waste.	Guatemala: – Women: 0 – Men: 0 Honduras: – Women: 0 – Men: 0	Guatemala: – Women: 96,418 – Men: 89,523 Honduras: – Women: 32,270 – Men: 31,383	Guatemala: – Women: 275,482 – Men: 255,779 Honduras: – Women: 92,197 – Men: 89,667	– There is permanent and continued political, strategic, and technical willingness by the governments of Guatemala and Honduras to strengthen the regulatory and governance frameworks related to IRBM of surface waters and aquifers of the Río Motagua Watershed – Effective communication among public agencies – Municipal governments and populations in Guatemala committed to controlling
	Indicator 2: Area (ha] in which the approach of IRBM has been applied in the Río Motagua Watershed in Guatemala and Honduras	– 99,694 ha (sub basins within the Río Motagua Watershed with son level of integrated management)	– IRBM approach in progress	– 1,799,080 ha	
	Indicator 3: Reduction in production of plastics waste and U-POPs that result from open burning of solid wastes in informal dumpsites and other waste-burning activities.	– Plastics waste*[11]: 109,500 metric tons (MT)/year – U-POP emissions: 225.6 gTEQ/year	– Plastics waste: 100,740 MT/year (8% reduction) – U-POP emissions: 207.6 gTEQ/year (8% reduction)	– Plastics waste: 87,600 MT/year (20% reduction) – U-POP emissions: 180.5 gTEQ/year (20% reduction)	
	Indicator 4: Change in national and local stakeholders' capacity for IRBM and monitoring and	GUATEMALA: – MARN National: 31.25% – MARN Region III: 39.58%	GUATEMALA: – MARN National: 36.25% – MARN Region III: 44.58%	GUATEMALA: – MARN National: 46.25% – MARN Region III: 54.58%	

[8] Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and need to be quantified. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

[9] Target is the change in the baseline value that will be achieved by the mid-term review and then again at the terminal evaluation.

[10] Risks must be outlined in the Feasibility section of this project document.

[11] 15% in total weight of solid wastes generated at the municipal level.

	control of water quality, including reduction of land-based pollution (solid wastes, U-POPs, and plastics) measures through the UNDP Capacity Scorecard	– MARN Region VII: 41.67% – Municipalities: Estanzuela: 52.08% Los Amates: 39.58% Pachalúm: 33.33% Puerto Barrios: 39.58% HONDURAS: – Mi Ambiente+ National: 45.83% – Mi Ambiente+ Western Region: 37.50% – Mi Ambiente+ Northwestern Region: 25.00% – Municipalities: Nueva Frontera: 25.00% Omoa: 37.50% Santa Rita: 27.08%	– MARN Region VII: 46.67% – Municipalities: Estanzuela: 57.08% Los Amates: 44.58% Pachalúm: 38.33% Puerto Barrios: 44.58% HONDURAS: – Mi Ambiente+ National: 50.83% – Mi Ambiente+ Western Region: 42.50% – Mi Ambiente+ Northwestern Region: 30.00% – Municipalities: Nueva Frontera: 30.00% Omoa: 42.50% Santa Rita: 32.08%	– MARN Region VII: 56.67% – Municipalities: Estanzuela: 67.08% Los Amates: 54.58% Pachalúm: 48.33% Puerto Barrios: 54.58% HONDURAS: – Mi Ambiente+ National: 60.83% – Mi Ambiente+ Western Region: 52.50% – Mi Ambiente+ Northwestern Region: 40.00% – Municipalities: Nueva Frontera: 40.00% Omoa: 52.50% Santa Rita: 42.08%	plastics waste and open burn of solid wastes – Optimal sampling – IRBM is adopted institutionally – Gender focus incorporated into IRBM
Outcome 1: Diagnostic analysis of the Surface and Groundwater Resources of the Río Motagua Watershed that is shared by Guatemala and Honduras.	Indicator 5: Hydrological and hydrogeological studies of the surface water and aquifers of the Río Motagua Watershed	– 0 hydrological studies – 0 hydrogeological studies	– One (1) hydrological study at the watershed level	– One (1) hydrological study at the watershed level – One (1) hydrogeological study at the watershed level	– Basic reference information is compiled efficiently, avoiding delays in development of the WDA as well as the subsequent National Strategic Action Plans (NSAPs) – Key stakeholders in both countries are convened by MARN and Mi Ambiente+ to validate information in the WDA, including the leadership of women who participate in the Development Councils and Watershed Councils of each country. – Sectoral policies and regulatory frameworks are reviewed, institutionalized, and continuously monitored in their application.
	Indicator 6: Watershed Diagnostic Analysis (WDA) includes a socioeconomic analysis that incorporates gender considerations: Agreement on priorities and fundamental causes of deterioration of the Río Motagua Watershed in Guatemala and Honduras.	– A WDA has not been considered (Classification 1 in the IW Tracking Tool)	– Progress is made in developing a WDA	– Agreement between Guatemala and Honduras regarding the priorities and work solutions for the watershed, including an analysis of the underlying causes (Classification 4 in the IW Tracking Tool).	
	Indicator 7: Updated regulatory framework tools guide the IRBM of the Río Motagua in the two countries.	– Guatemala: Wastewater Regulation 236-2006 and COGUANOR standards for Potable Water 29001-99 – Honduras: Water Law Decree 181-2009 and Potable Water and Sanitation Legal Framework Decree 118-2003 – National planning system	– Guatemala: None – Honduras: Executive Decree that reforms the Public Administration General Law (establishes offices' responsibilities and tasks related to water, sanitation, and solid waste)	– Guatemala: Proposal for wastewater regulation – Honduras: Proposal for Solid Waste Law – Honduras: Proposal for Solid Waste Regulation	

					– Methodologies associated with gender, socioeconomic, and environmental issues are incorporated into the integrated management of the watershed. – Regulatory frameworks are adopted and applied in both countries.
Outputs: 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 and groundwater pollution (solid waste, sedimentation, wastewater, etc.) developed. – Baseline conditions and status indicators of environmental and socioeconomic conditions related to watershed surface water and groundwater resources determined (watershed hydrologic/land use maps, physiochemical parameters, pollution sources, economic valuation of ecosystems, U-POPs emissions, plastic waste, 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.					
Outcome 2: Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua Watershed (Guatemala and Honduras) is agreed upon for implementation.	Indicator 8: SAP for the Río Motagua watershed and aquifers (Chiquimula, Copan Ruinas (Gua-Hon), Zacapa, Departments of Copan, Cortés, and Santa Bárbara)	– 0 (Neither Guatemala nor Honduras have developed SAPs for the watersheds referenced) (Classification 1 in the IW Tracking Tool)	– Processes that develop SAPs.	– SAPs developed and endorsed (Classification 4 in the IW Tracking Tool)	– There is continued willingness by the governments of Guatemala and Honduras to strengthen the regulatory and governance framework related to IRBM of surface waters and aquifers in the Río Motagua watershed – Effective communication among the public agencies – Key stakeholders from Guatemala and Honduras are in agreement about the structure and operational mechanism of the Coordination Unit of both countries for IRBM of the Río Motagua watershed – The rotation of staff does not diminish the
	Indicator 9: Inter-ministerial committees at the national level for IRBM of the Río Motagua watershed	– 0 (Neither Guatemala nor Honduras has established an inter-ministerial committee at the national level to address IRBM) (Classification 1 in the IW Tracking Tool)	– National Inter-ministerial Committee is working and operating in Guatemala and Honduras	– National Inter-ministerial Committee established and operating in Guatemala and Honduras (Classification 3 in the IW Tracking Tool)	
	Indicator 10: Proposal for the creation of a Coordination Unit between Guatemala and Honduras for the IRBM of the Río Motagua watershed	– 0 (there is no legally established Binational Guatemala-Honduras Coordination Unit for IRBM of the Río Motagua watershed); gender aspects in both countries are usually not considered	– Proposal for inclusive regulatory and policy framework and Coordination Unit between Guatemala and Honduras for IRBM of the Río Motagua watershed in process of being developed.	– Legal and operational framework of the Coordination Unit between Guatemala and Honduras proposed and harmonized for the integrated managed of the watershed. – The Commission will include 4 number of public entities, 10 number of local governments and 10 number of civil society	

				organizations, and 2 representatives from women's organizations in the Regional Development Councils, 1 representative from the Gender Unit of the MARN, Mi Ambiente, and Women in Honduras, 1 representative from INAM (Honduras) and SEPREM (Guatemala), representatives from Indigenous Populations; (the composition of the Commission will de confirmed during project implementation)	capacity of the project's stakeholders – Key institutions in Guatemala present in the Río Motagua watershed committed to the appropriate management and monitoring and control of chemicals and wastes (U-POPs and plastics) – The proposed gender mechanisms actively participate.
	Indicator 11: Number of key institutions in Guatemala present in the Río Motagua watershed incorporate and institutionalize the appropriate management of chemicals and wastes (U-POPs and plastics) in their watershed management plans and monitoring and control activities	– 0	– Ministries: 1 (MARN) – Municipalities: 20	– Ministries: 3 (MARN, MAGA, and MSPAS) – Municipalities: 56	

Outputs:

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;
   - Protocols for 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. High-level commission established that includes a Technical Committee and promotes permanent dialogue and coordination on Río Motagua management between 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.
3. Two (2) national-level proposals for updating the regulatory framework allow synergies for surface and groundwater management, including reducing pollution (solid waste, sedimentation, wastewater, etc.) and taking into account the regulations and international conventions to which both countries are parties.
4. An IRBM Binational Coordination Unit established within the Binational Framework Agreement between Guatemala and Honduras.
5. 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 are developed 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.
6. Targeted institutional capacity-building programs for IRBM and reducing land-based pollution:
   - Environmental Information Systems of the MARN (Guatemala) and 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, sedimentation, wastewater, etc.);
   - Training program strengthens national-, subnational-, and municipal-level capacities for IRBM (Guatemala and Honduras) and the sound 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.
7. 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 storage of plastic wastes (public and private sector).
8. Technical guidelines for the handling, transport, storage, and disposal of wastes.
9. Monitoring program of human and environmental health effects of U-POPs emissions and plastic wastes disposal, including improved laboratory and analytical competencies developed.

Outcome 3: Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences.	Indicator 12: Improved habitat (hectares under conservation) for protecting water resources with equal participation by men and women	– 0	– 100 ha of riparian forests	– 250 ha of riparian forests	– Pilot projects are initiated in an opportune manner, allowing the achievement of proposed environmental, socioeconomic, and gender goals. – There are no additional significant sources of
	Indicator 13: Number of municipal landfills in Guatemala using sustainable solid waste management schemes (reduction in open-air burning)	– 0	– At least 20	– At least 56	

	Pilot Project Municipality of Pachalum, Guatemala (IW) a) Change in nitrogen concentration (mg/L) in wastewater b) Change in BOD due to wastewater treatment (mg/L) c) Volume of treated wastewater	– Nitrogen concentration ranges from 30 to 45 mg/L – BOD concentration ranges from 340 to 350 mg/L – 0 m^3/day		– Reduction of nitrogen concentration by 20 mg/L – Reduction of BOD by 100 mg/L – 1,000 m^3/day	contamination that affect achieving the proposed environmental and socioeconomic goals. – Key stakeholders, such as the municipal authorities and women's groups, work effectively and jointly in the implementation of the pilot projects.
	Pilot Project Municipality of Puerto Barrios, Guatemala (IW) a) Acreage of restored area (ha) b) Non-degraded water recharge areas maintained or increased at the end of the project c) Change in the recharge rate of the aquifer resulting from ecological restoration	– 0 ha – Baseline will be determined during the first year of the pilot project and submitted to the GEF – 475 mm/year	– 30 ha – 630 ha under protection with local participation – 504 mm/year	– 85 ha – 1,800 ha under protection with local participation – 558 mm/year	
	Pilot Project Municipality of Estanzuela, Guatemala (IW) a) Change in nitrogen concentration (mg/L) in wastewater b) Change in BOD concentration (mg/L) in wastewater c) Volume of treated domestic wastewater	– Nitrogen concentration values above 20 mg/L – BOD concentration is 205 mg/L – 0 m^3/day		– Reduction of nitrogen concentration to less than 20 mg/L – Reduction of BOD concentration to 100 mg/L or less – 2,000 m^3/day	
	Pilot Project Municipality of Santa Rita, Honduras (IW) a) Change in nitrogen concentration (mg/L) in wastewater b) Change in BOD concentration as a result of wastewater treatment (mg/L) c) Volume of treated domestic wastewater	– Nitrogen concentration ranges from 30 to 45 mg/L – BOD concentration ranges from 340 to 350 mg/L – 0 m^3/day		– Reduction of nitrogen concentration to 20 mg/L – Reduction of BOD to 100 mg/L – 1,000 m^3/day	

	Pilot Project Municipality of Nueva Frontera, Honduras (IW) a) Area reforested (ha) b) Change in soil loss (tons/ha/year) c) Change in the water recharge rate as a result of ecological restoration	– 0 ha – Baseline will be determined during the first year of the pilot project and submitted to the GEF – Baseline will be determined during the first year of the pilot project and submitted to the GEF	– 35 ha – Reduction of 7 tons/ha/year of soil loss based on the natural forest scheme – Recharge increased by 140 mm/year based on the natural forest scheme	– 100 ha – Reduction of 20 tons/ha/year of soil loss based on the natural forest scheme – Recharge increased by 400 mm/year based on the natural forest scheme	
	Pilot Project Municipality of Omoa, Honduras (IW) a) Area (ha) of beach restored (cleaning of beaches)	– 0 ha	– 50 ha	– 150 ha	
	b) Area (ha) of mangroves restored	– 0 ha	– 35 ha	– 100 ha	
	Pilot Project Municipality of Pachalum, Guatemala (CW) a) Reduction in the number of illegal dumpsites of solid wastes b) Reduction (%) of U-POPs (solid waste from illegal dumpsites and other open burning activities). c) Reduction (%) of plastic waste in dumpsites.	– Baseline will be determined during the first year of the pilot project and submitted to the GEF – 0% reduction of U-POPs – 0% reduction of plastic waste in dumpsites	– Elimination of at least 6% of illegal dumpsites – At least 8% reduction of U-POPs (target will be confirmed during project implementation) – Reduction of at least 8% of plastic waste in the dumpsites.	– Elimination of at least 15% of illegal dumpsites. – At least 20% reduction of U-POPs (target will be confirmed during project implementation) – Reduction of at least 20% of plastic waste in the dumpsites.	
	Pilot Project Municipality of Estanzuela, Guatemala (CW) a) Reduction in the number of illegal dumpsites of solid wastes	– Baseline will be determined during the first year of the pilot project and submitted to the GEF	– Elimination of at least 6% of illegal dumpsites	– Elimination of at least 15% of illegal dumpsites.	
	b) Reduction (%) of U-POPs (solid waste from illegal dumpsites and other open burning activities).	– 0% reduction of U-POPs	– At least 8% reduction of U-POPs (target will be confirmed during project implementation)	– At least 20% reduction of U-POPs (target will be confirmed during project implementation)	

	c) Reduction (%) of plastic waste in dumpsites.	– 0% reduction of plastic waste in dumpsites	– Reduction of at least 8% of plastic waste in the dumpsites.	– Reduction of at least 20% of plastic waste in the dumpsites.	
	Pilot Project Municipality of Los Amates, Guatemala (CW) a) Reduction in the number of illegal dumpsites of solid wastes	– Baseline will be determined during the first year of the pilot project and submitted to the GEF	– Elimination of at least 6% of illegal dumpsites	– Elimination of at least 15% of illegal dumpsites.	
	b) Reduction (%) of U-POPs (solid waste from illegal dumpsites and other open burning activities).	– 0% reduction of U-POPs	– At least 8% reduction of U-POPs (target will be confirmed during project implementation)	– At least 20% reduction of U-POPs (target will be confirmed during project implementation)	
	c) Reduction (%) of plastic waste in dumpsites.	– 0% reduction of plastic waste in dumpsites	– Reduction of at least 8% of plastic waste in the dumpsites.	– Reduction of at least 20% of plastic waste in the dumpsites.	
Outputs: 1. Innovative investments to reduce Río Motagua water and coastal pollution from land-based sources: – Six (6) pilot projects with low-cost technology to reduce land-based pollution of water resources (e.g., biodigestors, oxidation ponds, control of soil erosion); – 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 cofinancing funds]); – Incentives available (environmental certifications, tax benefits, cash payments) for businesses that implement clean technologies and agricultural producers that adopt sustainable production practices. 2. Municipal solid waste management practices improved (with cofinancing and CW GEF funds): – Inventory of domestic waste dump sites and current practice of open-air burning; – Guidelines and technical support provided to municipalities for the sustainable management of solid wastes; – – Program to implement BMPs of solid waste, including the reduction of open burning from households in place with the participation of women; 3. At least three (3) pilot projects for the reduction of solid waste and proper handling and disposal of domestic waste, including elimination of open-air burning, contribute to the reduction of dioxin and 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 technologies (BATs) to reduce dioxin and furan emissions and plastic wastes; – Cleanup/closure of open air and illegal dump sites 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; 4. Rehabilitation (conservation and protection, reforestation, natural regeneration, remediation) of 250 ha of riparian ecosystems in the Río Motagua watershed in Honduras.					
Component 4: Knowledge Management and M&E	Indicator 16: Number of media productions that document and disseminate the successful experiences regarding use and management of surface water and groundwater (IW), as well as hazardous waste management (i.e., U-POPs and plastics) (CW)	– IW: 0 – CW: 0	– IW: at least 2 – CW: at least2	– IW: at least 5 – CW: at least 5	– Optimal documentation – Expansive and timely dissemination

	Indicator 17: Investment needs identified for the IRBM of the Río Motagua and the management of hazardous wastes (U-POPs and plastics)	– 0 (detailed studies have not been developed regarding the investment needs for IRBM of the Río Motagua and hazardous wastes)	– Feasibility study of the investment needs in progress	– Feasibility study of the investment priorities for IRBM of the Río Motagua and hazardous waste management (U-POPs and plastics)	
Outputs: 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;					

VI. MONITORING AND EVALUATION (M&E) PLAN

120. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

121. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the GEF M&E policy and other relevant GEF policies.

122. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.

M&E Oversight and monitoring responsibilities:

123. Principal Advisor: The Principal Advisor (or Binational Project Coordinator) is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Principal Advisor will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Principal Advisor will inform the Project Board, the UNDP Country Office and the UNDP-GEF Regional Technical Advisor (RTA) of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

124. The Principal Advisor will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Principal Advisor will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc.) occur on a regular basis.

125. Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

126. Project Implementing Partner: The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

127. UNDP Country Office: The UNDP Country Office will support the Principal Advisor as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent MTR and the independent TE. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

128. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g., annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Principal Advisor.

129. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF IEO.

130. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

131. **Audit**: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.[12]

Additional GEF monitoring and reporting requirements:

132. Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation;

b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;

c) Review the results framework and finalize the indicators, means of verification and monitoring plan;

d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;

e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;

f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and

g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

133. The Principal Advisor will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

134. GEF Project Implementation Report (PIR): The Principal Advisor, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Principal Advisor will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

135. The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

[12] See guidance here: https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx

136. Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

137. GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results: IW 1, IW 3, and CW 2.

138. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in Annex D to this project document – will be updated by the Principal Advisor/Team and shared with the mid-term review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the MTR or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

139. Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

140. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Principal Advisor will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

141. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP ERC. Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

142. Final Report: The project's terminal PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Mandatory GEF M&E Requirements and M&E Budget:

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget[13] (US$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	USD 10,000	USD 10,000	Within two months of project document signature
Inception Report	Principal Advisor	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	M&E Specialist Principal Advisor	USD 20,000 (USD 4,000/yr.)	USD 20,000 (USD 4,000/yr.)	Annually
GEF PIR	Principal Advisor and UNDP Country Office and UNDP-GEF team	None	None	Annually
NIM Audit as per UNDP audit policies	UNDP Country Office	Guatemala: USD 17,500 Honduras; USD 17,500 (USD 7,000/yr.)	*None*	Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	Principal Advisor Communications Expert	Covered through Outcome 4	Covered through Outcome 4	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Principal Advisor Gender and Stakeholder Involvement Specialist (GSIS) UNDP CO	35,100 (Salary of GSIS)	None	On-going
Addressing environmental and social grievances	Principal Advisor UNDP Country Office GSIS	USD 17,500	USD 17,500	
Project Board meetings	Project Board UNDP Country Office Principal Advisor	USD 10,000 (USD 2,000/yr.)	USD 10,000 (USD 2,000/yr.)	At minimum annually
Supervision missions	UNDP Country Office	None[14]	None	Annually

[13] Excluding project team staff time and UNDP staff time and travel expenses.

[14] The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

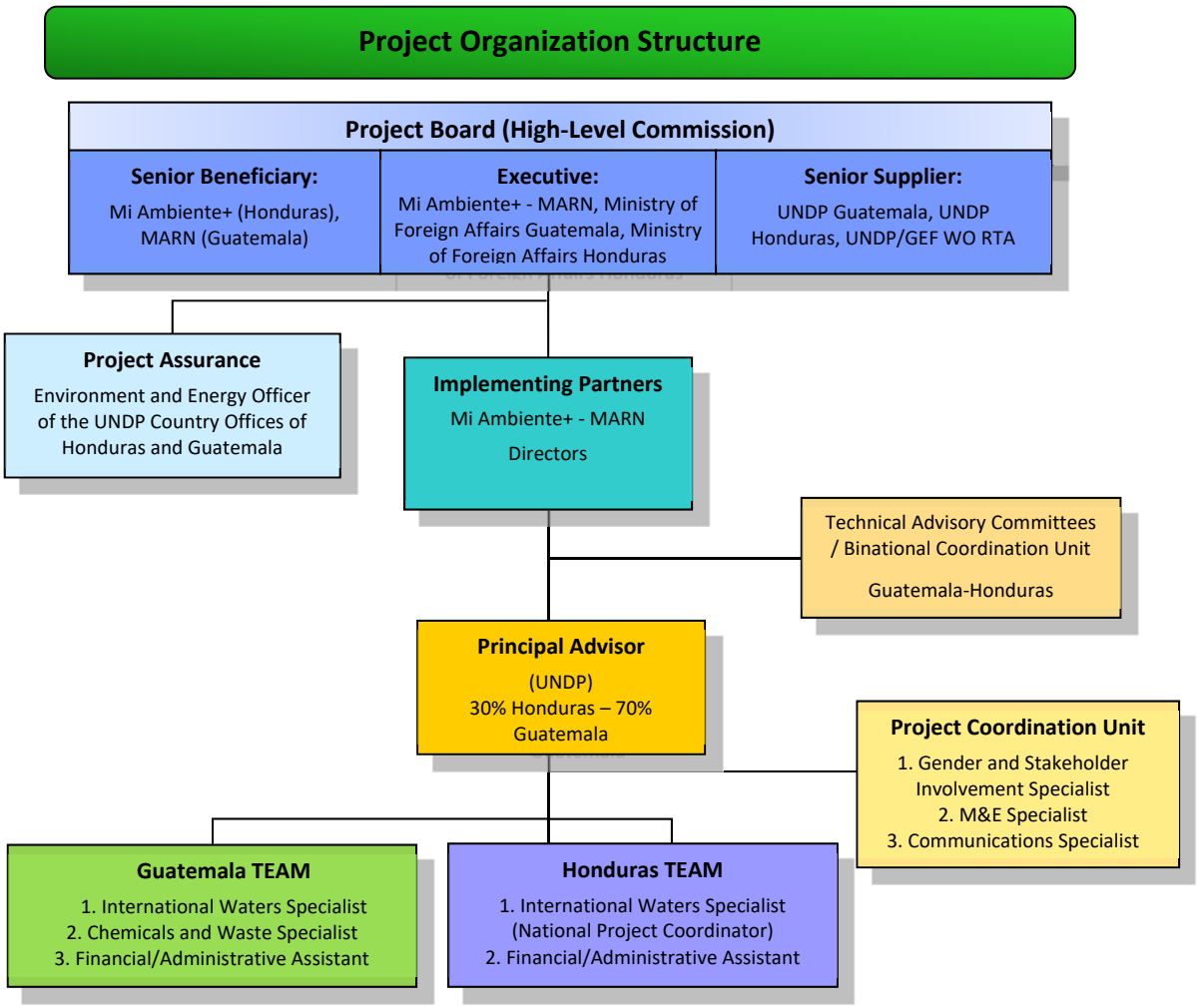
Oversight missions	UNDP-GEF team	None[14]	None	Troubleshooting as needed
Knowledge management as outlined in Outcome 4	Principal Advisor Communications Expert (CE)	USD 68,150 (Salary of CE, travel and publications)	USD 204,450	On-going
GEF Secretariat learning missions/site visits	UNDP Country Office and Principal Advisor and UNDP-GEF team	None	None	To be determined.
Mid-term GEF Tracking Tool to be updated	Principal Advisor	USD 6,000	USD 3,000	Before mid-term review mission takes place.
Independent MTR and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 48,350	USD 10,000	Between 2nd and 3rd PIR.
Terminal GEF Tracking Tool to be updated	Principal Advisor	USD 6,000	USD 3,000	Before terminal evaluation mission takes place
Independent TE included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 60,850	USD 10,000	At least three months before operational closure
Translation of MTR and TE reports into English	UNDP Country Office	USD 10,000	None	
TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses		**USD 326,950**	**USD 287,950**	

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

143. Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's national implementation modality (NIM), according to the Standard Basic Assistance Agreement (SBAA) between UNDP and the Government of Guatemala through the Ministry of Environment and Natural Resources (MARN), and the SBAA between UNDP and the Government of Honduras through the Secretariat of Energy, Natural Resources, Environment, and Mines (Mi Ambiente+), and their respective Country Programme.

144. The **Implementing Partner** for this project are state agencies; the MARN of Guatemala and the Mi Ambiente+ of Honduras; both will be responsible and accountable for managing this project. Guatemala will have the responsibility of leading the Project Management Unit (PMU) in coordination with Mi Ambiente+. The PMU will establish the protocols for the development of the project outputs. Among its roles, the PMU will keep informed the TACs in each country and the Project Board about the progress of technical and financial execution of the project. The implementing parters will also be responsible for the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of resources to be provided by UNDP. In the case of Guatemala, the implementation of the pilot projects for international waters and chemicals and waste will be delegated by the MARN to the UNDP Office, which will provide technical, financial, and monitoring oversight of the pilot projects.

145. The project organization structure is as follows:



146. The **Project Board** (also called the Project Steering Committee) will provide strategic and policy guidance to the project to achieve the vision of IRBM of the Río Motagua watershed. The Project Board will initially be composed by high-level representatives of the MARN and Mi Ambiente+ (Ministers), as well as the Ministries of Foreign Affairs of Guatemala and Honduras, representatives from the Secretariats of National Planning in both countries, representatives of the UNDP Country Offices in Guatemala and Honduras and the W&O RTA, and the participation of the Project Directors (MARN and Mi Ambiente+ – focal points/public officials), and the Principal Advisor of the project. The Project Board will facilitate the spaces for dialogue in seeking solutions within the project and complementary actions with to other donors, projects, initiatives, and partners working in other municipalities of the watershed where the project is not implementing pilot projects. The Project Board will facilitate the conditions so that the institutional agreement between both countries regarding the IRBM the Río Motagua watershed may become a reality in the next years.

147. The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendations for UNDP/Implementing Partner approval of project plans and revisions, and addressing any project level grievances. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity,

transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager.

148. Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;
- Agree on project manager's tolerances as required;
- Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the workplan;
- Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
- Assess and decide to proceed on project changes through appropriate revisions.

149. The composition of the Project Board must include the following roles:

150. Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is: Add who will represent the Executive for the project.

151. The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and suppler.

152. Specific Responsibilities: (as part of the above responsibilities for the Project Board)

- Ensure that there is a coherent project organisation structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organise and chair Project Board meetings.

153. Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Suppler is: Add who will represent the Senior Supplier for the project.

154. Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;

- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

155. Senior Beneficiary: The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiary is: Add who will represent the Senior Beneficiary for the project.

156. The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

157. Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

158. Project Manager: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

159. The Implementing Partner appoints the Project Manager, who should be different from the Implementing Partner's representative in the Project Board.

160. Specific responsibilities include:

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;

- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available.
- Prepare the GEF PIR and submit the final report to the Project Board;
- Based on the GEF PIR and the Project Board review, prepare the AWP for the following year.
- Ensure the mid-term review process is undertaken as per the UNDP guidance, and submit the final MTR report to the Project Board.
- Identify follow-on actions and submit them for consideration to the Project Board;
- Ensure the terminal evaluation process is undertaken as per the UNDP guidance, and submit the final TE report to the Project Board;

161. The **Technical Advisory Committees** (TACs) will serve as the coordinating entities comprised by experts from the project's institutional partners in Guatemala and Honduras. They will be the experts charged with providing strategic input for guiding the technical aspects of project implementation. The TACs' principal function will be focused on working jointly with the Project Management Unit so that it may implement the activity of each project component in a concrete manner. This sub-committee will have national representation and will act separately in each country. The committee's resolutions, inputs, and guidelines will reach the Project's Senior Advisor through the Focal Points of the MARN, Mi Ambiente+, and partner organizations. This sub-committee will be composed of specialists in technical issues related to international waters and chemicals and waste; as well as legal, diplomatic, and gender issues.

162. The **project assurance** UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices in Guatemala and Honduras, and at regional and headquarters levels. Project Assurance must be totally independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the GEF Agency. Additional quality assurance will be provided by the UNDP Regional Technical Advisor as needed.

163. Governance role for project target groups: Because of the project's binational character and activities for the implementation of a IRBM for the Río Motagua, as well as the activities in selected municipalities where the pilot projects will be implemented to provide innovative solutions to the environmental concerns in the watershed, the governance function will be led by the MARN in Guatemala and by Mi Ambiente+ in Honduras. Effective governance will require inter-sectoral action and the participation of multiple stakeholders and sectors. The government institutions with mandates for compliance with the outcomes of the project will be strategic partners for its successful implementation. The stakeholders (government institutions and CSOs) who will be involved through the implementation of the Stakeholder Engagement plan, as well as in actions that will lead to the development of the SAP for the IRBM of the Río Motagua watershed will also play a role in the project's governance. The municipalities, local groups, and associations identified in the pilot projects will serve as beneficiaries for implementing the innovative investments though each pilot project. The project's strategic partners will have a role in the complementarity and association with the project in the established areas of intervention. The Project Board, UNDP, the TACs of each country, the municipalities and implementing partners of the pilot projects, the Project Management Unit, and the project's beneficiaries will be coordinated through a mechanism that will be set up by the Project Management Unit to maintain coherence in implementing the project's activities, as well as follow-up to the indicators included in the project results framework (PRF).

164. UNDP Direct Project Services as requested by Government: Upon request from the Government of Guatemala and/or Honduras, UNDP can provide Direct Project Services according to its specific policies and convenience. In this case, the Government, as Implementing Partner, will sign a Letter of Agreement specifying the services to be provided and their costs (Annex J). According to GEF requirements, the costs of these services will be

part of the project management costs of the executing entity identified in the project budget. UNDP and the governments of Guatemala and/or Honduras recognize that these services are not mandatory and will only be provided in full compliance with the UNDP recovery of direct costs policies. The DPC will be charged annually using the UNDP Universal Price List.

165. Conformation of the Project Management Unit: The **Principal Advisor of the Project (also called the Binational Project Coordinator)** will reside in Guatemala (MARN) and will run the project on a day-to-day basis. His/her primary function is general coordination with all parties involved in the project, to provide a technical and strategic vision to his/her team and to the Project Board. He/she is responsible for directing the annual planning of the project, reporting, and providing follow-up to the outputs and activities.

166. The **Regional Project Team** will be composed of the M&E Specialist, the Gender and Stakeholder Involvement Specialist with emphasis in indigenous groups, and the Communications Specialist. Their principal function is to support the Principal Advisor and provide strategic input for the correct implementation of the project. The team is charged with guiding the implementation of the Stakeholder Participation Plan, and the Gender Strategy and Plan, as well as providing strategic guidance of the pilot projects' actions.

167. The **Guatemala Team** will be composed of a **Chemicals and Waste Specialist** who will provide technical support to all project activities related to the reduction of harmful chemicals waste, including the pilot projects; an **International Waters Specialist (or IRBM expert)**, who will also provide support for the implementation of the project's actions, including the development of the WDA, the SAP, and the pilot projects; and a **Financial and Administrative Assistant**—this position in Guatemala will be charged with integrating reports from both countries—whose role will be focused on providing administrative input for successful project management, and monitoring of financial performance and the budget. Special project actions will be required in terms of generating outputs, for which Guatemala and Honduras will contract services from consultants or firms in accordance with the type of output and following the appropriate procedures of the Implementing Agency.

168. The Honduras Team will be composed of an **International Waters Specialist (or National Project Coordinator)** who will also provide support for the implementation of the project's actions, including the development of the WDA, the SAP, and the pilot projects; and a **Financial and Administrative Assistant** whose role will be focused on providing administrative input for successful project management, and monitoring of financial performance and the budget. The position in Honduras will coordinate with Guatemala. Special project actions will be required in terms of generating outputs, for which Guatemala and Honduras will contract services from consultants or firms in accordance with the type of output and following the appropriate procedures by the Implementing Agency.

169. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy and the GEF policy on public involvement.

VIII. FINANCIAL PLANNING AND MANAGEMENT

170. The total cost of the project is USD 33,357,328. This is financed through a GEF grant of USD 5,329,452, and USD 28,027,876 in parallel co-financing. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

171. Parallel co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

Co-financing source	Co-financing type	Co-financing amount (USD)	Planned Activities/Outputs	Risks	Risk Mitigation Measures
MARN, Guatemala	Cash and in-kind	1,054,129	*Outcomes 1, 2, 3, and 4*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Asociación Sotz'il, Guatemala	Cash and in-kind	200,000	*Output 3.1: pilot projects* *Output 3.3: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project
Wetlands International, Guatemala	In-kind	50,576	*Output 3.1: pilot projects* *Output 3.3: pilot projects*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Mesoamerican Reef Fund (MARFUND)	Cash	225,453	*Output 3.1: pilot projects*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Foundation for Ecodevelopment and Conservation (FUNDAECO), Guatemala	Cash and in-kind	800,000	*Output 3.1: pilot projects*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Inter-American Development Bank (IADB), Guatemala	Cash and in-kind	15,000,000	*Outcomes 1, 2, 3, and 4*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Municipality of Pachalum, Guatemala	Cash and in-kind	163,002	*Output 3.1: pilot projects* *Output 3.3: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project
Municipality of Estanzuela, Guatemala	Cash	580,658	*Output 3.1: pilot projects* *Output 3.3: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project

Municipality of Los Amates, Guatemala	Cash	119,620	*Output 3.3: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project
Directorate General of the Merchant Marine, Honduras	Cash and in-kind	29,380	*Outcome 3*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
SAG, Honduras	In-kind	1,514,350	*Outcomes 1, 2, 3, and 4*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Gas del Caribe Honduras	Cash	2,194,395	*Outcome 3*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
ICF, Honduras	In-kind	487,003	*Outcomes 1, 2, and 3*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Mi Ambiente+, Honduras	In-kind	2,500,000	*Outcomes 1, 2, 3, and 4*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
GOAL Honduras	Cash	1,000,000	*Outcomes 1, 2, and 3*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
Municipality of Nueva Frontera, Honduras	Cash and in-kind	10,000	*Output 3.1: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project
Municipality of Omoa Honduras	In-kind	69,310	*Output 3.1: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of	The UNDP Country Office will monitor the co-financing contributions to the project

				funds to the institution	
Municipality of Santa Rita Honduras	Cash	30,000	*Output 3.1: pilot projects*	Medium – Dependent on annual budgeting and effective allocation of funds to the institution	The UNDP Country Office will monitor the co-financing contributions to the project
UNDP Honduras	Cash	1,500,000	*Outcomes 1, 2, 3, and 4*	Low	The UNDP Country Office will monitor the co-financing contributions to the project
UNDP Cap-Net	Cash	500,000	*Outcome 4*	Low	The UNDP Country Office will monitor the co-financing contributions to the project

172. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Principal Advisor and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF:

a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more;

b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

173. Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

174. Refund to Donor: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

175. Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

176. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

177. Financial completion: The project will be financially closed when the following conditions have been met:

a) The project is operationally completed or has been cancelled;

b) The Implementing Partner has reported all financial transactions to UNDP;

c) UNDP has closed the accounts for the project;

d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

178. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

IX. TOTAL BUDGET AND WORK PLAN

GUATEMALA – INTERNATIONAL WATERS & CHEMICALS AND WASTE

Total Budget and Work Plan			
Atlas Proposal or Award ID:	00085087	Atlas Primary Output Project ID:	00092858
Atlas Proposal or Award Title:	Integrated Environmental Management of the Río Motagua Watershed		
Atlas Business Unit	GTM10		
Atlas Primary Output Project Title	Integrated Environmental Management of the Río Motagua Watershed		
UNDP-GEF PIMS No.	5714		
Implementing Partner	Ministry of the Environment and Natural Resources (MARN)		

GEF Component/Atlas Activity	(Atlas Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	*See Budget Note:*
COMPONENT/ OUTCOME 1:	MARN	62000	GEF	71300	Local Consultants	56,200	44,200	17,600			118,000	*1*
				71400	Contractual Services – Individuals	21,501	21,501	21,500			64,502	*2*
				71600	Travel	9,150	9,150	4,750			23,050	*3*
				72100	Contractual Services-Companies	17,500	17,500				35,000	*4*
				72300	Materials & Goods	2,000	2,000				4,000	*5*
				72500	Supplies	500	500				1,000	*6*
				72800	Information Technology Equipmt	2,500					2,500	*7*
				74200	Audio Visual&Print Prod Costs			5,000			5,000	*8*
				74500	Miscellaneous Expenses	1,250	1,250	1,250			3,750	*9*
				75700	Training, Workshops and Confer			13,000			13,000	*10*
					Total Outcome 1	**110,601**	**96,101**	**63,100**			**269,802**	
COMPONENT/ OUTCOME 2:	MARN	62000	GEF	71300	Local Consultants	63,200	135,400	18,000			216,600	*11*
				71400	Contractual Services – Individuals	63,579	106,779	93,579	24,580	15,580	304,097	*12*
				71600	Travel	22,867	40,466	13,467	1,400		78,200	*13*
				72100	Contractual Services-Companies	15,000	95,000				110,000	*14*

				72500	Supplies	1,200	2,950	1,200			5,350	*15*
				72800	Information Technology Equipmt	1,400	15,000				16,400	*16*
				74200	Audio Visual&Print Prod Costs		50,500	42,000	11,000		103,500	*17*
				74500	Miscellaneous Expenses	1,875	1,875	1,875	1,875		7,500	*18*
				75700	Training, Workshops and Confer	6,000	52,500	22,500			81,000	*19*
					Total Outcome 2	**175,121**	**500,470**	**192,621**	**38,855**	**15,580**	**922,647**	
COMPONENT/ OUTCOME 3:	MARN	62000	GEF	71300	Local Consultants	32,300					32,300	*20*
				71400	Contractual Services – Individuals	63,634	63,634	63,635	63,635	51,055	305,593	*21*
				71600	Travel	7,659	12,186	12,185	12,186	5,784	50,000	*22*
				72100	Contractual Services-Companies	137,009	875,133	347,747	147,747	124,750	1,632,386	*23*
				72200	Equipment and furniture	1,250					1,250	*24*
				72500	Supplies	4,050	1,625	1,625	1,625	1,625	10,550	*25*
				72800	IT Equipment	4,085					4,085	*26*
				74500	Miscellaneous Expenses	3,017	3,017	3,017	3,017	2,192	14,260	*27*
				75700	Training, Workshops and Confer	4,000	4,000	4,000	4,000	4,000	20,000	*28*
					Total Outcome 3	**257,004**	**959,595**	**432,209**	**232,210**	**189,406**	**2,070,424**	
COMPONENT/ OUTCOME 4: KM and M&E	MARN	62000	GEF	71200	International Consultants			17,325		25,200	42,525	*29*
				71300	Local Consultants			13,950		13,950	27,900	*30*
				71400	Contractual Services – Individuals	32,994	32,994	32,994	32,994	32,994	164,970	*31*
				71600	Travel	12,600	2,100	20,925	2,100	11,700	49,425	*32*
				74100	Professional Services	3,500	3,500	7,250	3,500	7,250	25,000	*33*
				74200	Audio Visual&Print Prod Costs		875	875	875	875	3,500	*34*
				75700	Training, Workshops and Confer	11,000	3,000	3,900	3,000	4,125	25,025	*35*
					Total Outcome 4	**60,094**	**42,469**	**97,219**	**42,469**	**96,094**	**338,345**	
PROJECT MANAGEMENT	MARN	62000	GEF	71400	Contractual Services – Individuals	14,977	14,977	14,977	14,977	14,977	74,885	*36*

				71600	Travel	3,000	3,000	3,000	3,000	3,000	15,000	*37*
				72500	Supplies	1,080	1,080	1,080	1,080	1,080	5,400	*38*
				72800	IT Equipment	2,751					2,751	*39*
				74500	Miscellaneous Expenses	2,000	2,000	2,000	2,000	2,000	10,000	*40*
				74596/64 397	Direct Project Costs	14,405	14,405	14,405	14,405	14,404	72,024	*41*
					Total Project Management	**38,213**	**35,462**	**35,462**	**35,462**	**35,461**	**180,060**	
					PROJECT TOTAL	**641,033**	**1,634,097**	**820,611**	**348,996**	**336,541**	**3,781,278**	

HONDURAS – INTERNATIONAL WATERS

Total Budget and Work Plan			
Atlas Proposal or Award ID:	00088100	Atlas Primary Output Project ID:	00094909
Atlas Proposal or Award Title:	Integrated Environmental Management of the Río Motagua Watershed		
Atlas Business Unit	HND10		
Atlas Primary Output Project Title	Integrated Environmental Management of the Río Motagua Watershed		
UNDP-GEF PIMS No.	5714		
Implementing Partner	Secretariat of Energy, Natural Resources, Environment, and Mines (Mi Ambiente+)		

GEF Component/Atlas Activity	**(Atlas Implementing Agent)**	**Fund ID**	**Donor Name**	**Atlas Budgetary Account Code**	**ATLAS Budget Description**	**Amount Year 1 (USD)**	**Amount Year 2 (USD)**	**Amount Year 3 (USD)**	**Amount Year 4 (USD)**	**Amount Year 5 (USD)**	**Total (USD)**	***See Budget Note:***
COMPONENT/ OUTCOME 1:	Mi Ambiente+	62000	GEF	71300	Local Consultants	56,200	44,200	10,800			111,200	*1*
				71400	Contractual Services – Individuals	35,979	35,978	35,978			107,935	*2*
				71600	Travel	7,950	7,950	3,150			19,050	*3*
				72100	Contractual Services-Companies	17,500	17,500				35,000	*4*
				72300	Materials & Goods	2,000	2,000				4,000	*5*
				72500	Supplies	500	500				1,000	*6*

				72800	Information Technology Equipmt	2,300					2,300	*7*
				74200	Audio Visual&Print Prod Costs			5,000			5,000	*8*
				74500	Miscellaneous Expenses	1,250	1,250	1,250			3,750	*9*
				75700	Training, Workshops and Confer			9,000			9,000	*10*
					Total Outcome 1	**123,679**	**109,378**	**65,178**			**298,235**	
COMPONENT/ OUTCOME 2:	Mi Ambiente+	62000	GEF	71300	Local Consultants	22,000	25,540				47,540	*11*
				71400	Contractual Services – Individuals	38,214	78,664	65,464	26,547	17,546	226,435	*12*
				71600	Travel	11,550	19,750	7,200	1,400		39,900	*13*
				72500	Supplies	500	2,250	500			3,250	*14*
				72800	Information Technology Equipmt			15,000			15,000	*15*
				74200	Audio Visual&Print Prod Costs		13,700	12,200	4,500		30,400	*16*
				74500	Miscellaneous Expenses	476	476	476	476		1,904	*17*
				75700	Training, Workshops and Confer	5,000	18,575	7,025			30,600	*18*
					Total Outcome 2	**77,740**	**158,955**	**107,865**	**32,923**	**17,546**	**395,029**	
COMPONENT/ OUTCOME 3:	Mi Ambiente+	62000	GEF	71300	Local Consultants	16,800		4,000			20,800	*19*
				71400	Contractual Services – Individuals	52,363	52,362	52,362	52,362	39,850	249,299	*20*
				71600	Travel	3,158	3,157	3,157	3,158	900	13,530	*21*
				72100	Contractual Services-Companies	34,638	152,312	75,314	75,314	21,500	359,078	*22*
				72200	Equipment and furniture	500					500	*23*
				72500	Supplies	590	591	591	590		2,362	*24*
				72800	IT Equipment	1,214					1,214	*25*
				74500	Miscellaneous Expenses	625	625	625	625		2,500	*26*
					Total Outcome 3	**109,888**	**209,047**	**136,049**	**132,049**	**62,250**	**649,283**	
COMPONENT/ OUTCOME 4: KM and M&E	Mi Ambiente+	62000	GEF	71200	International Consultants			5,775		8,400	14,175	*27*
				71300	Local Consultants			4,650		4,650	9,300	*28*

				71400	Contractual Services – Individuals	5,976	5,976	5,976	5,976	5,976	29,880	*29*
				71600	Travel	11,830	1,330	14,955	2,380	3,830	34,325	*30*
				74100	Professional Services	3,500	3,500	6,000	3,500	6,000	22,500	*31*
				74200	Audio Visual&Print Prod Costs		875	875	875	875	3,500	*32*
				75700	Training, Workshops and Confer	9,550	2,000	2,300	2,000	2,375	18,225	*33*
					Total Outcome 4	**30,856**	**13,681**	**40,531**	**14,731**	**32,106**	**131,905**	
PROJECT MANAGEMENT	Mi Ambiente+	62000	GEF	71400	Contractual Services – Individuals	5,196	5,196	5,196	5,196	5,196	25,980	*34*
				71600	Travel	1,500	1,500	1,500	1,500	1,500	7,500	*35*
				72500	Supplies	560	560	561	561	561	2,803	*36*
				72800	IT Equipment	2,950					2,950	*37*
				74500	Miscellaneous Expenses	1,000	1,000	1,000	1,000	1,000	5,000	*38*
				74596/64397	Direct Project Costs	5,898	5,898	5,897	5,898	5,898	29,489	*39*
					Total Project Management	**17,104**	**14,154**	**14,154**	**14,155**	**14,155**	**73,722**	
					PROJECT TOTAL	**359,267**	**505,215**	**363,777**	**193,858**	**126,057**	**1,548,174**	

Summary of Funds:

	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)
GEF	1,000,300	2,139,312	1,184,388	542,854	462,598	5,329,452
MARN	210,826	210,826	210,826	210,826	210,825	1,054,129
Asociación Sotz'il	40,000	40,000	40,000	40,000	40,000	200,000
Wetlands International	10,115	10,115	10,115	10,115	10,116	50,576
MARFUND	45,091	45,091	45,091	45,090	45,090	225,453
FUNDAECO	160,000	160,000	160,000	160,000	160,000	800,000
Inter-American Development Bank	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000
Municipality of Pachalum, Guatemala	163,002					163,002
Municipality of Estanzuela, Guatemala	430,893	149,765				580,658

Municipality of Los Amates, Guatemala	23,924	23,924	23,924	23,924	23,924	119,620
Directorate General of the Merchant Marine, Honduras	29,380					29,380
Secretariat of Agriculture and Livestock Honduras	302,870	302,870	302,870	302,870	302,870	1,514,350
Gas del Caribe Honduras	438,879	438,879	438,879	438,879	438,879	2,194,395
ICF Honduras	97,401	97,401	97,401	97,400	97,400	487,003
MiAmbiente+ Honduras	625,000	625,000	625,000	625,000		2,500,000
GOAL Honduras	333,333	333,333	333,334			1,000,000
Municipality of Nueva Frontera, Honduras	2,000	2,000	2,000	2,000	2,000	10,000
Municipality of Omoa Honduras	17,328	17,328	17,327	17,327		69,310
Municipality of Santa Rita Honduras	7,500	7,500	7,500	7,500		30,000
UNDP Honduras	300,000	300,000	300,000	300,000	300,000	1,500,000
UNDP Cap-Net	100,000	100,000	100,000	100,000	100,000	500,000
TOTAL	**7,337,842**	**8,003,344**	**6,898,655**	**5,923,785**	**5,193,702**	**33,357,328**

Budget Notes:

GUATEMALA – INTERNATIONAL WATERS and CHEMICALS AND WASTES

Atlas Category	Atlas Code	Budget Notes
Component 1: Diagnostic analysis of the Surface and Groundwater Resources of the Río Motagua watershed that is shared by Guatemala and Honduras		
1. Local consultants	71300	a) Consultant to design a groundwater monitoring network. Total cost: $6,000; 4 months @ $1,500/month (Output 1.1).
		b) Consultant to collect groundwater monitoring data. Total cost: $18,000; 12 months @ $1,500/month (Output 1.1).
		c) Hydrogeological consultant to coordinate groundwater studies in the Motagua watershed. Total cost: $18,000; 12 months @ $1,500/month (Output 1.1).
		d) GIS Expert for development of GIS database to consolidate hydrogeological information and population of this database. Total cost: $13,200; 12 months @ 1,100/month (Output 1.1).
		e) Hydrological/surface water expert for collection of information on environmental status of surface water resources, including identifying sources of pollution and baseline data on the agreed upon environmental indicators. Total cost: $18,000; 12 months @ 1,500/month (Output 1.1).
		f) Socio-economic expert for collection of socioeconomic information and gathering of baseline data on agreed upon socioeconomic indicators. Total cost: $8,000; 8 months @ $1,000/month (Output 1.1).
		g) Gender expert to conduct a detailed assessment of gender aspects and gathering of baseline data on agreed upon gender indicators. Total cost: $6,000; 6 months @ $1,000/month (Output 1.1).
		h) GIS expert for development of GIS database to consolidate surface water and land use stressors information and population of database, as well as development of web portals. Total cost: $13,200; 12 months @ $1,100/month (Output 1.1).
		i) Policy expert for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans in Guatemala. Total cost: $17,600; 8 months @ $2,200/month (Output 1.1).
2. Contractual Services – Individuals	71400	a) Binational Project Coordinator: coordination support to diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed. Total cost: $10,580.
		b) Contract for WDA expert for gathering, analysis and consolidation of information and writing of WDA; facilitation of meetings to validate accuracy of information in WDA; development of materials to summarize WDA for different stakeholders; provision of reliable data to GIS expert for inclusion in database, which includes data analysis and harmonization of information. Total cost: $18,000; 12 months @ $1,500/month (Output 1.1).
		c) National Project Specialist (IW): Technical support to diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed. Total cost: $31,500.
		d) Financial/Administrative Assistant Guatemala: Administrative and logistical support to diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed. Total cost: $4,422.
3. Travel	71600	a) Travel costs for three (3) consultants to carry out the hydrogeological studies. Total cost: $6,000; five 4-day trips per consultant @ $100/day during 3 months (includes DSA and ground transportation) (Output 1.1).
		b) Travel costs to gather baseline data and carry out consultations and meetings for preparation of WDA (groundwater expert, surface water expert, socioeconomic expert, gender expert, and WDA expert). Total cost: $6,000; five 2-day trips per consultant @ $100/day during 6 months (includes DSA and ground transportation) (Output 1.1).
		c) Travel for Binational Project Coordinator in oversight of Outputs for Component 1. Total cost: $2,250; 15 trips @ $150/trip during 24 months (includes DSA and ground transportation)

		d) Travel for support of National Project Specialist (IW) to Output 1.1. Total cost: $7,200; @ $300/month for 24 months (includes DSA and ground transportation)
		e) Travel for policy expert to support municipalities in incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans in Guatemala. Total cost: $1,600 @ $200/month for 8 months (includes DSA and ground transportation) (Output 1.1).
4. Contractual Services - Companies	72100	a) Company to drill wells for monitoring. Total cost: $25,000 (Output 1.1).
		b) Company to purchase groundwater measurement equipment. Total cost: $5,000 (Output 1.1).
		c) Company for physical, chemical and bacterial analyses. Total cost: $5,000 (Output 1.1).
5. Materials & Goods	72300	Materials required for hydrogeological studies, including material for hydrogeological sampling. Total cost: $4,000 (Output 1.1).
6. Supplies	72500	Office stationary and other supplies required for preparation of WDA. Total cost: $1,000 (Output 1.1).
7. Information Technology Equipmt	72800	a) IT equipment and software to support development and use of groundwater and surface water databases. Total cost: $1,000 (Output 1.1).
		b) Computer and software for National Project Specialist (IW). Total cost: $1,500
8. Audio Visual&Print Prod Costs	74200	Publication and electronic copies of WDA for multiple stakeholders. Total cost: $5,000 (Output 1.1).
9. Miscellaneous Expenses	74500	Unforeseen events related to preparation of WDA and other costs related to currency conversion, banking, etc. under Outcome 1. Total cost: $3,750.
10. Training, Workshops and Confer	75700	a) Binational events for WDA release. Total cost: $7,000; one 2-day workshops @ $3,500/day/workshop (Output 1.1).
		b) Workshops with municipal authorities for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans in Guatemala. Total cost: $6,000; 3 workshops @ $2,000/workshop (Output 1.1).
Component 2. Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed (Guatemala and Honduras) is agreed upon for implementation		
11. Local consultants	71300	a) International Law Expert to prepare draft statutes and norms for establishment of Río Motagua's Binational Commission and Technical Committee. Total cost: $6,000; 3 months @ $2,000/month (Output 2.2).
		b) Legal expert for reviewing and updating the regulatory framework in Guatemala to allow synergies for surface and ground water management. Total cost: $18,000; 6 months @ $3,000/month (Output 2.3).
		c) Information Management Expert to assess and update the Environmental Information Systems of MARN (Guatemala) with capability for using remote-sensing technology to monitor water quality and share information. Total cost: $13,200; 6 months @ $2,200/month (Output 2.6).
		d) Local consultant to develop capacity building plan for IRBM. Total cost: $6,000; 6 months @ $1,000/month (Output 2.6).
		e) Instructors to deliver capacity building plan. Total cost: $10,400; 13 sessions, given to MARN and staff from departments and municipalities @ $50/hour for 16 hours per training session (Output 2.6).
		f) Trainer for 2 gender-mainstreaming workshops in Guatemala. Total cost: $4,000 @ $2,000/event (Output 2.6).
		g) Workshop facilitator for 2 events/ information exchanges between Guatemala and Honduras and consolidation of lessons learned. Total cost: $3,000: @ $1,500/event (Output 2.6).
		h) Local consultant to develop a binational environmental education plan for IRBM. Total cost: $6,000 (Output 2.6).
		i) Local consultant to develop capacity building and environmental education plan for the sound management and reduction of harmful chemicals and waste. Total cost: $16,000; 8 months @ $2,000/month (Output 2.6).
		j) Instructors to deliver capacity building plan related to CW. Total cost: $8,000; 10 sessions, given to staff from the Department of Water Resources and Watersheds (DRHyC/MARN) and from eight (8) departmental delegations @ $50/hour for 16 hours per training session (Output 2.6).
		k) Local consultant to support the implementation of environmental education activities regarding human and environmental health effects of U-POPs emissions and plastic wastes disposal. Total cost: $36,000; 18 months @2,000/month (Output 2.6)
		l) Trainer for 3 gender mainstreaming workshops related to CW. Total cost: $6,000 @ $2,000/event (Output 2.6).

		m) Chemicals and wastes expert to support the incorporation of the sound environmental management of harmful chemicals and waste consideration in departmental (8) and municipal (3) development plans. Total cost: $36,000; 12 months @ $3,000/month (Output 2.7).
		n) Chemicals and wastes expert to develop technical guidelines for the handling, transport, storage, and disposal of wastes. Total cost: $12,000; 4 months @ $3,000/month (Output 2.8).
		o) Chemicals and wastes expert to design a monitoring program of human and environmental health effects of U-POPs emissions and plastic wastes disposal, including key indicators. Total cost: $36,000; 12 months @ $3,000/month (Output 2.9).
12. Contractual Services – Individuals	71400	a) Binational Project Coordinator: coordination support for implementation of binational SAP and oversight of CW activities under Component 2. Total cost: $33,471.
		b) National Project Specialist Guatemala: technical support for implementation of binational SAP. Total cost: $31,500.
		c) Contract for Hydrological Resource Expert to organize and facilitate relevant meetings, carry out the SWOT analysis and prepare the final SAP for the Río Motagua watershed. Total cost: $27,000; 18 months @ $1,500/month (Output 2.1).
		d) Contract for M&E Expert to identify indicators to track implementation of SAP and NSAPs, obtain consensus on these indicators and to develop a joint binational work plan for monitoring. Total cost: $13,200; 12 months @ $1,100/month (Output 2.1).
		e) Contract for national specialist to prepare the National Strategic Action Plan for Guatemala. Total cost: 54,000; 18 months @ $3,000/month (Output 2.1).
		f) Expert to develop protocols for Local Action Plans in Guatemala. Total cost: $18,000; 6 months @ $3,000 month (Output 2.1).
		g) Contract for Financial Expert to support binational task group to ensure technical, scientific, and economic support for SAP implementation. Total cost: $27,000; 18 months over 3 years (i.e., part-time) @ $1,500/month (Output 2.2).
		h) Contract for Environmental Education Expert for the implementation of a binational environmental education plan that contributes to the reduction of environmental pressures on the Río Motagua watershed, including water pollution sources. Total cost: $24,000; 24 months @ $1,000/month (Output 2.6).
		i) Financial/Administrative Assistant Guatemala: Administrative and logistical support for implementation of binational SAP and implementation of CW outputs under Component 2. Total cost: $12,926.
		j) National Project Specialist (CW) in support for implementation of CW outputs under Component 2, including drafting of technical guidelines for the handling, transport, storage, and disposal of wastes (Output 2.8). Total cost: $63,000.
13.Travel	71600	a) Travel costs for meetings to agree upon SAPs, NSAPs, to share drafts and validate final versions. Total cost: $4,500; $250/month for 18 months (Output 2.1).
		b) Travel costs for national specialist to prepare the National Strategic Action Plan for Guatemala. Total cost: $3,600; $200 month for 18 months (Output 2.1).
		c) Travel costs associated with obtaining consensus on M&E indicators. Total cost: $1,500; 6 trips per year @ $250/ trip for one year (Output 2.1).
		d) Travel costs for meetings of Binational Project Coordinator and International Law Expert to establish the Binational Commission and Technical Committee. Total cost: $4,000; 4 trips per year for 2 years @ $250/trip-person (Output 2.2).
		e) Travel cost for meetings of National Project Specialist (IW) to establish the Binational Commission and Technical Committee. Total cost: $4,000; 4 trips per year for 2 years @ $500/trip (Output 2.2).
		f) Travel costs to ensure technical, scientific, and economic support for SAP implementation. Total cost: $4,200; 4 trips per year during 3 years @ $350/trip (Output 2.2).
		g) Travel costs for meetings to agree upon protocols for Local Action Plan in Guatemala. Total cost: $2,400; 2 trips per month during 6 months @ $200/trip (Output 2.1)
		h) Travel costs for meetings of Binational Project Coordinator to establish an IRBM Binational Coordination Unit and MOU. Total cost: $2,000; 4 trips per year for 2 years @ $250/trip (Output 2.3 and Output 2.4).

		i) Travel cost for meetings of National Project Specialist (IW) to establish an IRBM Binational Coordination Unit. Total cost: $4,000; 4 trips per year for 2 years @ $500/trip (Output 2.3).
		j) Travel costs associated with consultancy to develop capacity building plan. Total cost: $1,000; 2 trips @ $500/trip (Output 2.6).
		k) Travel costs associated with 15 training sessions in Guatemala. Total cost: $6,000 @ $400/session (Output 2.6).
		l) Travel cost related to gender mainstreaming workshop (2) in Guatemala. Total cost $2,000 @ $1,000/event. (Output 2.6).
		m) Travel costs to facilitate information exchanges between Guatemala and Honduras. Total cost: $7,500; accommodations at venues for 100 participants (50 from each country) @ $25/person ($2,500) and travel subsidies for 100 participants $50/person ($5,000) (Output 2.6).
		n) Travel costs related to the implementation of a binational environmental education plan for IRBM. Total cost: $6,000 @ $250 month for 24 months (Output 2.6)
		o) Travel costs associated with consultancy to develop capacity building and environmental education plan for CW management. Total cost: $5,000; 10 trips @ $500/trip (Output 2.6).
		p) Travel costs associated with 10 training sessions related to CW. Total cost: $4,000 @ $400/session (Output 2.6).
		q) Travel costs associated with the implementation of environmental education activities regarding human and environmental health effects of U-POPs emissions and plastic wastes disposal. Total cost: $5,000; 10 trips @ $500/trip (Output 2.6).
		r) Travel costs of chemicals and wastes expert to support the incorporation of the sound environmental management of harmful chemicals and waste consideration in departmental (8) and municipal (3) development plans. Total cost: $2,000; ten 2-day trips @ $100/day during 12 months (includes DSA and ground transportation) (Output 2.7).
		s) Travel costs associated with obtaining consensus on M&E indicators for assessing or human and environmental health effects of U-POPs emissions and plastic wastes disposal. Total cost: $1,500; 6 trips @ $250/ trip for one year (Output 2.9).
		t) Travel costs of Binational Project Coordinator in oversight of CW outputs under Component 2. Total cost: $3,000.
		u) Travel cost of National Project Specialist in support of CW outputs under Component 2. Total cost: $5,000.
14. Contractual Services - Companies	72100	a) Company to development 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. Total cost: $30,000 (Output 2.7).
		b) Company to purchase laboratory and analytical equipment to assess human and environmental health effects of U-POPs emissions and plastic wastes disposal. Total cost: $80,000 (Output 2.9).
15. Supplies	72500	a) Stationery for meetings and workshops, office supplies, etc. for development of SAP and NSAPs. Total cost: $500 (Output 2.1).
		b) Supplies for IRBM training workshops. Total cost: $750 (Output 2.6);
		c) Supplies for gender mainstreaming workshops; Total cost: $500 (Output 2.6).
		d) Supplies for information exchanges between Guatemala and Honduras. Total cost: $500 (Output 2.6).
		e) Supplies related to the implementation of a binational environmental education plan for IRBM. Total cost: $1,000 (Output 2.6).
		f) Office stationary and other supplies for implementation of CW outputs under Component 2. Total cost: $2,100.
16. Information Technology Equipmt	72800	a) IT equipment (hardware and software) to enhance the capability of the Environmental Information Systems of the MARN (Guatemala) for using remote-sensing technology to monitor water quality and share information. Total cost: $15,000 (Output 2.6).
		b) Computer and software for National Project Specialist (CW). Total cost: $1,400.
17. Audio Visual&Print Prod Costs	74200	a) Printing of SAPs and NSAPs for dissemination to different relevant stakeholders. Total cost: $1,000 (Output 2.1).
		b) Printed materials for capacity building. Total cost: $1,500 (Output 2.6).
		c) Teaching materials for implementation of environmental education plan for 1,000 people in Guatemala. Total cost: $12,000 @ $12/person (Output 2.6).
		d) Materials for public environmental awareness-raising in Guatemala. Total cost: $20,000 (Output 2.6).
		e) Production of video summarizing the environmental education and awareness raising process. Total cost: $5,000 (Output 2.6).
		f) Printed materials for capacity building for the reduction of harmful chemicals (U-POPs) and waste (plastics). Total cost: $5,000 (Output 2.6).

		g) Teaching materials for implementation of environmental education plan for 1,000 people for the reduction of harmful chemicals (U-POPs) and waste (plastics). Total cost: $12,000 @ $12/person (Output 2.6).
		h) Materials for public environmental awareness-raising for the reduction of harmful chemicals (U-POPs) and waste (plastics). Total cost: $40,000 (Output 2.6).
		i) Production of video summarizing the environmental education and awareness raising process related to CW. Total cost: $5,000 (Output 2.6).
		j) Printing of technical guidelines for the handling, transport, storage, and disposal of solid wastes for dissemination to different relevant stakeholders. Total cost: $2,000 (Output 2.8).
18. Miscellaneous Expenses	74500	Unforeseen events related to preparation of SAPs and NSAPs, etc., and the implementation of CW outputs and other costs such as currency conversion under Outcome 2. Total cost: $7,500.
19. Training, Workshops and Confer	75700	a) Cost associated with SAP and NSAP workshops, to agree on reforms required, indicators and final SAPs and NSAPs. Total cost; $3,000 (Output 2.1).
		b) Cost associated with development of protocols for Local Action Plans in Guatemala. Total cost: $2,000 (Output 2.1).
		c) Meeting/workshops to establish Rio Motagua Watershed Binational Commission, Technical Committee, IRBM Binational Coordination Unit, and signing of MOU. Total cost: $12,000; 2 meetings per year in Guatemala during 2 years @ $3,000/meeting (Output 2.2).
		d) Workshops with national authorities to discuss and approve proposals for updating the regulatory framework to allow synergies for surface and ground water management in Guatemala. Total cost: $2,000; 2 workshops @ $1,000/workshop (Output 2.3).
		e) Workshop costs for IRBM training in Guatemala. Total cost: $7,500; 20 people for 15 events @ $15/person-event ($4,500) and rental of venues for workshops @ $200/event ($3,000) (Output 2.6).
		f) Workshop costs for gender mainstreaming in Guatemala. Total cost: $2,000; 40 people for 2 events @ $15/person-event ($1,200) and rental of venues for workshops @ $400/event ($800) (Output 2.6).
		g) Meetings costs for information exchanges between Guatemala and Honduras. Total cost: $2,500; 50 participants @ $25/person for two events (Output 2.6).
		h) Training and workshop costs for environmental education program for IRBM in Guatemala. Total cost: $18,000 (Output 2.6).
		i) Workshop costs for the reduction of harmful chemicals (U-POPs) and waste (plastics) through training and environmental education. Total cost: $20,000 (Output 2.6).
		j) Workshop costs for gender mainstreaming related to CW. Total cost: $2,000; 40 people for 2 events @ $15/person-event ($1,200) and rental of venues for workshops @ $400/event ($800) (Output 2.6).
		k) Training for monitoring and analysis human and environmental health effects of U-POPs emissions and plastic wastes disposal. Total cost: $10,000 (Output 2.9).
Component 3. Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences		
20. Local Consultants	71300	a) Pilot 1 – Estanzuela (IW): Sanitary expert to develop the reuse of treated wastewater plan. Total cost: $5,000 (Output 3.1).
		b) Pilot 2 – Pachalum (IW): Sanitary expert for designing wastewater treated plan. Total Cost: $2,000 (Output 3.1).
		c) Pilot 3 - Puerto Barrios (IW): Social participation expert to design a local participative management model and its implementation plan in conjunction with CONAP. Total cost: $8,800 (Output 3.1).
		d) Pilots 1, 2, and 3 (CW) - Environmental legislation expert to develop the municipal regulation for solid waste integrated management. Total cost: $9,900 (Output 3.3).
		e) Pilot 2 and 3 (Pachalum and Los Amates; CW) - Sanitary expert to develop a control and surveillance system to avoid new illegal dumpsites; includes training for municipal personnel in charge of control and surveillance. Total cost: $6,600 (Output 3.3).
21. Contractual Services – Individuals	71400	a) Binational Project Coordinator: coordination support for implementation of innovative pilot initiatives for the IRBM of the Río Motagua watershed and oversight of CW outputs for Component 3. Total cost: $46,391.

		b) National Project Specialist (IW): technical support for innovative pilot initiatives for the IRBM of the Río Motagua watershed. Total cost: $63,000.
		c) Pilot Project Manager IW Guatemala. Total cost: $50,325 (Output 3.1).
		d) Financial/Administrative Assistant Guatemala: Administrative and logistical support for implementation of innovative pilot initiatives for the IRBM of the Río Motagua watershed and implementation of CW outputs under Component 3. Total cost: $18,527.
		e) National Project Specialist (CW) in support for implementation of CW outputs under Component 3. Total cost: $63,000.
		f) Pilot Project Manager CW. Total cost: $64,350 (Output 3.3).
22. Travel	71600	a) Travel for Binational Project Coordinator in oversight of outputs under Component 3. Total cost: $8,000 (includes DSA and ground transportation)
		b) Travel for support of National Project Specialist Guatemala to outputs under Component 3. Total cost: $7,500 (includes DSA and ground transportation)
		c) DSA Pilot Project Manager IW Guatemala. Total cost: $13,580 (Output 3.1).
		d) Travel cost of National Project Specialist (CW) in support of CW outputs under Component 3. Total cost: $10,000 (includes DSA and ground transportation)
		e) DSA Pilot Projects Manager CW. Total cost: $10,920 (Output 3.3).
23. Contractual Services - Companies	72100	a) Pilot 1 – Estanzuela (IW): a) Study to evaluate the characterization of municipal wastewater, analysis for the rehabilitation of the wastewater treatment plant, operation manual, and elaboration of the monitoring plan for the quality of treated water discharges. Total cost: $30,512 (Output 3.1).
		b) Pilot 1 – Estanzuela (IW): Training programme about domestic wastewater management and good practices for treated water use. Total cost: $20,988 (Output 3.1).
		c) Pilot 2 – Pachalum (IW): Review and assessment of the integrated study of waste water treatment, including the construction of the treatment plant and designing the water quality monitoring plan. Total cost: $170,000 (Output 3.1).
		d) Pilot 2 – Pachalum (IW): Training programme on good practices for treated water use, including awareness campaigns with selected agro productive units. Total cost: $20,000 (Output 3.1).
		e) Pilot 3 - Puerto Barrios (IW): Identification and characterization of degraded areas, definition of qualitative and quantitative monitoring variables (restoration and self-sustainability), design and execution of the ecological restoration programme. Total cost: $51,000 (Output 3.1).
		f) Incentives available for businesses that implement clean technologies and agriculture producers that adopt sustainable production practices. Total cost $115,000 (Output 3.1).
		g) Develop 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. Total cost: $400,000 @ $50,000/pre-investment studies (Output 3.1).
		h) Information management system and inventory of domestic waste dumpsites and current practice of open burning. Total cost: $75,000 (Output 3.2).
		i) Provide guidelines and technical support to municipalities for the sustainable management of solid wastes. Total cost: $200,000. (Output 3.2).
		j) Pilot 1 - Estanzuela (CW): Integrated urban solid waste treatment study and treatment plant reconditioning design. Total cost: $ 21,695 (Output 3.3).
		k) Pilot 1 - Estanzuela (CW): Recondition of the solid urban waste treatment plant. Total cost: $133,395 (Output 3.3).
		l) Pilot 2 - Pachalum (CW): Integrated solid waste treatment and simplified landfill study, construction of infrastructure for the solid waste treatment plant, and reuse treated solid waste and simplified landfill plan. Total cost: $82,398 (Output 3.3).
		m) Pilot 3 - Los Amates (CW): Integrated solid waste treatment and simplified dumpsite study, construction of infrastructure for the solid waste treatment plant, and reuse treated solid waste and simplified dumpsite plan. Total cost: $82,398 (Output 3.3).
		n) Pilot 1, 2, and 3 - Training programme about good practices for using co-products derived from the process of solid waste treatment. Total cost: $30,000 (Output 3.3).

		o) Targeted investment to implement BMPs of residues, including the reduction of open burning from households, with the participation of women. Total cost: $200,000 (Output 3.2).
24. Equipment and furniture	72200	a) Desks (3) for pilot projects. Total cost: $500 (Output 3.1).
		b) Digital camera (1) for pilot projects (IW). Total cost: $300 (Output 3.1).
		c) Desks (3) for pilot projects (CW). Total cost: $300 (Output 3.3).
		d) Digital camera (1) for pilot projects (CW). Total cost: $150 (Output 3.3).
25. Supplies	72500	a) Office supplies (pilot projects). Total cost: $2,425 (Output 3.1).
		b) Stationery for meetings and workshops, office supplies, etc. for development of outputs under Component 3. Total cost: $5,500.
		c) Office supplies (pilot projects CW). Total cost: $2,625 (Output 3.3).
26. IT Equipment	72800	a) One (1) desktop computer (pilot projects): Total cost: $1,665 (Output 3.1).
		b) One (1) printer (pilot projects) Total cost: $500 (Output 3.1).
		c) IT maintenance (pilot projects). Total cost: $260 (Output 3.1).
		d) One (1) desktop computer (pilot projects CW): Total cost: $1,000 (Output 3.3).
		e) One (1) printer (pilot projects CW) Total cost: $300 (Output 3.3).
		f) IT maintenance (pilot projects CW). Total cost: $360 (Output 3.3).
27. Miscellaneous Expenses	74500	a) Incidental expenses associated to pilot projects (IW). Total cost: $3,300 (Output 3.1).
		b) Incidental expenses associated to pilot projects (CW). Total cost: $900 (Output 3.3).
		c) Unforeseen events related implementation of outputs and other costs such as currency conversion under Outcome 3. Total cost: $10,160.
28. Training, Workshops and Confer	75700	Training program to implement BMPs of residues, including the reduction of open-air burning from households. Total cost: $20,000 (Output 3.2).
Component 4. Knowledge Management and Monitoring & Evaluation		
29. International Consultants	71200	a) Mid-term project review (IW): Total cost: $5,775.
		b) Terminal project evaluation (IW). Total cost: $8,400.
		c) Mid-term project review (CW): Total cost: $11,550.
		d) Terminal project evaluation (CW). Total cost: $16,800.
30. Local Consultants	71300	a) Mid-term GEF Tracking Tools update (IW). Total cost: $1,500.
		b) Terminal GEF Tracking Tools update (IW). Total cost: $1,500.
		c) Mid-term review (paid through pilot projects IW): Total cost: $3,150.
		d) Terminal evaluation (paid through pilot projects IW). Total cost: $3,150.
		e) Mid-term GEF Tracking Tools update (CW). Total cost: $3,000.
		f) Terminal GEF Tracking Tools update (CW). Total cost: $3,000.
		g) Mid-term review (paid through pilot projects CW): Total cost: $6,300.
		h) Terminal evaluation (paid through pilot projects CW). Total cost: $6,300.
31. Contractual Services – Individuals	71400	a) Expert: Monitoring & evaluation of project activities (including monitoring of indicators in project results framework - PRF). Total cost: $100,980.
		b) Gender Expert. Monitoring of gender mainstreaming (Gender Mainstreaming Plan). Total cost: $31,590.
		c) Communications Expert. Communication activities and documentation and systematization of lessons learnt and best practices, including cost of documentation and systematization of lessons learned and best practices. Total cost: $32,400.
32. Travel	71600	a) Travel costs for mid-term review (IW). Total cost: $2,075.

		b) Travel costs for terminal evaluation (IW): Total cost: $2,500.
		c) Travel costs for mid-term review of pilot projects (IW). Total cost: $1,050.
		d) Travel costs for terminal evaluation of pilot projects (IW). Total cost: $1,050.
		e) Travel costs for the Binational Project Coordinator and a representative from Guatemala to participate in the International Waters Conference. Total cost: $21,000.
		f) Travel costs for mid-term review (CW). Total cost: $4,150.
		g) Travel costs for terminal evaluation (CW). Total cost: $5,000.
		h) Travel costs for mid-term review pilot projects (CW). Total cost: $1,050.
		i) Travel costs for terminal evaluation pilot projects (CW). Total cost: $1,050.
		j) Travel costs related to knowledge management and M&E: Total cost: $10,500.
33. Professional Services	74100	a) External audit (5). Total cost: $17,500.
		b) Translations of MTR and FE Reports. Total cost: $2,500.
		c) Translations of MTR and FE Reports (CW). Total cost: $5,000.
34. Audiovisual & Print Prod. Costs	74200	Publications related to knowledge management and communication. Total cost: $3,500.
35. Training, Workshops and Confers	75700	a) Project Inception Workshop. Total cost $5,000.
		b) Pilot Project Inception Workshop (3; IW). Total cost $1,500.
		c) Mid-term review related workshops (IW). Total cost: $300.
		d) Terminal evaluation related workshops (IW). Total cost: $375.
		e) Pilot Project Inception Workshop (3; CW). Total cost $1,500.
		f) Mid-term review related workshops (CW). Total cost: $600.
		g) Terminal evaluation related workshops (CW). Total cost: $750.
		h) Meeting and workshops for monitoring safeguards or addressing grievances. Total cost: 10,000.
		i) Project board meetings. Total cost: $5,000.
Project Management		
36. Contractual Services- Individuals	71400	a) Binational Project Coordinator: project planning, day-to-day management of project activities, project reporting, maintaining key relationships among stakeholders. Total cost: $38,760.
		b) Financial/Administrative Assistant Guatemala: financial management of the project, accounting, purchasing, and reporting. Total cost: $36,125.
37. Travel	71600	Travel costs related to project management. Total cost: $15,000 @ 3,000/year during 5 years.
38. Supplies	72500	Office and IT supplies. Total cost: $5,400.
39. IT Equipment	72800	a) Computer Binational Project Coordinator. Total cost: $750.
		b) Computer Financial/Administrative Assistant Guatemala (IW): Total cost: $1,500.
		c) Printer (1). Total cost: $251.
		d) Video beam (1). Total cost: $250.
40. Miscellaneous	74500	Incidental expenses related to project management. Total cost: $10,000.
41. Direct Project Costs (DPC)	74596/ 64397	a) Direct Project Costs. Total cost: $72,024.

HONDURAS – INTERNATIONAL WATERS

Atlas Category	Atlas Code	Budget Notes
Component 1: Diagnostic analysis of the Surface and Groundwater Resources of the Río Motagua watershed that is shared by Honduras and Honduras		
1. Local consultants	71300	a) Consultant to design a groundwater monitoring network. Total cost: $6,000; 4 months @ $1,500/month (Output 1.1).
		b) Consultant to collect groundwater monitoring data. Total cost: $18,000; 12 months @ $1,500/month (Output 1.1).
		c) Hydrogeological consultant to coordinate groundwater studies in the Motagua watershed. Total cost: $18,000; 12 months @ $1,500/month (Output 1.1).
		d) GIS Expert for development of GIS database to consolidate hydrogeological information and population of this database. Total cost: $13,200; 12 months @ 1,100/month (Output 1.1).
		e) Hydrological/surface water expert for collection of information on environmental status of surface water resources, including identifying sources of pollution and baseline data on the agreed upon environmental indicators. Total cost: $18,000; 12 months @ 1,500/month (Output 1.1).
		f) Socio-economic expert for collection of socioeconomic information and gathering of baseline data on agreed upon socioeconomic indicators. Total cost: $8,000; 8 months @ $1,000/month (Output 1.1).
		g) Gender expert to conduct a detailed assessment of gender aspects and gathering of baseline data on agreed upon gender indicators. Total cost: $6,000; 6 months @ 1,000/month (Output 1.1).
		h) GIS expert for development of GIS database to consolidate surface water and land use stressors information and population of database, as well as development of web portals. Total cost: $13,200; 12 months @ $1,100/month (Output 1.1).
		i) Policy expert for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans in Honduras. Total cost: $10,800; 6 months @ $1,800/month (Output 1.1).
2. Contractual Services – Individuals	71400	a) Binational Project Coordinator: coordination support to diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed. Total cost: $7,935.
		b) Contract for WDA expert for gathering, analysis and consolidation of information and writing of WDA; facilitation of meetings to validate accuracy of information in WDA; development of materials to summarize WDA for different stakeholders; provision of reliable data to GIS expert for inclusion in database, which includes data analysis and harmonization of information. Total cost: $18,000; 12 months @ $1,500/month (Output 1.1).
		c) National Project Specialist Honduras: Technical support to diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed. Total cost: $60,000.
		d) Financial/Administrative Assistant Honduras: Administrative and logistical support to diagnostic analysis of the surface and groundwater resources of the Río Motagua watershed. Total cost: $22,000.
3. Travel	71600	a) Travel costs for three (3) consultants to carry out the hydrogeological studies. Total cost: $6,000; five 4-day trips per consultant @ $100/day during 3 months (includes DSA and ground transportation) (Output 1.1).
		b) Travel costs to gather baseline data and carry out consultations and meetings for preparation of WDA (groundwater expert, surface water expert, socioeconomic expert, gender expert, and WDA expert). Total cost: $6,000; five 2-day trips per consultant @ $100/day during 6 months (includes DSA and ground transportation) (Output 1.1).
		c) Travel for Binational Project Coordinator in oversight of Outputs for Component 1. Total cost: $2,250; 15 trips @ $150/trip during 24 months (includes DSA and ground transportation)
		d) Travel for support of National Project Specialist to Output 1.1. Total cost: $3,600; @ $150/month for 24 months (includes DSA and ground transportation)
		e) Travel for policy expert to support municipalities in incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans in Honduras. Total cost: $1,200 @ $200/month for 6 months (includes DSA and ground transportation) (Output 1.1).

4. Contractual Services - Companies	72100	a) Company to drill wells for monitoring. Total cost: $25,000 (Output 1.1).
		b) Company to purchase groundwater measurement equipment. Total cost: $5,000 (Output 1.1).
		c) Company for physical, chemical and bacterial analyses. Total cost: $5,000 (Output 1.1).
5. Materials & Goods	72300	Materials required for hydrogeological studies, including material for hydrogeological sampling. Total cost: $4,000 (Output 1.1).
6. Supplies	72500	Office stationary and other supplies required for preparation of WDA. Total cost: $1,000 (Output 1.1).
7. Information Technology Equipmt	72800	IT equipment and software to support development and use of groundwater and surface water databases. Total cost: $1,000 (Output 1.1).
		Computer and software for National Project Specialist Honduras. Total cost: $1,300
8. Audio Visual&Print Prod Costs	74200	Publication and electronic copies of WDA for multiple stakeholders. Total cost: $5,000 (Output 1.1).
9. Miscellaneous Expenses	74500	Unforeseen events related to preparation of WDA and other costs related to currency conversion, banking, etc. under Outcome 1. Total cost: $3,750.
10.Training, Workshops and Confer	75700	a) Binational events for WDA release. Total cost: $6,000; one 2-day workshops @ $3,000/day/workshop (Output 1.1).
		b) Workshops with municipal authorities for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans in Honduras. Total cost: $3,000; 2 workshops @ $1,500/workshop (Output 1.2).
Component 2. Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed (Honduras and Honduras) is agreed upon for implementation		
11. Local consultants	71300	a) International Law Expert to prepare draft statutes and norms for establishment of Río Motagua's Binational Commission and Technical Committee. Total cost: $6,000; 3 months @ $2,000/month (Output 2.2).
		b) Legal expert for reviewing and updating the regulatory framework in Honduras to allow synergies for surface and ground water management. Total cost: $9,000; 5 months @ $1,800/month (Output 2.3).
		c) Information Management Expert to assess and update the Environmental Information Systems of Mi Ambiente+ with capability for using remote-sensing technology to monitor water quality and share information. Total cost: $10,000; 5 months @ $2,000/month (Output 2.6).
		d) Local consultant to develop capacity building plan for IRBM. Total cost: $6,000; 6 months @ $1,000/month (Output 2.6).
		e) Instructors to deliver capacity building plan. Total cost: $5,040; 12 sessions, given to Mi Ambiente+, and staff from departments and municipalities @ $35/hour for 12 hours per training session (Output 2.6).
		f) Trainer for 2 gender-mainstreaming workshops in Honduras. Total cost: $3,000 @ $1,500/event (Output 2.6).
		g) Workshop facilitator for 2 events/ information exchanges between Guatemala and Honduras and consolidation of lessons learned. Total cost: $2,500: @ $1,250/event (Output 2.6).
		h) Local consultant to develop a binational environmental education plan. Total cost: $6,000; 6 months @ $1,000/month (Output 2.6).
12. Contractual Services – Individuals	71400	a) Binational Project Coordinator: coordination support for implementation of binational SAP. Total cost: $7,935.
		b) National Project Specialist Honduras: technical support for implementation of binational SAP. Total cost: $60,000.
		c) Contract for Hydrological Resource Expert to organize and facilitate relevant meetings, carry out the SWOT analysis and prepare the final SAP for the Río Motagua watershed. Total cost: $27,000; 18 months @ $1,500/month (Output 2.1).
		d) Contract for M&E Expert to identify indicators to track implementation of SAP and NSAPs, obtain consensus on these indicators and to develop a joint binational workplan for monitoring. Total cost: $13,200; 12 months @ $1,100/month (Output 2.1).
		e) Contract for national specialist to prepare the National Strategic Action Plan for Honduras. Total cost: $35,000; 14 months @ $2,500/month (Output 2.1).
		f) Expert to develop protocols for Local Action Plans in Honduras. Total cost: $12,500; 5 months @ $2,500 month (Output 2.1).
		g) Contract for Financial Expert to support binational task group to ensure technical, scientific, and economic support for SAP implementation. Total cost: $27,000; 18 months over 3 years (i.e., part-time) @ $1,500/month (Output 2.2).

		h) Contract for Environmental Education Expert for the implementation of a binational environmental education plan that contributes to the reduction of environmental pressures on the Río Motagua watershed, including water pollution sources. Total cost: $24,000; 24 months @ $1,000/month (Output 2.6).
		i) Financial/Administrative Assistant Honduras: Administrative and logistical support for implementation of binational SAP. Total cost: $19,800.
13. Travel	71600	a) Travel costs for meetings to agree upon SAPs, NSAPs, to share drafts and validate final versions. Total cost: $4,500; $250/month for 18 months (Output 2.1).
		b) Travel costs for national specialist to prepare the National Strategic Action Plan for Honduras. Total cost: $2,100; $150 month for 14 months (Output 2.1).
		c) Travel costs associated with obtaining consensus on M&E indicators. Total cost: $1,500; 6 trips per year @ $250/ trip for one year (Output 2.1).
		d) Travel costs for meetings of Binational Project Coordinator and International Law Expert to establish the Binational Commission and Technical Committee. Total cost: $4,000; 4 trips per year for 2 years @ $250/trip-person (Output 2.2).
		e) Travel cost for meetings of National Project Specialist Honduras to establish the Binational Commission and Technical Committee. Total cost: $2,400; 3 trips per year for 2 years @ $400/trip (Output 2.2).
		f) Travel costs to ensure technical, scientific, and economic support for SAP implementation. Total cost: $4,200; 4 trips per year during 3 years @ $350/trip (Output 2.2).
		g) Travel costs for meetings to agree upon protocols for Local Action Plan in Honduras. Total cost: $1,200; 1 trip per month during 6 months @ $200/trip (Output 2.1)
		h) Travel costs for meetings of Binational Project Coordinator to establish an IRBM Binational Coordination Unit and MOU. Total cost: $2,000; 4 trips per year for 2 years @ $250/trip (Output 2.3 and Output 2.5).
		i) Travel cost for meetings of National Project Specialist Honduras to establish an IRBM Binational Coordination Unit. Total cost: $1,800; 2 trips per year for 3 years @ $300/trip (Output 2.4).
		j) Travel costs associated with consultancy to develop capacity building plan. Total cost: $500; 2 trips @ $250/trip (Output 2.6).
		k) Travel costs associated with 8 training sessions in Honduras. Total cost: $1,600 @ $200/session (Output 2.6).
		l) Travel cost related to gender mainstreaming workshop (2) in Honduras. Total cost $600 @ 300/event. (Output 2.6).
		m) Travel costs to facilitate information exchanges between Guatemala and Honduras. Total cost: $7,500; accommodations at venues for 100 participants (50 from each country) @ $25/person ($2,500) and travel subsidies for 100 participants $50/person ($5,000) (Output 2.6).
		n) Travel costs related to the implementation of a binational environmental education plan for IRBM. Total cost: $6,000 @ $250 month for 24 months (Output 2.6).
14.Supplies	72500	a) Stationery for meetings and workshops, office supplies, etc. for development of SAPs and NSAPs. Total cost: $500 (Output 2.1).
		b) Supplies for IRBM training workshops. Total cost: $750 (Output 2.6);
		c) Supplies for gender mainstreaming workshops. Total cost: $500 (Output 2.6).
		d) Supplies for information exchanges between Guatemala and Honduras. Total cost: $500 (Output 2.6).
		e) Supplies related to the implementation of a binational environmental education plan for IRBM. Total cost: $1,000 (Output 2.6).
15. Information Technology Equipmt	72800	IT equipment (hardware and software) to enhance the capability of the Environmental Information Systems of Mi Ambiente+ (Honduras) for using remote-sensing technology to monitor water quality and share information. Total cost: $15,000 (Output 2.6).
16. Audio Visual&Print Prod Costs	74200	a) Printing of SAPs and NSAPs for dissemination to different relevant stakeholders. Total cost: $1,000 (Output 2.1).
		b) Printed materials for capacity building. Total cost: $1,500 (Output 2.6).
		c) Teaching materials for implementation of environmental education plan for 1,000 people in Honduras. Total cost: $10,000 @ $10/person (Output 2.6).
		d) Materials for public environmental awareness-raising in Honduras. Total cost: $14,400 (Output 2.6).
		e) Production of video summarizing the environmental education and awareness raising process. Total cost: $3,500 (Output 2.6).

17. Miscellaneous Expenses	74500	Unforeseen events related to preparation of SAPs and NSAPs, etc., other costs such as currency conversion under Outcome 2. Total cost: $1,904.
18. Training, Workshops and Confer	75700	a) Cost associated with SAP and NSAP workshops, to agree on reforms required, indicators and final SAPs and NSAPs. Total cost; $3,000 (Output 2.1).
		b) Cost associated with development of protocols for Local Action Plans in Honduras. Total cost: $2,000 (Output 2.1).
		c) Meeting/workshops to establish Río Motagua's Binational Commission and Technical Committee. Total cost: $10,000; 2 meetings per year in Honduras during 2 years @ $2,500/meeting (Output 2.2).
		d) Workshops with national authorities to discuss and approve proposals for updating the regulatory framework to allow synergies for surface and ground water management in Honduras. Total cost: $2,000; 2 workshops @ $1,000/workshop (Output 2.3).
		e) Workshop costs for IRBM training in Honduras. Total cost: $4,000; 20 people for 10 events @ $10/person-event ($2,000) and rental of venues for workshops @ $200/event ($2,000) (Output 2.6).
		f) Workshop costs for gender mainstreaming in Honduras. Total cost: $800; 20 people for 2 events @ $10/person-event ($400) and rental of venues for workshops @ $200/event ($400) (Output 2.6).
		g) Meetings costs for information exchanges between Guatemala and Honduras. Total cost: $1,750; 25 participants @ $35/person for two events (Output 2.6)
		h) Training and workshop costs for environmental education program for IRBM in Honduras. Total cost: $7,050 (Output 2.6)
Component 3. Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Honduras and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences		
19. Local Consultants	71300	a) Pilot 1 - Omoa: Legal expert for the development of a municipal normative framework for the integrated management of critical ecosystems. Total Cost: $8,800 (Output 3.1).
		b) Pilot 2 - St. Rita: Sanitary expert for designing wastewater reuse plan. Total Cost: $5,000 (Output 3.1).
		c) Pilot 2 - St. Rita: Environmental legislation expert to develop a municipal regulation for wastewater integrated management. Total cost: $3,000; 12 weeks - $250/week (Output 3.1)
		d) Pilot 3 - Nueva Frontera: Economist or forestry expert to formulate and facilitate the implementation of the forest nursery business plan. Total cost: $4,000 (Output 3.1).
20. Contractual Services – Individuals	71400	a) Binational Project Coordinator: coordination support for implementation of innovative pilot initiatives for the IRBM of the Río Motagua watershed. Total cost: $26,449.
		b) National Project Specialist Honduras: technical support for innovative pilot initiatives for the IRBM of the Río Motagua watershed. Total cost: $120,000.
		c) Pilot Project Manager IW Honduras. Total cost: $50,050 (Output 3.1).
		d) Financial/Administrative Assistant Honduras: Administrative and logistical support for implementation of innovative pilot initiatives for the IRBM of the Río Motagua watershed. Total cost: $52,800.
21. Travel	71600	a) Travel for Binational Project Coordinator in oversight of outputs under Component 3. Total cost: $2,250 (includes DSA and ground transportation).
		b) Travel for support of National Project Specialist Honduras to outputs under Component 3. Total cost: $2,250 (includes DSA and ground transportation).
		c) DSA Pilot Project Manager IW Honduras. Total cost: $9,030 (Output 3.1).
22. Contractual Services - Companies	72100	a) Pilot 1 - Omoa: Design and implement a training action plan on the importance of governance in the restoration and conservation of coastal marine ecosystems. Total cost: $32,400 (Output 3.1).

		b) Pilot 1 - Omoa: Design and implement the intersectoral strategy for the cleaning of beaches and estuaries, identification of critical mangrove areas for restoration, and reforestation actions. Total cost: $78,750 (Output 3.1).
		c) Pilot 2 - St. Rita: Develop an integrated study for wastewater management including WWTP design, construction of the WWTP, and elaboration of wastewater monitoring plan. Total Cost: $77,000 (Output 3.1).
		d) Pilot 2 - St. Rita: Training programme on how to operate the treatment plant, good practices regarding treated water reuse and implementation of environmental awareness campaigns on watershed integrated environmental management. Total Cost: $19,968 (Output 3.1).
		e) Pilot 3 - Nueva Frontera: Design and implementation of the Municipal forest nursery. Total cost: $37,560 (Output 3.1).
		f) Pilot 3 - Nueva Frontera: Training programme on establishment and maintenance of forest nursery, deforestation problem, and local environmental management in the municipality. Total cost: $27,400 (Output 3.1).
		g) Incentives available for businesses that implement clean technologies and agriculture producers that adopt sustainable production practices. Total cost $30,000 (Output 3.1).
		h) Rehabilitation of 250 ha of riparian ecosystems in the watershed in Honduras. Total cost: $56,000 (Output 3.4).
23. Equipment and furniture	72200	a) Desks (3) for pilot projects. Total cost: $500 (Output 3.1).
24. Supplies	72500	Office supplies (pilot projects). Total cost: $2,362 (Output 3.1).
25. IT Equipment	72800	a) One (1) desktop computer (pilot projects): Total cost: $766 (Output 3.1).
		b) One (1) printer (pilot projects) Total cost: $300 (Output 3.1).
		c) IT maintenance (pilot projects). Total cost: $148 (Output 3.1).
26. Miscellaneous Expenses	74500	Incidental expenses associated to pilot projects and other costs such as currency conversion under Outcome 3. Total cost: $2,500 (Output 3.1).
Component 4. Knowledge Management and Monitoring & Evaluation		
27. International Consultants	71200	a) Mid-term project review: Total cost: $5,775.
		b) Terminal project evaluation. Total cost: $8,400.
28. Local Consultants	71300	a) Mid-term GEF Tracking Tools update. Total cost: $1,500.
		b) Terminal GEF Tracking Tools update. Total cost: $1,500.
		c) Mid-term review (paid through pilot projects): Total cost: $3,150.
		d) Terminal evaluation (paid through pilot projects). Total cost: $3,150.
29. Contractual Services – Individuals	71400	a) Expert: Monitoring & evaluation of project activities (including monitoring of indicators in project results framework - PRF). Total cost: $17,820.
		b) Gender Expert. Monitoring of gender mainstreaming (Gender Mainstreaming Plan). Total cost: $3,510.
		c) Communications Expert. Communication activities and documentation and systematization of lessons learnt and best practices, including cost of documentation and systematization of lessons learned and best practices. Total cost: $8,550.
30. Travel	71600	a) Travel costs for mid-term review. Total cost: $2,075.
		b) Travel costs for terminal evaluation: Total cost: $2,500.
		c) Travel costs for mid-term review of pilot projects. Total cost: $1,050.
		d) Travel costs for terminal evaluation of pilot projects. Total cost: $1,050.
		e) Travel costs for knowledge management: Total cost: $6,650.

		f) Travel costs for the Binational Project Coordinator and a representative from Honduras to participate in the International Waters Conference. Total cost: $21,000.
31. Professional Services	74100	a) External audit (5). Total cost: $17,500.
		b) Translations of MTR and FE Reports. Total cost: $5,000.
32. Audiovisual & Print Prod. Costs	74200	Publications related to knowledge management and communication. Total cost: $3,500.
33. Training, Workshops and Confers	75700	a) Project Inception Workshop. Total cost $5,000.
		b) Pilot Project Inception Workshop (3). Total cost $2,550.
		c) Mid-term review related workshops. Total cost: $300.
		d) Terminal evaluation related workshops. Total cost: $375.
		e) Meeting and workshops for monitoring safeguards or addressing grievances. Total cost: 5,000.
		f) Project board meetings. Total cost: $5,000.
Project Management		
34. Contractual Services- Individuals	71400	a) Binational Project Coordinator: project planning, day-to-day management of project activities, project reporting, maintaining key relationships among stakeholders. Total cost: $10,580.
		b) Financial/Administrative Assistant Honduras financial management of the project, accounting, purchasing, and reporting. Total cost: $15,400.
35. Travel	71600	Travel costs related to project management. Total cost: $7,500.
36. Supplies	72500	Office and IT supplies. Total cost: $2,803
37. IT Equipment	72800	a) Computer Binational Project Coordinator. Total cost: $750
		b) Computer Financial/Administrative Assistant Honduras: Total cost: $1,500
		b) Printer (1). Total cost: $350
		c) Video beam (1). Total cost: $350.
38. Miscellaneous	74500	Incidental expenses related to project management. Total cost: $5,000.
39. Direct Project Costs (DPC)	74596/ 64397	Direct Project Costs (DPC). Total cost: $29,489

X. LEGAL CONTEXT

179. This document together with the CPAP signed by the Government and UNDP which is incorporated herein by reference, constitute together a Project Document as referred to in the SBAA; as such all provisions of the CPAP apply to this document. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner", as such term is defined and used in the CPAP and this document.

180. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

a) Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b) Assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

181. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document [and the Project Cooperation Agreement between UNDP and the Implementing Partner].

182. The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document".

183. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

XI. MANDATORY ANNEXES

A. Multi year Workplan
B. Monitoring Plan
C. Evaluation Plan
D. GEF Tracking Tool (s) at baseline (see separate file)
E. Terms of Reference for Project Board, Principal Project Advisor, and other positions as appropriate
F. UNDP Social and Environmental and Social Screening Template (SESP) (see separate file)
G. UNDP Project Quality Assurance Report
H. UNDP Risk Log
I. Results of the capacity assessment of the project implementing partner and HACT micro assessment
J. Letters of Agreements for UNDP Support Services (Guatemala and Honduras) (see separate file)
K. Stakeholder Engagement Plan
L. Gender Strategy and Action Plan
M. Co-Financing letters (see separate file)
N. Pilot Projects (see separate file)

ANNEX A: MULTI YEAR WORKPLAN:

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1. Diagnostic analysis of the Surface and Groundwater Resources of the Río Motagua watershed that is shared by Guatemala and Honduras																					
Output 1.1 A Watershed Diagnostic Analysis (WDA) performed following the Transboundary Diagnostic Analysis/Strategic Action Program (TDA/SAP) methodology identifying the main environmental and water resource issues in both countries, finalized and agreed upon																					
1.1.1. Develop a technical/scientific document identifying issues related to surface water and groundwater pollution	MARN, MiAmbiente+																				
1.1.2. Assess baseline conditions for status indicators of environmental and socioeconomic conditions related to watershed surface and groundwater resources	MARN, MiAmbiente+																				
1.1.3. Make available the WDA at the national (Guatemala and Honduras), sub-national, municipal, and community levels	MARN, MiAmbiente+																				
1.1.4. Develop guidelines for incorporating the principal findings of the WDA in the Municipal Development Plans and/or Investment Plans for both countries	MARN, MiAmbiente+																				
Component 2. Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed (Guatemala and Honduras) is agreed upon for implementation																					
Output 2.1. Binational SAP completed and endorsed at the highest (ministerial) level in each country																					
2.1.1. Develop NSAPs and SAP for the sustainable integrated management of the Río Motagua watershed (including reduction of land-based pollution sources)	MARN, MiAmbiente+																				
2.1.2. Develop protocols for Local Action Plans and proposal for a long-term monitoring system including environmental and socioeconomic indicators for tracking the implementation of the SAP and NSAPs	MARN, MiAmbiente+																				
Output 2.2. High-Level Commission established that includes a Technical Committee and promotes permanent dialogue and coordination on Río Motagua management between Guatemala and Honduras																					
2.2.1. Create national and binational subcommittees to enable coordination of actions for SAP implementation (including reducing the sources of land-based pollution) with local participation	MARN, MiAmbiente+																				
2.2.2. Establish an international cooperation task group ensures technical, scientific, and economic support for SAP implementation	MARN, MiAmbiente+																				
2.3. Two (2) national-level proposals for updating the regulatory framework allow synergies for surface and groundwater management, including reducing pollution (solid waste, sedimentation, wastewater, etc.), taking into account the regulations and international conventions to which both countries are parties																					

2.3.1. Review of the existing legal and institutional frameworks and identify gaps for integrated surface and groundwater management	MARN, MiAmbiente+																					
2.3.2. Draft proposals to make adjustments to harmonize the regulatory frameworks at the national, regional, and local levels	MARN, MiAmbiente+																					
2.3.3. Socialization of the proposals for updating the regulatory framework	MARN, MiAmbiente+																					
Output 2.4. An IRBM Binational Coordination Unit established within the Binational Framework Agreement between Guatemala and Honduras																						
2.4.1. Sign a Binational Framework Agreement to operationalize the relevant actions for coordination between the countries	MARN, MiAmbiente+																					
2.4.2. Draft guidelines to promote joint governance and the implementation of binational efforts to ensure the IRBM the Río Motagua watershed.	MARN, MiAmbiente+																					
Output 2.5. Memorandum of Understanding (MOU) between the countries for the implementation of the IRBM																						
2.5.1. Draft the MOU following an agreed communication mechanism define by the High-Level Commission and Binational Coordination Unit	MARN, MiAmbiente+																					
2.5.2. Define a schedule of periodic meetings to follow up on commitments arising from the MOU.	MARN, MiAmbiente+																					
2.5.3. Evaluation of the impact of the MOU and its actions	MARN, MiAmbiente+																					
Output 2.6. Targeted institutional capacity-building programs for IRBM and reduce land-based pollution.																						
2.6.1. Define specific training objectives, identify targeted stakeholders, outline the implementation plan and timeline, and develop learning materials	MARN, MiAmbiente+																					
2.6.2. Identify the training methodology, including the training tools to be used	MARN, MiAmbiente+																					
2.6.3. Conduct and evaluate training	MARN, MiAmbiente+																					
2.6.4. Conduct information exchanges to identifying best environmental management practices to reduce land-based sources of pollution	MARN, MiAmbiente+																					
2.6.5. Implement a binational environmental education campaign to build awareness to reduce environmental pressures on the Río Motagua basin and coastal areas	MARN, MiAmbiente+																					

Output 2.7. 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																					
2.7.1. Incorporate environmental management considerations of harmful chemicals and waste in departmental and municipal development plans	MARN																				
2.7.2. Establish 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	MARN																				
Output 2.8. Technical guidelines for the handling, transport, storage, and disposal of wastes																					
2.8.1. Assess existing technical guidelines for the handling, transport, storage, and disposal of wastes	MARN																				
2.8.2. Outline additional technical guidelines and draft proposal for their consideration and incorporation as part of the existing regulations	MARN																				
Output 2.9. Monitoring program of the health effects for humans and the environment caused by U-POPs emissions and plastic wastes disposal, including improved laboratory and analytical competencies developed																					
2.9.1. Create a monitoring and control unit under the MARN for legal and illegal open-air dump sites	MARN																				
2.9.2. Strengthen the capacity of government laboratories to collect and analyze data and assess quantitative levels of human and environmental exposure to U-POPs emissions and to recommend BATs	MARN																				
2.9.3. Incorporate lessons learned from the implementation of pilot projects (Component 3) for the reduction of solid waste and management of domestic waste into the monitoring program	MARN																				
Component 3. Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences																					
Output 3.1. Innovative investments to reduce Río Motagua water and coastal pollution from land-based sources.																					
3.1.1. Implement 6 pilot projects with low-cost technology to reduce land-based pollution of water resources	MARN, MiAmbiente+																				

3.1.2. Develop 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 cofinancing funds]);	MARN, MiAmbiente+																				
3.1.3. Make Incentives available for businesses that implement clean technologies and agricultural producers who adopt sustainable production practices	MARN, MiAmbiente+																				
Output 3.2. Municipal solid waste management practices improved (with cofinancing and CW GEF funds)																					
3.2.1. Conduct inventory of domestic waste dumpsites and current practice of open burning	MARN																				
3.2.2. Develop guidelines and provide technical support to municipalities for the sustainable management of solid wastes	MARN																				
3.3.3. Develop program to implement BMPs of waste, including reducing open-air burning from households with the participation of women	MARN																				
Output 3.3. Three (3) pilot projects for the reduction of solid waste and proper handling and disposal of domestic waste, including elimination of open-air burning, contribute to the reduction of dioxin and furan emissions and plastic wastes																					
3.3.1. Implement pilot project for the integrated management of urban solid waste in the municipal capital of Pachalum	MARN, Municipality																				
3.3.2. Implement pilot project for the integrated management of urban solid waste in the municipal capital of Estanzuela	MARN, Municipality																				
3.3.1. Implement pilot project for the integrated urban solid waste management in the Municipal Capital of Los Amates	MARN, Municipality																				
Output 3.4. Rehabilitation (conservation and protection, reforestation, natural regeneration, remediation) of 250 ha of riparian ecosystems in the watershed in Honduras.																					
3.4.1. Develop the rehabilitation plan	MiAmbiente+																				
3.4.2. Conduct ecosystem rehabilitation using native plants	MiAmbiente+																				
3.4.3. Develop financial strategies and plans or the sustainability of nurseries and rehabilitation initiatives	MiAmbiente+																				
Component 4: Knowledge Management and Monitoring and Evaluation.																					
Output 4.1. Best practices documented and experiences shared (media, short videos, etc.) with other IW and CW projects using existing information-exchange platforms																					

4.1.1. Systematization of South-South experiences for IRBM of the Río Motagua watershed, including the management of harmful wastes, U-POPs, and plastics	MARN, MiAmbiente+																					
4.2.2. Develop a plan for scaling-up best practices for managing domestic waste disposal sites	MARN, MiAmbiente+																					
4.2.3. Document and share lessons learned highlighting the role of women in the project	MARN, MiAmbiente+																					

ANNEX B: MONITORING PLAN

The Principal Advisor will collect results data according to the following monitoring plan.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
Project Objective: Improve the integrated management of the Río Motagua watershed and reduce land-based sources of pollution and produced emissions from unintentionally formed persistent organic pollutants (U-POPs) to mitigate impacts on coastal-marine ecosystems and the livelihoods of the local populations.	Indicator 1: Number of people benefiting from strengthened quality of life through solutions for management of natural resources, ecosystems services, chemicals and waste.	Guatemala: – Women: 275,482 – Men: 255,779 Honduras: – Women: 92,197 – Men: 89,667	– Periodic project monitoring and follow-up – Project follow-up meetings and surveys	– Annually	– Principal Advisor	– PIR – Reports of project follow-up meetings	– There is permanent and continued political, strategic, and technical willingness by the governments of Guatemala and Honduras to strengthen the regulatory and governance frameworks related to IRBM of surface waters and aquifers of the Río Motagua Watershed – Effective communication among public agencies – Municipal governments and populations in Guatemala committed to controlling plastics waste and open burn of solid wastes – Optimal sampling – IRBM is adopted institutionally Gender focus incorporated into IRBM
	Indicator 2: Area (ha] in which the approach of Integrated Watershed Management (IRBM) has been applied in the Río Motagua Watershed in Guatemala and Honduras	– 1,799,080 ha under IRBM approach	– Periodic project monitoring and follow-up	– Mid and final point of the project	– Principal Advisor – Project technical team	– PIR – Related project reports	
	Indicator 3: Reduction in production of plastics waste and U-POPs that result from open burning of solid wastes in informal dumpsites and other waste-burning activities.	– Plastics waste: 87,600 MT/year (20% reduction) – U-POP emissions: 180.5 gTEQ/year (20% reduction)	– Periodic project monitoring and follow-up	– Annually	– Principal Advisor – Project technical team	– Field sampling – Field notes verification reports – PIR	

	Indicator 4: Change in national and local stakeholders' capacity for IRBM and monitoring and control of water quality, including reduction of land-based pollution (solid wastes, U-POPs, and plastics) measures through the UNDP Capacity Scorecard	GUATEMALA: – MARN National: 46.25% – MARN Region III: 54.58% – MARN Region VII: 56.67% – Municipalities: Estanzuela: 67.08% Los Amates: 54.58% Pachalúm: 48.33% Puerto Barrios: 54.58% HONDURAS: – Mi Ambiente+ National: 60.83% – Mi Ambiente+ Western Region: 52.50% – Mi Ambiente+ Northwestern Region: 40.00% – Municipalities: Nueva Frontera: 40.00% – Omoa: 52.50% – Santa Rita: 42.08%	– Completed UNDP Capacity Development Tool UNDP Capacity	– Mid and final point of the project	– Principal Advisor – Project technical team	– Updated UNDP Capacity Development Tool	
Outcome 1: Diagnostic analysis of the Surface and Groundwater Resources of the Río Motagua Watershed that is	Indicator 5: Hydrological and hydrogeological studies of the surface water and aquifers of the Río Motagua Watershed	– One (1) hydrological study at the watershed level – One (1) hydrogeological study at the watershed level	– Periodic project monitoring and follow-up	– Annually	– Principal Advisor – Project technical team	– PIR – Related project reports	– Basic reference information is compiled efficiently, avoiding delays in development of the WDA as well as the subsequent National Strategic Action Plans (NSAPs)

shared by Guatemala and Honduras.	Indicator 6: Watershed Diagnostic Analysis (WDA) included a socioeconomic analysis that incorporates gender considerations: Agreement on priorities and fundamental causes of deterioration of the Río Motagua Watershed in Guatemala and Honduras.	– Agreement between Guatemala and Honduras regarding the priorities and work solutions for the watershed, including an analysis of the underlying causes (Classification 4 in the IW Tracking Tool).	– Periodic project monitoring and follow-up – Project follow-up meetings	– Mid and final point of the project	– Principal Advisor	– PIR – Related project/meeting reports – Completed GEF IW Tracking Tool	– Key stakeholders in both countries are convened by MARN and Mi Ambiente+ to validate information in the WDA, including the leadership of women who participate in the Development Councils and Watershed Councils of each country. – Sectoral policies and regulatory frameworks are reviewed, institutionalized, and continuously monitored in their application. – Methodologies associated with gender, socioeconomic, and environmental issues are incorporated into the integrated management of the watershed. – Regulatory frameworks are assumed and applied in both countries.
	Indicator 7: Updated regulatory framework tools guide the IRBM of the Río Motagua in the two countries.	– Guatemala: Proposal for wastewater regulation – Honduras: Proposal for Solid Waste Law – Honduras: Proposal for Solid Waste Regulation	– Periodic project monitoring and follow-up	– Annually	– Principal Advisor	– Draft of proposals – PIR	
Outcome 2: Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua Watershed (Guatemala and Honduras) is agreed upon for implementation.	Indicator 8: SAP for the Río Motagua watershed and aquifers (Chiquimula, Copan Ruins (Gua-Hon)- Zacapa, Departments of Copan, Cortés, and Santa Bárbara)	– SAPs developed (Classification 4 in the IW Tracking Tool)	– Periodic project monitoring and follow-up	– Mid and final point of the project	– Principal Advisor – Project technical team	– PIR – Related project/meeting reports – Completed GEF IW Tracking Tool	– There is continued willingness by the governments of Guatemala and Honduras to strengthen the regulatory and governance framework related to IRBM of surface waters and aquifers in the Río Motagua watershed – Effective communication among the public agencies – Key stakeholders from Guatemala and Honduras are in agreement about the structure and operational mechanism of the
	Indicator 9: Inter-ministerial committees at the national level for IRBM of the Río Motagua	– National Inter-ministerial Committee established and operating in Guatemala and Honduras (Classification 3 in the IW Tracking Tool)	– Periodic project monitoring and follow-up – Project follow-up meetings	– Mid and final point of the project	– Principal Advisor	– PIR – Operation guidelines – Proceedings – Completed GEF IW Tracking Tool	

	Indicator 10: Proposal for the creation of a Coordination Unit between Guatemala and Honduras for the IRBM of the Río Motagua	– Legal and operational framework of the Coordination Unit between Guatemala and Honduras proposed and harmonized for the integrated managed of the watershed. – The Commission will include 4 number of public entities, 10 number of local governments and 10 number of civil society organizations, and 2 representatives from women's organizations in the Regional Development Councils, 1 representative from the Gender Unit of the MARN, Mi Ambiente, and Women in Honduras, 1 representative from INAM (Honduras) and SEPREM (Guatemala), representatives from Indigenous Populations; – (the composition of the Commission will de confirmed during project implementation)	– Periodic project monitoring and follow-up – Project follow-up meetings	– Annually	– Principal Advisor	– PIR – Draft of proposal – Related project/meeting reports	Coordination Unit of both countries for IRBM of the Río Motagua – The rotation of staff does not diminish the capacity of the project's stakeholders – Key institutions in Guatemala present in the Río Motagua watershed committed to the appropriate management and monitoring and control of chemicals and wastes (U-POPs and plastics) – The proposed gender mechanisms actively participate.
	Indicator 11: Number of key institutions in Guatemala present in the Río Motagua watershed incorporate and institutionalize the appropriate	– Ministries: 3 (MARN, MAGA, and MSPAS) – Municipalities: 56	– Periodic project monitoring and follow-up – Project follow-up meetings	– Annually	– Principal Advisor	– Watershed management plans – Watershed monitoring and control plans – PIR	

	management of chemicals and wastes (U-POPs and plastics) in their watershed management plans and monitoring and control activities						
Outcome 3: Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned allowing the replication and scaling-up of successful experiences.	Indicator 12: Improved habitat (hectares under conservation) for protecting water resources with equal participation by men and women	– 250 ha of riparian forests	– Field verification studies	– Annually	– Principal Advisor – Project technical team	– Field notes and verification reports – PIR	– Pilot projects are initiated in an opportune manner, allowing the achievement of proposed environmental, socioeconomic, and gender goals. – There are no additional significant sources of contamination that affect achieving the proposed environmental and socioeconomic goals. – Key stakeholders, such as the municipal authorities and women's groups, work effectively and jointly in the implementation of the pilot projects.
	Indicator 13: Number of municipal landfills in Guatemala using sustainable solid waste management schemes (reduction in open-air burning)	– At least 56	– Field verification studies	– Annually	– Principal Advisor – Project technical team	– Field notes and verification reports – PIR	
	Pilot Project Municipality of Pachalum, Guatemala (IW) a) Change in nitrogen concentration (mg/L) in wastewater b) Change in BOD due to wastewater treatment (mg/L) c) Volume of treated wastewater	– Reduction of nitrogen concentration by 20 mg/L – Reduction of BOD by 100 mg/L – 1,000 m^3/day	– Water sampling/field monitoring reports	– At least monthly after system is operating	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	
	Pilot Project Municipality of Puerto Barrios, Guatemala (IW) a) Acreage of restored area (ha)	– 85 ha	– Field monitoring reports – Hydric balance of the aquifers based on Shosiksky	– Annually	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	

	b) Non-degraded water recharge areas maintained or increased at the end of the project c) Change in the recharge rate of the aquifer resulting from ecological restoration	– 1,800 ha under protection with local participation – 558 mm/year	and Losilla (2000) methodology				
	<u>Pilot Project Municipality of Estanzuela, Guatemala (IW)</u> a) Change in nitrogen concentration (mg/L) in wastewater b) Change in BOD concentration (mg/L) in wastewater c) Volume of treated domestic wastewater	– Reduction of nitrogen concentration to less than 20 mg/L – Reduction of BOD concentration to 100 mg/L or less – 2,000 m^3/day	– Water sampling/field monitoring reports	– At least monthly after system is operating	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	
	<u>Pilot Project Municipality of Santa Rita, Honduras (IW)</u> a) Change in nitrogen concentration (mg/L) in wastewater b) Change in BOD concentration as a result of wastewater treatment (mg/L) c) Volume of treated domestic wastewater	– Reduction of nitrogen concentration to 20 mg/L – Reduction of BOD to 100 mg/L – 1,000 m^3/day	– Water sampling/field monitoring reports	– At least monthly after system is operating	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	
	<u>Pilot Project Municipality of Nueva Frontera, Honduras (IW)</u> a) Area reforested (ha) b) Change in soil loss (tons/ha/year)	– 100 ha – Reduction of 20 tons/ha/year of soil loss based on the natural forest scheme	– Field monitoring reports – Hydric balance of the aquifers based on Shosiksky and Losilla (2000) methodology	– Annually	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	

	c) Change in the water recharge rate as a result of ecological restoration	– Recharge increased by 400 mm/year based on the natural forest scheme					
	<u>Pilot Project Municipality of Omoa, Honduras (IW)</u> a) Area (ha) of beach restored (cleaning of beaches) b) Area (ha) of mangroves restored	– 150 ha – 100 ha	– Field monitoring reports	– Annually	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	
	<u>Pilot Project Municipality of Pachalum, Guatemala (CW)</u> a) Reduction in the number of illegal dumpsites of solid wastes b) Reduction (%) of U-POPs (solid waste from illegal dumpsites and other open burning activities). c) Reduction (%) of plastic waste in dumpsites.	– Elimination of at least 15% of illegal dumpsites. – At least 20% reduction of U-POPs – Reduction of at least 20% of plastic waste in the dumpsites.	– Field monitoring reports	– At least twice a year	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	
	<u>Pilot Project Municipality of Estanzuela, Guatemala (CW)</u> a) Reduction in the number of illegal dumpsites of solid wastes b) Reduction (%) of U-POPs (solid waste from illegal dumpsites and other open burning activities).	– Elimination of at least 15% of illegal dumpsites. – At least 20% reduction of U-POPs	– Field monitoring reports	– At least twice a year	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports –	

	c) Reduction (%) of plastic waste in dumpsites.	– Reduction of at least 20% of plastic waste in the dumpsites.					
	Pilot Project Municipality of Los Amates, Guatemala (CW) a) Reduction in the number of illegal dumpsites of solid wastes b) Reduction (%) of U-POPs (solid waste from illegal dumpsites and other open burning activities). c) Reduction (%) of plastic waste in dumpsites.	– Elimination of at least 15% of illegal dumpsites. – At least 20% reduction of U-POPs – Reduction of at least 20% of plastic waste in the dumpsites.	– Field monitoring reports	– At least twice a year	– Pilot Project Coordinator and Project technical team	– Field notes and verification reports – PIR – MTR and TE reports	
Outcome 4: Knowledge Management and M&E	Indicator 16: Number of media productions that document and disseminate the successful experiences regarding use and management of surface water and groundwater (IW), as well as hazardous waste management (i.e., U-POPs and plastics) (CW)	– IW: at least 5 – CW: at least 5	– Periodic project monitoring and follow-up	– Annually	– Principal Advisor – Project technical team	– PIR – Related project reports – Web pages with project information	– Optimal documentation – Expansive and timely dissemination
	Indicator 17: Investment needs identified for the IRBM of the Río Motagua and the management of hazardous wastes (U-POPs and plastics)	Feasibility study of the investment priorities for IRBM of the Río Motagua and hazardous waste management (U-POPs and plastics)	– Periodic project monitoring and follow-up – Project follow-up meetings	– Mid and final point of the project	– Principal Advisor	– Drafts of feasibility study	

Mid-term GEF Tracking Tool	N/A	N/A	– Completed GEF Tracking Tools: IW, CW – Baseline GEF Tracking Tools included in Annex D	– After 2nd PIR submitted to GEF	– Project consultant but not evaluator	– Completed GEF Tracking Tools	– None
Terminal GEF Tracking Tool	N/A	N/A	– Completed GEF Tracking Tools: IW, CW – Baseline GEF Tracking Tools included in Annex D	– After final PIR submitted to GEF	– Project consultant but not evaluator	– Completed GEF Tracking Tools	– None
Mid-term Review	N/A	N/A	– To be outlined in MTR inception report	– Submitted to GEF same year as 3rd PIR	– Independent evaluators	– Completed MTR	– None
Environmental and Social risks and management plans, as relevant.	N/A	N/A	– Updated SESP and management plans	– Annually	– Principal Advisor – UNDP CO	– Updated SESP	– None

ANNEX C: EVALUATION PLAN

Evaluation Title	Planned start date Month/year	Planned end date Month/year	Included in the Country Office Evaluation Plan	Budget for consultants	Other budget (i.e. travel, site visits, workshops)	Budget for translation
Mid-term Review	06/2021	08/2021	No	USD 35,700	USD 12,650	USD 5,000
Terminal Evaluation	07/2023	09/2023	No	USD 46,200	USD 14,650	USD 5,000
			Total evaluation budget	**USD 119,200**		

ANNEX D: GEF TRACKING TOOLS AT BASELINE (SEE SEPARATE FILE)

The GEF Tracking Tools for the IW Focal Areas and the CW Focal Area will be used to track project-level results. These will be based on results tracked in the Río Motagua watershed and related pilot projects. As noted in the Monitoring Plan (see Annex B above), these will be reported on by the Principal Advisor (or Binational Project Coordinator) and shared with the UNDP Country Offices, the UNDP-GEF Regional Technical Advisors, and MARN and Mi Ambiente+. Tracking Tools will be updated by project consultants (but not evaluators) during the mid-point and end of the project.

ANNEX E: TERMS OF REFERENCE FOR PROJECT BOARD, PRINCIPAL ADVISOR, TECHNICAL SPECIALISTS, AND OTHER POSITIONS

E.1. Terms of Reference of Project Board

Responsibilities

The Project Board will provide overall strategic policy and management direction for the project and play a critical role in reviewing and approving the project planning and execution conducted by the PCU and the Executing Agencies (MARN and Mi Ambiente+). In line with the adoption of an adaptive management approach, the Project Board will review project progress, make recommendations and adopt the (biennial) project work plans and budget.

Whenever feasible, approval by the Project Board members of interim revisions (as applicable) of the biennial project work plans and budgets will be sought by electronic means, in order to optimize cost-efficiency of the project management arrangements.

Specific Duties

Specific functions of the Project Board will include:

- Review and approve the Initiation Plan (if such plan was required and submitted to the Local Project Appraisal Committee [LPAC] in each country).
- Agree on Principal Advisor's responsibilities, as well as the responsibilities of the other members of the Project Management team;
- Delegate any Project Assurance function as appropriate;
- Review the Progress Report for the Initiation Stage (if an Initiation Plan was required);
- Review and appraise detailed Project Plan and Annual Work Plan (AWP), including Atlas reports covering activity definition, quality criteria, issue log, updated risk log and the monitoring and communication plan.
- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the Principal Advisor;
- Provide guidance and agree on possible countermeasures/management actions to address specific risks;
- Agree on Principal Advisor tolerances in the AWP and quarterly plans when required;
- Conduct regular meetings to review the Project Quarterly Progress Report and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans.
- Review Combined Delivery Reports (CDR) prior to certification by the Implementing Partner.
- Appraise the Project Annual Review Report, make recommendations for the next AWP, and inform the Outcome Board about the results of the review.
- Review and approve end project report, make recommendations for follow-on actions;
- Provide ad-hoc direction and advice for exception situations when Principal Advisor's tolerances are exceeded;
- Assess and decide on project changes through revisions;
- Assure that all Project deliverables have been produced satisfactorily;
- Review and approve the Final Project Review Report, including lessons-learned;
- Make recommendations for follow-on actions to be submitted to the Outcome Board;
- Commission project evaluation (only when required by partnership agreement);
- Notify operational completion of the project to the Outcome Board.

As the Project Board will provide overall guidance to the Project; it will not be expected to deal with day-to-day management and administration of the Project. This will be handled by the Principal Advisor, in coordination with the Executing Agencies, and under guidance from the Country Offices of the Implementing Agency (to ensure conformity with UN's requirements).

The Project Board is especially responsible for evaluation and monitoring of Project outputs and achievements. In its formal meetings, the Project Board will be expected to review the Project work plan and budget expenditure, based on the Principal Advisor's report. The Project Board should be consulted for supporting any changes to the work plan or budget, and is responsible for ensuring that the Project remains on target with respect to its outputs.

Where necessary, the Project Board will support definition of new targets in coordination with, and approval from, the Implementing/Executing Agencies.

Membership

The Project Board is expected to be composed of:

- Representative of the GEF Implementing Agency: UNDP Country Offices in Guatemala and Honduras
- Representative of the Implementing Partners: MARN and Mi Ambiente+
- Representatives of the Ministry of Foreign Affairs of Guatemala and Ministry of Foreign Affairs of Honduras.

Other parties can be invited as observers to the Project Board Meetings, as deemed relevant and beneficial for the implementation of the Project.

Frequency and Conduct of Meetings

It is anticipated that there will be at least three full meetings of the Project Board to take place at the following times during the duration of the Project:

- Project Inception
- Project Midterm
- Project End

Other options such as meetings of representative groupings of the Project Board, teleconferencing and e-mail will be explored to allow for discussion and review of project matters during the years when no formal Project Board are planned. Formal meetings will be scheduled and arranged by the PCU in consultation with, and at the request of, the other Project Board members.

E.2. Terms of Reference for Key Project Staff

A Principal Advisor, a Monitoring and Evaluation (M&E) Specialist, a Gender and Stakeholder Involvement Specialist, and Communications Specialist will staff the PCU. A Chemicals and Waste Specialist and an International Waters Specialist (or IRBM expert) will provide technical support to all project activities in Guatemala, and an International Waters Specialist (or IRBM expert) will provide technical support to all project activities in Honduras. A Financial and Administrative Assistant in Guatemala and a Financial and Administrative Assistant in Honduras will provide administrative input for successful project implementation, and management and monitoring of all financial project aspects. ToRs for these positions will be further discussed and will be fine-tuned during the Inception Workshop so that roles and responsibilities and UNDP GEF reporting procedures are clearly defined and understood. Also, during the Inception Workshop the ToRs for specific consultants and sub-contractors will be fully discussed and, for those consultancies to be undertaken during the first year of the project, full ToRs will be drafted and selection and hiring procedures will be defined.

Principal Advisor (Binational Project Coordinator)

A Principal Advisor will be hired using project funds to carry out the duties specified below, and to provide further technical assistance as required by the project team to fulfill the objectives of the project. He/she will be responsible for ensuring that the project meets its obligations to the GEF and the UNDP, with particular regard to the management aspects of the project, including supervision of staff, serving as stakeholder liaison, implementation of activities, and reporting. The Principal Advisor will lead the PCU and will be responsible for the day-to-day management of project activities and the delivery of its outputs. The Principal Advisor will support and coordinate the activities of all partners, staff, and consultants as they relate to the implementation of the project. The Principal Advisor will be responsible for the following tasks:

Specific Duties

- Prepare detailed work plan and budget under the guidance of the Project Board and UNDP;
- Make recommendations for modifications to the project budget and, where relevant, submit proposals for budget revisions to the Project Board, and UNDP;

- Facilitate project planning and decision-making sessions;
- Organize the contracting of consultants and experts for the project, including preparing ToRs for all technical assistance required, preparation of an action plan for each consultant and expert, supervising their work, and reporting to the UNDP Project Officer;
- Provide technical guidance and oversight for all project activities;
- Oversee the progress of the project components conducted by local and international experts, consultants, and cooperating partners;
- Coordinate and oversee the preparation of all outputs of the project;
- Foster, establish, and maintain links with other related national and international programs and national projects, including information dissemination through media such as web page actualization, etc.;
- Organize Project Board meetings at least once every semester as well as annual and final review meetings as required by UNDP, and act as the secretary of the Project Board;
- Coordinate and report the work of all stakeholders under the guidance of UNDP;
- Prepare PIRs/APRs in the language required by the GEF and the UNDP´s Country Offices and attend annual review meetings;
- Ensure that all relevant information is made available in a timely fashion to UNDP regarding activities carried out nationally, including private and public sector activities, which impact the project;
- Prepare and submit quarterly progress and financial reports to UNDP as required, following all UNDP quality management system and internal administrative process;
- Coordinate and participate in M&E exercises to appraise project success and make recommendations for modifications to the project;
- Prepare and submit technical concepts and requirements about the project requested by UNDP, the Government of Guatemala, the Government of Honduras, or other external entities;
- Perform other duties related to the project in order to achieve its strategic objectives;
- Ensure the project utilizes best practices and experiences from similar projects;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project activities are carried out on schedule and within budget to achieve the project outputs;
- Solve all scientific and administrative issues that might arise during the project.

Outputs

- Detailed work plans indicating dates for deliverables and budget;
- Documents required by the control management system of UNDP;
- ToRs and action plan of the staff and monitoring reports;
- List of names of potential advisors and collaborators and potential institutional links with other related national and international programs and national projects;
- Quarterly reports and financial reports on the consultant's activities, all stakeholders' work, and progress of the project to be presented to UNDP (in the format specified by UNDP);
- A final report that summarizes the work carried out by consultants and stakeholders during the period of the project, as well as the status of the project outputs at the end of the project;
- Minutes of meetings and/or consultation processes;
- Yearly PIRs/APRs;
- Adaptive management of project.

All documents are to be submitted to the UNDP Project Officer and in MS Word and in hard copy.

Qualifications (indicative)

- A graduate academic degree in areas relevant to the project (e.g., integrated watershed management, solid waste management);
- Minimum 10 years of experience in project management with at least 3 years of experience in at least one area relevant to the project (e.g., integrated watershed management, solid waste management);

- Experience facilitating consultative processes, preferably in the field of watershed management;
- Proven ability to promote cooperation between and negotiate with a range of stakeholders, and to organize and coordinate multi-disciplinary teams;
- Strong leadership and team-building skills;
- Self-motivated and ability to work under the pressure;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve stated project objectives;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in Spanish and English;
- Previous experience working with a GEF-supported project is considered an asset.

Project Thematic Specialists

The project Thematic Specialists (Chemicals and Waste Specialist and International Waters Specialists) will be responsible for ensuring the technical implementation of the Project's activities in Guatemala and Honduras. They will work full time and be paid with Project funds under the supervision of the Principal Advisor.

Specific Duties

- Assist the Principal Advisor in the preparation of an Operational Work Plan for the duration of the project and corresponding Annual Work Plans based on the Project Document and Inception Report;
- Directly supervise the implementation of technical activities in in Guatemala and Honduras;
- Assist the Principal Advisor in the contracting of consultants and experts for the project, including preparing ToRs for all technical assistance required, and supervising their work;
- Coordinate and monitor the activities in Guatemala and Honduras as described in the Work Plan;
- Collect and analyze lessons learned and best practices, and design replication strategies within other watersheds in Guatemala and Honduras;
- Ensure consistency between the various project elements and related activities provided or funded by other donor organizations within the Río Motagua watershed;
- Assist the Principal Advisor in organizing all technical reporting activities to the GEF, UNDP, and Executing Agencies, ensuring adherence to the Agencies' technical reporting requirements;
- Promote the Project and seek opportunities to leverage additional co-funding; and
- Represent the Project at meetings and other project-related fora at the local and subnational levels, as required.

Qualifications (indicative)

- An academic degree in areas relevant to the project (integrated watershed management, solid waste management);
- At least 5 years of working experience in the fields related to the project (integrated watershed management, solid waste management) or a directly related field;
- Experience facilitating consultative processes, planning and monitoring at the local level (preferably in the field of watershed management);
- Ability to work both independently and as a member of a team;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve stated project objectives at the local level;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in Spanish and English; and
- Previous experience working with a GEF-supported project is considered an asset.

Communications Specialist

The Communications Specialist will be responsible for advising on and issuing communications, as well as awareness-raising, and visibility activities related to the project. This position will be part of the PCU under the supervision of the Principal Advisor

Specific Duties:

- Coordinate and conduct the communication, awareness-raising, and visibility campaigns of the project at the local, national, and binational regional levels;
- Coordinate the design, production, and dissemination of diverse reports, publications, and knowledge products through different media, including print, websites, and social networks;
- Promote visibility of the project results and activities through placement and distribution of information material and creative partnerships;
- Advise and assist project teams at the national and binational levels in developing awareness campaigns, communication strategies, visibility actions, and media initiatives;
- Establish synergies with other GEF and non-GEF initiatives on IRBM and solid waste management, governments, private sector entities, donor agencies, among other stakeholders to promote cooperation and coordination of implementation of related efforts at the national and binational levels; and
- Draft and ensure that key results, reports, lessons learned, BMPs, and relevant success stories (e.g., pilot projects) are disseminated through different communication vehicles.

Qualifications (indicative)*:*

- Degree in Communications, or other related field;
- At least 3-5 years of experience in the field of communications, preferably focused on IRBM and solid waste management;
- Previous experience working with a GEF project is considered an asset;
- Ability to synthesize, systematize, edit, and publish information to produce communications materials and products;
- Strong interpersonal and communication skills; commitment to team work and to working across disciplines; and
- Fluency in Spanish is essential, both spoken and written. Working knowledge of English is an asset.

M&E Specialist

The M&E Specialist will be responsible for the advisory and conduction of all M&E activities related to the project. This position will be part of the PCU under the supervision of the Principal Advisor

Specific Duties:

- Responsible for the proper functioning of the Project's M&E, including the Project impact indicators contained in the PRF and GEF Tracking Tools for IW and CW in accordance with the GEF requirements;
- Coordinate with the project Principal Advisor and the different technical and administrative units of MARN and Mi Ambiente+ to program M&E activities;
- Establish in the AWP the necessary time and resources to comply with the UNDP and GEF M&E requirements for the project;
- Coordinate the preparation of forms, questionnaires, and other tools for collecting information in the field within the framework of M&E and the PRF;
- Provide support to the Principal Advisor in preparing M&E reports required by UNDP and the GEF, indicating, among other things, the progress in complying with the indicators included in the PRF; and
- Prepare the ToRs for the MTR and TE of the Project.

Qualifications (indicative):

- Degree in environmental sciences, waters resources management, engineering, or other similar areas with a focus on project monitoring and evaluating;
- At least 5-10 years of experience in the fields of environmental sciences, waters resources management, engineering, or other similar areas, 3 years of which shall be in project monitoring and evaluation;
- Experience in data analysis, publications and/or reporting based on field data is required;
- Previous experience working with a GEF project is considered an asset;
- Strong interpersonal and communication skills; commitment to teamwork and to working across disciplines; and
- Fluency in Spanish is essential, both spoken and written. Working knowledge of English is an asset.

Gender and Stakeholder Involvement Specialist

The Gender and Stakeholder Involvement Specialist will be responsible for ensuring that gender is mainstreamed during project execution and the implementation of the project Gender Action Plan as well as the implementation of the Stakeholder Engagement Plan. This position will be part of the PCU under the supervision of the Principal Advisor.

Specific Duties:

- Coordinate with the project Principal Advisor and the different technical and administrative units of MARN and Mi Ambiente+ for gender mainstreaming and stakeholder participation, with emphasis in indigenous peoples;
- Establish in the AWP the necessary time and resources to implement the project Gender Action Plan;
- Collect sex-disaggregated data in line with the PRF and Gender Action;
- Develop and Indigenous Peoples Participation Plan;
- Provide support to the Principal Advisor in preparing gender-based and stakeholder participation reports required by UNDP and the GEF, indicating, among other things, the progress in complying with the indicators included in the PRF, the Gender Action Plan, and the Stakeholder Engagement Plan;
- Participate and coordinate in project training activities for gender mainstreaming; and
- Coordinate actions with government agencies, NGOs, CSOs, and women's organization or groups whose work focuses on gender in the Río Motagua watershed.

Qualifications (indicative):

- Degree in social or natural sciences or other relevant discipline, preferably with a specialization in gender, indigenous peoples, and project cycle management;
- At least 5 years of experience in the field of gender equality and gender mainstreaming, and stakeholder participation including indigenous groups;
- Demonstrated expertise in mainstreaming gender and stakeholder participation, including indigenous groups, in UNDP and/or GEF projects and programs in Guatemala and Honduras;
- Experience working with government institutions and international organizations that support gender and development work in environmental projects and programs;
- Knowledge of with gender analysis tools and methodologies for gender mainstreaming;
- Previous experience working with a GEF project is considered an asset;
- Strong interpersonal and communication skills; commitment to team work and to working across disciplines; and
- Fluency in Spanish is essential, both spoken and written. Working knowledge of English is an asset.

Financial and Administrative Assistant

The Project Finance Assistants (one in Guatemala and one in Honduras) are responsible for the financial and administrative management of the project activities and assists in the preparation of quarterly and annual work plans and progress reports for review and monitoring by UNDP.

Specific Duties

- Responsible for providing general financial and administrative support to the project;
- Take own initiative and perform daily work in compliance with annual work schedules;
- Assist project management in performing budget cycle: planning, preparation, revisions, and budget execution;
- Provide assistance to partner agencies involved in project activities, performing and monitoring financial aspects to ensure compliance with budgeted costs in line with UNDP policies and procedures;
- Monitor project expenditures, ensuring that no expenditure is incurred before it has been authorized;
- Assist project team in drafting quarterly and yearly project progress reports concerning financial issues.
- Drafting the contracts of national / local consultants and all project staff, in accordance with the instructions of the UNDP Contract Office in each country;
- Ensure that UNDP procurement rules are followed during procurement activities that are carried out by the project and maintain responsibility for the inventory of the project assets;
- Perform preparatory work for mandatory and general budget revisions, annual physical inventory and auditing, and assist external evaluators in fulfilling their mission;
- Prepare all outputs in accordance with the UNDP administrative and financial office guidance;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project financial activities are carried out on schedule and within budget to achieve the project outputs;
- Perform all other financial related duties, upon request;
- Make logistical arrangements for the organization of meetings, consultation processes, and media;
- Draft correspondence related to assigned project areas; provide clarification, follow up, and responses to requests for information;
- Assume overall responsibility for administrative matters of a more general nature, such as registry and maintenance of project files;
- Provide support to the Principal Advisor and project staff in the coordination and organization of planned activities and their timely implementation;
- Assist the Principal Advisor in liaising with key stakeholders from the Government of Guatemala and the Government of Honduras counterpart, co-financing agencies, civil society, and NGOs, as required;
- Ensure the proper use and care of the instruments and equipment used on the project
- Resolve all administrative and support issues that might arise during the project.
- Provide assistance in all logistical arrangements concerning project implementation;

Qualifications (indicative)

- Undergraduate Degree in finance, business sciences, or related fields;
- A demonstrated ability in the financial management of development projects and in liaising and cooperating with government officials, donors, and civil society;
- Self-motivated and ability to work under the pressure;
- Team-oriented, possesses a positive attitude, and works well with others;
- Flexible and willing to travel as required;
- Excellent interpersonal skills;
- Excellent verbal and writing communication skills in Spanish and English;
- Good knowledge of Word, Outlook, Excel, and Internet browsers;
- Previous experience working with a GEF and/or UNDP-supported project is considered an asset.

ANNEX F: UNDP SOCIAL AND ENVIRONMENTAL AND SOCIAL SCREENING (SEE SEPARATE FILE)

ANNEX G: UNDP PROJECT QUALITY ASSURANCE REPORT

Design & Appraisal Stage Quality Assurance Report

Overall Project Rating: Decision:

Project Number: 00095723

Project Title: Integrated Environmental Management of the Río Motagua Watershed

Project Date: 01-Apr-2016

1. Does the project's Theory of Change specify how it will contribute to higher level change? (Select the option from 1-3 that best reflects the project)

3: The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time.

2: The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence.

1: The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change.

Evidence Management Response

Please refer to Project Document

2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project)

3: The project responds to one of the three areas of development work as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging areas; an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. (all must be true to select this option)

2: The project responds to one of the three areas of development work as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. (both must be true to select this option)

1: While the project may respond to one of the three areas of development work as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development issue. None of the relevant SP indicators are included in the RRF. This answer is also selected if the project does not respond to any of the three areas of development work in the Strategic Plan.

Evidence

Please refer to Project Document

3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that best reflects this project)

3: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable.)The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) (all must be true to select this option)

2: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. (both must be true to select this option)

1: The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project.

Not Applicable

Evidence Management Response

Please refer to Project Document

4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project)

3: Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives.

2: The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives.

1: There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence.

Evidence Management Response

Please refer to Project Document

5. Does the project use gender analysis in the project design and does the project respond to this gender analysis with concrete measures to address gender inequities and empower women? (select the option from 1-3 that best reflects this project)

3: A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)

2: A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. (all must be true to select this option)

1: The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered.

Evidence Management Response

Please refer to Project Document

6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners, other development partners, and other actors? (select the option from 1-3 that best reflects this project)

3: An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. (all must be true to select this option)

2: Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified.

1: No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance.

Evidence Management Response

Please refer to Project Document and the report on role and partner's participation.

7. Does the project seek to further the realization of human rights using a human rights based approach? (select from options 1-3 that best reflects this project)

3: Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. (all must be true to select this option)

2: Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget.

1: No evidence that the project aims to further the realization of human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered.

Evidence Management Response

Please refer to Project Document

8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project)

3: Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. (all must be true to select this option).

2: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget.

1: No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered.

Evidence Management Response

Please refer to Project Document

9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? [If yes, upload the completed checklist as evidence. If SESP is not required, provide the reason(s) for the exemption in the evidence section. Exemptions include the following:

Preparation and dissemination of reports, documents and communication materials Organization of an event, workshop, training

Strengthening capacities of partners to participate in international negotiations and conferences Partnership coordination (including UN coordination) and management of networks

Global/regional projects with no country level activities (e.g. knowledge management, inter-governmental processes) UNDP acting as Administrative Agent

Yes

No

SESP not required

Evidence

Please refer to SESP

10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project)

3: The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of the key expected changes identified in the theory of change, each with credible data sources, and populated baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. (all must be true to select this option)

2: The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. (all must be true to select this option)

1: The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators.

Evidence Management Response

Please refer to Project Document - result's matrix

11. Is there a comprehensive and costed M&E plan with specified data collection sources and methods to support evidence-based management, monitoring and evaluation of the project?

Yes

No

Evidence

Please refer to Project Document - M&E plan.

12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project)

3: The project's governance mechanism is fully defined in the project document. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. (all must be true to select this option).

2: The project's governance mechanism is defined in the project document; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. (all must be true to select this option)

1: The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided.

Evidence Management Response

Please refer to Project Document

13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project)

3: Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. (both must be true to select this option)

2: Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk.

1: Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and no initial risk log is included with the project document.

Evidence Management Response

Please refer to Project Document

14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.

Yes

No

Evidence

Please refer to Project Document

15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)

Yes

No

Evidence

Please refer to Project Document

16. Is the budget justified and supported with valid estimates?

3: The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget.

2: The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates.

1: The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.

Evidence

Please refer to Project Document - budget

17. Is the Country Office fully recovering the costs involved with project implementation?

3: The budget fully covers all direct project costs that are directly attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.)

2: The budget covers significant direct project costs that are directly attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant.

1: The budget does not reimburse UNDP for direct project costs. UNDP is cross-subsidizing the project and the office should advocate for the inclusion of DPC in any project budget revisions.

Evidence Management Response

Please refer to Project Document - LoA for DPC

18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project)

3: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the selected modality, based on the development context. (both must be true to select this option)

2: The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments.

1: The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered.

Evidence Management Response

Please refer to Project Document

19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination?

3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions.

2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions.

1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project.

Not Applicable

Evidence

Please refer to Project Document. Please refer to meeting minutes; Please refer to Gender Strategy and action plan; Please refer to the report on role and partner's participation.

20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation?

Yes

No

Evidence

Please refer to Project Document

21. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum.

Yes

No

Evidence Management Response

22. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project)

3: The project has a realistic work plan & budget covering the duration of the project at the activity level to ensure outputs are delivered on time and within the allotted resources.

2: The project has a work plan & budget covering the duration of the project at the output level.

1: The project does not yet have a work plan & budget covering the duration of the project.

Evidence

Please refer to Project Document

23. Have national partners led, or proactively engaged in, the design of the project?

3: National partners have full ownership of the project and led the process of the development of the project jointly with UNDP.

2: The project has been developed by UNDP in close consultation with national partners.

1: The project has been developed by UNDP with limited or no engagement with national partners. Not Applicable

Evidence

Please refer to meeting minutes.

24. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project):

3: The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly.

2.5: A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities.

2: A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment.

1.5: There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned.

1: Capacity assessments have not been carried out and are not foreseen. There is no strategy for strengthening specific capacities of national institutions.

Not Applicable

Evidence

Please refer to HACT's micro assessment analysis: MARN (Guatemala) and MiAmbiente+ (Honduras).

25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible?

Yes

No

Not Applicable

Evidence

The Ministry of the Environment and Natural Resources will be the implementation partner, under the National Implementation Modality (NIM), where UNDP is responsible of direct payments.

26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)?

Yes

No

Evidence

Please refer to Project Document

Quality Assurance Summary/PAC Comments

ANNEX H: UNDP RISK LOG

Project risks					
Description	**Type**	**Impact & Probability**	**Mitigation Measures**	**Owner**	**Status**
Limited coordination and commitment from the governments fail to ensure environmental and financial sustainability beyond the life of the project	Political, Organizational	I = 4 P = 2	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	MARN, Mi Ambiente+	No change
Limited public interest in reducing pollution and resistance to change current management practices	Strategic	I = 3 P = 3	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	MARN, Mi Ambiente+	No change

			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 and groundwater 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	Political, Organizational	I = 2 P = 2	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.	MARN, Mi Ambiente+	No change
Climate change	Environmental	I = 4 P = 2	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	MARN, Mi Ambiente+	No change

			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.		
Absence of culturally appropriate consultations may affect the rights and interests, lands, resources, territories and traditional livelihoods of indigenous peoples	Strategic	I = 3 P = 3	The project will be implemented with consideration given to the rights of indigenous peoples for their effective participation in environmental and development projects as established under Guatemalan law. An Indigenous Peoples Participation Plan will be developed during the first year of project implementation to satisfy FPIC requirements. Also, as part of the mitigation measures, the project's Advisory Technical Committee (TAC) will include the participation of the Indigenous Group for Climate Change in Guatemala (*Mesa Indígenas de Cambio Climático de Guatemala*), of which the Asociación Sotzil is a member and has experience in social and environmental safeguards; the Asociación Sotzil is also a project co-financier. The project will also make use of the Access to Information and Complaints Office in	UNDP, MARN	No change

			Guatemala, of which the Ministry of Natural Resources and Environment (MARN) of Guatemala is member. The project will also include UNDP's mechanism for addressing complaints, grievances, and suggestions; through this mechanism the project will receive useful information that will serve to continuously improve and prevent conflicts that the project's actions may generate regarding indigenous participation. Finally, the indigenous communities will be fully consulted during project implementation and will actively participate in the project's execution to ensure that their rights and concerns are taken into account. In the case of Honduras there is no presence of indigenous communities or indigenous lands in the area where the project will be implemented.		

ANNEX I: RESULTS OF THE CAPACITY ASSESSMENT OF THE PROJECT IMPLEMENTING PARTNER AND HACT MICRO ASSESSMENT

Pursuant to the UN General Assembly Resolution 56/201 on the triennial policy review of operational activities for development of the United Nations system, UNDP adopted an operational framework for transferring cash to government and non-government Implementing Partners (IP). Its implementation will significantly reduce transaction costs and lessen the burden that the multiplicity of UN procedures and rules creates for its partners.

Financial regulation.27.02 (Definitions) of the UNDP Financial Regulations and Rules (FRR) defines National Implementation Modality (NIM) as: "The overall management of UNDP programme activities in a specific programme country carried out by an eligible national entity of that country." National implementation is used when there is adequate capacity in the national authorities to undertake the functions and activities of the programme or project.

National implementation is considered to be the norm since it is expected to contribute most effectively to:

- Greater national self-reliance by effective use and strengthening of the management capabilities, and technical expertise of national institutions and individuals, through learning by doing;
- Enhanced sustainability of development programmes and projects by increasing national ownership of, and commitment to development activities;
- Reduced workload and integration with national programmes through greater use of appropriate national systems and procedures.

The Agencies will assess the risks associated with transactions to an IP, before initiating cash transfers under the harmonized procedures.

- Micro Assessment*:* This assesses the risks related to cash transfers to the partner and is done once every programme cycle, or whenever a significant change in the Implementing Partner's organizational management is noticed. Assessments should be done for partners (government or NGO) that receive or are expected to receive cash transfers above an annual amount (usually US$ 100,000 combined from all Agencies. The micro assessment reviews the Implementing Partner's system of accounting, reporting, auditing, and internal controls.

The Micro Assessments serve two objectives:

- Development objective*:* The assessments help Agencies and the Government to identify strengths and weaknesses in the PFM system and the financial management practices of individual Implementing Partners, and identify areas for capacity development.

- Financial management objective*:* The assessments help Agencies identify the most suitable resource *transfer* modality and procedures, and scale of assurance activities to be used with each Implementing Partner.

After assessing the national procurement and financial systems and the capacity of implementing partners, UNDP will adopt a risk management approach and select the most suitable funds transfer modality. In addition, UNDP will define steps to ensure the proper use of the funds provided. This will approach will ensure greater convergence between the assistance provided and the priorities and needs of each country.

Micro Assessment: MARN (Guatemala)

Based on the operating guidelines provided above, a micro assessment was performed from December 2014 to January 2015 to evaluate MARN's financial management capacity. The evaluation included: a) review of laws and regulations applicable to, as well as related financial, accounting, and administrative information; b) interviews at IP offices, and verification of information; c) review of documents, processes, and accounting records; d) weighting of results and final assessment of IP capacity using a microassessment questionnaire.

It was concluded in the micro-assessment that MARN has a combined **low risk level** for management processes for fund management, staffing, accounting policies and procedures, internal auditing, external auditing, monitoring, information management, and recruitment and procurement. The complete microassessment is available through the UNDP Country Office in Guatemala.

Micro Assessment: Mi Ambiente+ (Honduras)

Based on the operating guidelines provided above, a micro assessment was performed in June of 2106 to evaluate the financial management capacity of the MiAmbiente+'s Project Coordinating Office (PCO). It was concluded in the micro-assessment that MiAmbiente+'s PCO has a combined **moderate risk level** for: Implementing Partner, Programme Management, Organizational Structure and Staffing, Accounting Policies and Procedures, Fixed Assets and Inventory, Financial Reporting and Monitoring, Information Systems, and Procurement. The complete microassessment is available through the UNDP Country Office in Honduras.

ANNEX J: LETTERS OF AGREEMENTS FOR UNDP SUPPORT SERVICES (GUATEMALA & HONDURAS) (SEE SEPARATE FILE)

ANNEX K: STAKEHOLDER ENGAGEMENT PLAN

Objectives of the Stakeholder Participation Plan:

The formulation of the stakeholder participation plan has the following objectives: a) to clearly identify the basic roles and responsibilities of the main participants in this Project; b) to ensure full knowledge of those involved concerning the progress and obstacles in project development and to take advantage of the experience and skills of the participants to enhance project activities; and c) to identify key instances in the project cycle where stakeholder involvement will occur. The ultimate purpose of the stakeholder participation plan will be the long-term sustainability of the project achievements, based on transparency and the effective participation of the key stakeholders.

During the PPG phase, visits were conducted by the project team and MARN (Guatemala) and Mi Ambiente+ (Honduras) staff to the prioritized municipalities in both countries to consult and involve the local stakeholders early on in the project design process and to identify potential partnerships with local groups for effective participatory planning and management. The stakeholders consulted included authorities and CSOs of prioritized municipalities (Guatemala: Municipality of Pachalum, Municipality of Puerto Barrios, Municipality of Estanzuela, Municipality of Los Amates; Honduras: Municipality of Santa Rita, Municipality of Nueva Frontera, and Municipality of Omoa). In addition, multiple government officials in Guatemala (e.g., MARN, MAGA, INFOM, MINEDUC, MSPAS, Ministry of Foreign Affairs, Ministry of Energy and Mines) and Honduras (e.g., Mi Ambiente+, ICF, SAG, SDHJGD, SRECI), NGOs (TNC, MARFUND, FUNDAECO), and multilateral agencies (IADB), we re consulted.

Participation mechanisms:

Information dissemination, consultation, and similar activities that took place during the PPG

During the PPG phase of the project, key stakeholders participated in planning and project design workshops and multiple smaller focus group sessions and meetings. These participatory forums include: a) PPG phase inception workshop; b) project Results Framework Workshop; and c) multiple individual meetings and consultations with key national and local stakeholders held by the project team, UNDP Country Offices in Guatemala and Honduras, and staff from the MARN and Mi Ambiente+.

The Inception Workshop was held on January 31st, 2017 in the coastal city of Puerto Barrios in Guatemala. The objectives of this workshop were to: a) help the PPG project team and other stakeholders to understand and take ownership of the project goals and objectives, b) ensure that the project team and other stakeholders have a clear understanding of what the PPG phase seeks to achieve as well as their own roles in successfully carrying out the PPG activities, c) re-build commitment and momentum among key stakeholders (including potential project co-financers) for the PPG phase, and d) validate the PPG Work Plan.

The Results Framework Workshop was held on April 24-25, 2015 in the city of Copán Ruinas, Honduras. The objectives of this workshop were to: a) define the Results Framework, including the revised project outputs, indicators, baseline information, goals, verification mechanisms, and assumptions; b) preliminary definition of the project's activities for each outcome/output; c) define a preliminary budget for the project, including the co-financing; and d) update the PPG phase Work Plan.

Throughout project development, close contact was maintained with the national and local stakeholders. National institutions and key donor agencies were directly involved in the development of the project. Numerous consultations occurred with multiple stakeholders to discuss the various aspects of project design and consultations with co-financing institutions were conducted to ensure a complete package of signed cofinancing letters that will contribute to the IRBM of the Río Motagua watershed and reduce land-based sources of pollution and solid waste.

Approach to stakeholder participation

The project's approach for stakeholder involvement and participation is based on the principles outlined in the following table.

Principle	Stakeholder participation will:
Adding Value	Be an essential means of adding value to the project.
Inclusivity	Include all relevant stakeholders.
Accessibility and Access	Be accessible and promote access to the process.
Transparency	Be based on transparency and fair access to information.
Fairness	Ensure that all stakeholders are treated in a fair and unbiased way.
Accountability	Be based on a commitment to accountability by all stakeholders.
Constructive	Seek to manage conflict and promote the public interest.
Redressing	Seek to redress inequity and injustice.
Capacitating	Seek to develop the capacity of all stakeholders.
Needs-Based	Be based on the needs of all stakeholders.
Flexible	Be designed and implemented in a flexible manner.
Rational and Coordinated	Be rationally planned and coordinated, rather than ad hoc.
Excellence	Be subject to ongoing reflection and improvement.

Stakeholder involvement plan

The project's design incorporates several features to ensure ongoing and effective stakeholder participation in its implementation. The mechanisms to facilitate the involvement and active participation of different stakeholders in project implementation will comprise a number of different elements:

a) Project inception workshop to enable stakeholder awareness of the start of project implementation

The project will be launched by a multi-stakeholder workshop. This workshop will provide an opportunity to provide all stakeholders with the most updated information on the project and the project work plan. It will also establish a basis for further consultation as the project's implementation begins.

b) Formation of Project Steering Committee to ensure representation of stakeholder interests in project

A Project Board will be formed to ensure broad representation of all key interests throughout the project's implementation. The representation and broad terms of reference of the Project Board are further described in Section VII (Governance and Management Arrangements) of this Project Document.

c) Establishment of a Project Management Unit (PMU) to oversee stakeholder engagement processes during project

The PMU will take direct operational and administrative responsibility for facilitating stakeholder involvement and ensuring increased local ownership of the project and its results. The PCU will be located in Guatemala and led by a Principal Advisor (i.e., Binational Project Coordinator) to both countries, who will ensure stakeholder engagement at the local level, including the participation of community, rural, indigenous, and women's organizations and individuals.

d) Project communications to facilitate ongoing awareness of the project

The PMU will include a Communications Specialist that will ensure that all stakeholders aware of the project and its management. This will include dialogue and communication at the local and municipal levels to promote the reduction of land-based sources of pollution and the sound management of domestic solid waste, and building awareness about transparency in project management.

Component 4 will allow the gathering and sharing of lessons learned in a systematic and efficient manner, with special emphasis on the development and dissemination of knowledge, facilitating communication for ongoing awareness of the project.

e) Direct involvement of stakeholders in project implementation

The direct involvement of the national, subnational, and local stakeholders in project implementation, including capacity-building is described below.

GUATEMALA STAKEHOLDER PARTICIPATION PLAN						
TYPE OF STAKEHOLDER	**STAKEHOLDER**	**ROLE IN THE PROJECT**	**ACTIONS**	**RESULTS**	**COMPONENT**	**DURATION**
Government institutions, focal point of the project, and responsible for project outcomes	Ministry of the Environment and Natural Resources (MARN)	As the GEF focal point, the MARN will: 1) preside over the project's TAC in Guatemala; 2) be responsible for leading the project implementation; and 3) be responsible for coordinating with the national, regional, and local-level project partners, primarily with beneficiary groups at these levels.	1. Will guide the project actions through close communication with the GEF and UNDP. 2. Will help to guide, strengthen, and support IBRM to reduce land-based pollution from different sources. 3. Will provide feedback through lessons learned from other GEF projects that the MARN implements in Guatemala. 4. Will ensure that the project is framed within the policies and norms related to environmental conservation, and that the results contribute to reducing land-based pollution that affects surface water and groundwater within the Río Motagua watershed. 5. Will ensure that the project complies with GEF guidelines, including gender considerations in the GEF-6 framework with the participation of the Gender Unit of MARN. 6. Will provide legal support through its Legal Department to representatives to the TAC and the Ministry Delegation for IRBM, as well as to other units that participate in the TAC. 7. Will provide support to the TAC through its Social Participation Division, Indigenous Peoples and Gender Unit in relevant issues for proper execution of the project.	1. Adequate communication with the GEF to guide the project's actions. 2. Adequate communication and execution of actions with UNDP to guide the project's actions. 3. Project adequately implemented including planning, strategic, operational, technical, and administrative aspects as well as mainstreaming gender. 4. Coordination with the project stakeholders allows achieving the projects' outcomes and outputs.	1, 2, 3, and 4	5 years
Government institutions that contribute to the results, but that do not have a direct responsibility	Ministry of Agriculture, Livestock, and Food (MAGA)	The MAGA, through the Vice-Ministry of Rural Economic Development, the Divisions of Productive Reconversion, Agricultural Development, and Strengthening for Productive Organization and Commercialization, through its network of agricultural extension officers, will coordinate, support, and facilitate actions to reduce agricultural-based contamination in the Río Motagua watershed.	1. Will contribute to the process of training farmers (small and large) to implement best practices for reducing contamination from the use of agricultural products: a) agricultural runoff (solid waste and wastewater) and b) solid waste and wastewater from agricultural industries, for which MAGA will provide support in strengthening soil conservation actions to reduce erosion and transport of contaminated solid waste and wastewater. 2. Will provide support and guidance for coordinating with the MARN in actions related to watershed planning and management, so that the actions implemented help to reduce contamination and improve the provision of environmental services. 3. Will support the MARN so that the project's actions are harmonized with the country's agricultural policies, especially the MAGA's institutional gender policy, to reduce contamination of the Río Motagua watershed and promote the equal participation of men and women.	1. Guidance for Project Coordination for developing and implementing the WDA, SAP, and NSAP. 2. Women and men farmers trained in best environmental management practices, reduce contamination from agricultural-based solid waste and wastewater. 3. Technical staff of the MAGA with increased knowledge and training in environmental management to reduce agricultural-based solid waste and wastewater. 4. Database with information about contaminators (agricultural businesses), contaminants (agricultural products) for the Río Motagua watershed updated and available.	1 and 2	5 years
	Ministry of Education (MINEDUC)	MINEDUC will provide support for the implementation of	1. Provide support for the implementation of a binational environmental education program to build environmental awareness and contribute to the	1. Key watershed populations and institutions aware of the importance of reducing land-based pollution.	2	3 years

		programs to build awareness and capacities for IRBM and the reduction of land-based pollution.	reduction of environmental pressures on the Río Motagua watershed, including surface and groundwater pollution sources.			
	Ministry of Public Health and Social Welfare (MSPAS)	MSPAS will provide support and coordination of actions to incorporate considerations related to human health within IRBM of the Río Motagua watershed, including the reduction of toxic chemical waste.	1. Will provide information about statistics, records, studies, intensity, and location regarding the prevalence of illnesses stemming from land-based pollution, solid waste, and wastewater in Río Motagua watershed. 2. Will guide planning and decision making at the Río Motagua watershed level, as well as the departmental and municipal levels, to reduce the prevalence of illnesses related to land-based pollution, solid waste, and wastewater in the Río Motagua watershed. 3. Will support updating the national regulatory framework to create synergies for managing surface water and groundwater, including reducing contamination. 4. Will support and guide program to monitor effects on human health and the environment from U-POP emissions and the elimination of plastic wastes (differentiated by sex), including laboratories and public sector analytical capabilities. 5. Will support the development of technical guidelines for the handling, transport, storage, and disposal of wastes.	1. Database with records and statistics on the prevalence of illnesses stemming from land-based pollution, solid waste, and wastewater in the Río Motagua watershed. 2. Government and municipal authorities, private business officials, and the general population, including women, with better information for reducing illnesses related to land-based pollution and contributing to its reduction. 3. Adequate support for monitoring the effects of U-POP emissions and elimination of plastic wastes on human health and the environment.	1 and 2	5 years
	Ministry of Foreign Affairs	Will be responsible for providing legal and policy guidelines regarding Guatemala's relations with Honduras during the implementation of the project.	1. Will establish legal, technical, administrative, and policy procedures to adequately implement the project within the framework of the Guatemalan Constitution and the laws related to aspects of the project. 2. Will maintain close relations with the MARN and other government institutions involved in the project to oversee guidelines that, regarding treaties, conventions, agreements, and other international accords, are signed and ratified between Guatemala and Honduras. 3. Will promote open and transparent dialogue, encouraging good relations between Guatemala and Honduras that will facilitate IRBM of the Río Motagua. 4. Will provide support to and participate in the Guatemala—Honduras High-Level Commission in its development of a framework for institutional cooperation that facilitates IRBM of the Río Motagua; in addition, will be a member of Guatemala's TAC.	1. Legal, technical, administrative and policy procedures related to the project developed and implemented following the Ministry of Foreign Affairs' guidelines. 2. Guatemala—Honduras High-Level Commission operating and executing its functions and tasks for IRBM of the Río Motagua. 3. The Guatemala TAC performs its role following the directives provided by the Ministry of Foreign Affairs.	1 and 2	5 years
	Presidential Secretariat for Planning and Programs (SEGEPLAN)	Will perform oversight to ensure the project is implemented in line with national land use and development plans.	1. Will be responsible for guiding the institutions involved so that the project's actions are harmonized with related public policies. 2. Will serve as the link with the Development Councils System during the consultation process to develop the local action plans, departmental plans, NSAP, and SAP between Guatemala and Honduras. 3. Will ensure the participation of representatives from women's organizations at the different levels of the consultation processes. 4. Will provide guidance on project monitoring and evaluation.	1. SAP, NSAP, and local action plans are harmonized with public policies related to environmental and gender issues. 2. Departmental and municipal development plans that incorporate proper management of chemicals and hazardous wastes harmonized with public policies regarding land use and development.	2	5 years
	National Forestry Institute (INAB)	Will provide technical assistance related to the identification of land-based sources of	1. Will support the WDA with information about changes in forest cover and their relation to land-based pollution, and the identification of water recharge areas.	1. Studies about water recharge areas within watersheds available. 2. Incentives available for implementation of clean technologies and farmers who adopt	1, 2, and 3	4 years

		pollution, the identification of water recharge areas and their protection, and incentives for sustainable production.	2. Will provide support through incentives for businesses that as part of the implementation of clean technologies and farmers who adopt sustainable production practices to employ sustainable forest management. 3. Will provide guidelines to develop the NSAP for sustainable management of the Río Motagua watershed. 4. Will provide technical support to the Municipality of Puerto Barrios and other local stakeholders for the protection and restoration of water recharge areas within the Cerro San Gil Springs Protected Reserve.	sustainable production practices to employ sustainable forest management. 4. The Municipality of Puerto Barrios and other local stakeholders protect and restore key water recharge areas.		
	National Council for Protected Areas (CONAP)	Will provide technical assistance related to identifying sources of land-based pollution in surface water and groundwater, and the protection of water recharge areas.	1. Will participate in the development of the WDA of the Río Motagua watershed and will provide guidelines for developing the NSAP for sustainably managing the Río Motagua watershed. 2. Will provide information related to protected areas located within the Río Motagua watershed. 3. Will provide technical assistance to the Municipality of Puerto Barrios and other local stakeholders for protection of the water recharge areas and the Cerro San Gil Springs Protected Reserve.	1. Studies about water recharge areas within watersheds available. 2. Project Coordination has support for developing the WDA, SAP, and NSAP related to key areas that contribute to reducing land-based pollution. 3. The Municipality of Puerto Barrios and other local stakeholders protect key water recharge areas.	1, 2, and 3	4 years
Institutions supporting municipalities	Municipalities	The municipalities will be directly responsible for reducing contamination from land-based sources and the implementation of actions at the local level for IRBM.	1. Will incorporate the principal findings of the WDA into the Municipal Development Plans and/or Investment Plans. 2. Will adapt the municipal regulatory framework for the management of surface water and groundwater. 3. Will participate in training technical staff, municipal officials, and the general population (members of COCODES and the Water Commissions) to reduce land-based pollution. 4. Will participate in and coordinate actions for developing protocols for Local Action Plans and a proposed long-term monitoring system to monitor implementation of the SAP and NSAP. 5. Will participate in the Guatemala—Honduras High-Level Commission to develop the institutional framework for cooperation that facilitates IRBM of the Río Motagua. 6. Will participate in subnational committees to implement the SAP. 7. Will implement pilot projects for reducing land-based pollution: management and treatment of domestic wastewater, protection and restoration of water recharge areas, reforestation to reduce diffuse contamination from water erosion and runoff, and integrated management of urban solid waste to reduce U-POP emissions (dioxins and furans) and emissions from plastic wastes. 8. Will promote the participation of the DMM, Women Commissions of the Municipal Development Council, and women in general in development of the WDA, and training and consultation for the IRBM.	1. Municipal Development Plans and Investment Plans include considerations for IRBM and gender. 2. Technical staff, municipal officials, and the general population trained in reducing land-based pollution with a focus on gender equality. 3. Information about environmental indicators updated and available. 4. Land-based pollution reduced in prioritized municipalities through pilot projects, contributing to IRBM of the Río Motagua. 5. Development plans in three municipalities incorporate proper management of chemicals and hazardous wastes.	1, 2, and 3	5 years
	National Association of Municipalities (ANAM)	ANAM will provide technical and legal support to the municipalities in the Río Motagua watershed that participate in	1. Will facilitate project implementation, principally with those municipalities where the pilot projects are to be developed to reduce land-based pollution and planning for IRBM of the Río Motagua. 2. Will facilitate support for the project through socialization, participation, and implementation of the project in coordination with the COMUDES and the COCODES as instruments of governance.	1. Municipalities with knowledge about the project, the actions that are being executed and implemented, and supporting these actions. 2. COMUDES and COCODES participate appropriately in the project, as a result of the	1, 2, and 3	5 years

		implementation of the project.	3. Will contribute to disseminating project actions and results among the associated municipalities.	support from ANAM at the Río Motagua watershed level. 3. Project actions adequately disseminated at the national level.		
	Municipal Development Institute (INFOM)	INFOM will provide technical support to the municipalities of the Río Motagua watershed that participate in implementation of the project.	1. Will play a central role in coordinating actions for the municipalities to participate in the project, particularly in the planning, studies, and local actions for IRBM, including: a) actions to reduce contamination within the framework of the Guatemala—Honduras SAP for IRBM of the Río Motagua; b) development of protocols for local action plans and monitoring actions; c) implementation of innovative investments for reducing water and coastal contamination from land-based sources; d) technical guidelines for handling, transport, implementation of innovative investments for storage and disposal of wastes; and e) improvements to municipal practices for handling solid waste.	1. The project is framed and executed within the guidelines and principles issued by INFOM regarding participation and actions at the municipal level.	2 and 3	5 years
Civil Society	Urban and Rural Community Development Councils (COCODES), Water Committees, and other CSOs	The CSOs will represent the interests of the community during project implementation. The Water Committees are organizations recognized by the municipalities for overseeing the management of water sources in their communities; as such, they will actively participate in IRBM at the local level.	1. Will participate in the project activities to develop protocols for the Local Action Plans and the implementation of actions to reduce contamination within the framework of the Guatemala—Honduras for IRBM of the Río Motagua. 2. Will work with the Municipal Development Councils (COMUDES) and the Urban and Rural Departmental Development Councils (CODEDES) on instruments of governance to allow expanded and appropriate participation in the consultation and planning processes to develop Local Action Plans and their recognition and approval at the municipal level. 3. Will be beneficiaries of training on issues related to reducing land-based pollution and IRBM of the Río Motagua, in which women's participation plays an important role. 4. Will participate in subnational committees for implementation of the SAP and NSAP. 5. Will participate in environmental awareness and education campaigns, including the active participation of women, to promote reducing land-based pollution. 6. Will be key players in processes to incorporate criteria into the municipal development plans for environmentally appropriate handling of harmful chemicals and wastes.	1. Active participation by the CODEDES, Water Commissions, and other CSOs in decision making and implementing actions for IRBM of the Río Motagua in its locations. 2. Members of the CODEDES, Water Commissions, and other CSOs trained and aware of the importance of reducing land-based pollution within IRBM.	2 and 3	5 years
	Local communities	Will participate and benefit from project implementation, including the reduction of land-based pollution improving their quality of life	1. Will participate in project activities for the development of Local Action Plans 2. Will participate in the implementation of actions for reducing pollution as part of the binational SAP and NPAS for the IRBM of the Río Motagua watershed. 3. Will be beneficiaries of training for IRBM and environmental education for the reduction and management of domestic solid waste. 4. Will directly participate and benefit from the implementation of pilot projects in prioritized municipalities. 5. Will participate in decision-making processes related to the implementation of the project through the COCODES, Water Committees, and other CSOs, which represent them.	1. Active participation from local community members in decision making and implementing actions for IRBM of the Río Motagua at the local level 2. Community members trained and aware of the importance of reducing land-based pollution within IRBM.	2 and 3	5 years

	Women and indigenous organizations	Women organizations will represent the interests, views, and priorities of women during project implementation Indigenous organizations will represent the interests, views, and priorities of indigenous peoples during project implementation	1. Will participate in project activities for the development of Local Action Plans. 2. Will participate in the implementation of actions for reducing pollution as part of the binational SAP and NPAS for the IRBM of the Río Motagua watershed. 3. Will be beneficiaries of training for IRBM and environmental education for the reduction and management of domestic solid waste. 4. Will directly participate and benefit from the implementation of pilot projects in prioritized municipalities. 5. Will represent women interests through organizations and offices such as DMM, the Gender and Environment Technical Group (which include representatives from MAGA, CONAP, MARN, and INAB), and women in the CODEDES (e.g., Network of Women for Biodiversity, Women's Coordination Group of Izabal, Women's Coordination Group of Zacapa, and Fundación Guatemala). 6. Will represent indigenous interests through organizations and offices such as Indigenous Table of Climate Change, Asociación Sotz`il, and Asociación Ak Tenamit; the Asociación Sotz`il will act as a Project cofinancing.	1. Gender Strategy and Action Plan implemented (Annex L). 2. Active participation from indigenous organizations and indigenous peoples in decision making and implementing actions for IRBM of the Río Motagua at the local level 3. Indigenous organizations and indigenous peoples trained and aware of the importance of reducing land-based pollution within IRBM. 4. Active participation of the Asociación Sotz`il as a Project co-financer.	2 and 3	5 years
	Private sector	The private sector will participate by supporting project activities to reduce land-based pollution caused by agricultural, livestock, industrial, commercial, and tourism activities, among others.	1. Will support the development of protocols for Local Action Plans. 2. Will form part of joint actions with the governments of Guatemala and Honduras as part of the international cooperation task group's strategy to ensure economic support for implementation of the SAP. 3. Will participate in subnational committees for implementation of the SAP and NSAP. 4. Will benefit from incentives for implementing clean technologies and the adoption of sustainable production practices. 5. Will contribute to reducing U-POP emissions and emissions from plastic wastes through recycling and composting programs for producing fertilizers.	1. The private sector participates in and contributes to decision-making and actions to reduce land-based pollution and IRBM of the Río Motagua. 2. Clean technologies and sustainable production practices under implementation.	2 and 3	5 years

HONDURAS STAKEHOLDER PARTICIPATION PLAN						
TYPE OF STAKEHOLDER	**STAKEHOLDER**	**ROLE IN THE PROJECT**	**ACTIONS**	**RESULTS**	**COMPONENT**	**DURATION**
Government institutions, focal point of the project, and responsible for project outcomes	Ministry of Energy, Natural Resources, Environment, and Mines (Mi Ambiente+)	As the GEF focal point, Mi Ambiente+ will: 1) preside over the project's TAC in Honduras; 2) be responsible for leading the project implementation; and 3) be responsible for coordinating with the national, regional, and local-level project partners, primarily	1. Will guide the project actions through close communication with the GEF and UNDP. 2. Will help to guide, strengthen, and support IRBM to reduce land-based pollution from diffuse sources. 3. Will regulate and oversee compliance with environmental standards to reduce contamination from solid waste and wastewater handling by government institutions, municipalities, the private sector (agricultural and other industries) and the general population. 4. Will provide feedback through lessons learned from other GEF projects that Mi Ambiente+ implements in Honduras. 5. Will ensure that the project is framed within the policies and norms related to environmental conservation, and that the results contribute to	1. Adequate communication with the GEF to guide the project's actions. 2. Adequate communication and execution of actions with UNDP to guide the project's actions. 3. Project adequately implemented including planning, strategic, operational, technical, and administrative aspects as well as mainstreaming gender. 4. Coordination with the project stakeholders allows achieving the projects' outcomes and products.	1, 2, 3, and 4	5 years

		with beneficiary groups at these levels.	reducing land-based pollution that affects surface water and groundwater within the Río Motagua watershed. 6. Will ensure that the project complies with GEF guidelines, including gender considerations in the GEF-6 framework with the participation of the Gender Unit of Mi Ambiente+. 7. Will provide legal support through its Legal Department to representatives to the TAC and the Ministry Delegation for the proper integration of IRBM, as well as to other units that participate in the TAC. 8. Will provide support to the TAC through its Gender Unit in relevant issues for proper execution of the project.			
Strategic Partners of the Project	Secretariat of General Government Coordination (SCGG)	The SCGG is responsible for the coordination of public administration: Will oversee that the project is implemented in line with the framework of the Country Vision and Nation Plan and the national regulatory framework.	1. Will facilitate assigning resources and cofinancing to achieve the objectives and goals defined in the project's annual and multiannual Strategic Plan. 2. Will support the mechanisms and procedures for monitoring and evaluating the project results. 3. Will oversee that the project actions are framed within the related public policies.	1. Project executed in accordance with National Planning and considering related public policies.	1, 2, and 3	5 years
	Secretariat of Agriculture and Livestock (SAG)	The SAG will coordinate, support, and facilitate actions to reduce agricultural-based contamination in the Río Motagua watershed.	1. Will facilitate specific information about the production sectors in the Río Motagua watershed, as well as agricultural assistance that ensures the reduction of land-based/agricultural pollution and coordination with institutions, organizations, and private sector dedicated to agricultural production. 2. Will contribute to the process of training farmers (small and large) to implement best practices for reducing contamination from the use of agricultural products: a) agricultural runoff (solid waste and wastewater) and b) solid waste and wastewater from agricultural industries, for which Mi Ambiente+ will provide support in strengthening soil conservation actions to reduce erosion and transport of contaminated solid waste and wastewater. 3. Will provide support and guidance for coordinating with the Mi Ambiente+ in actions related to watershed planning and management, so that the actions implemented in the upper and lower portions of the watershed help to reduce vulnerability and improve the provision of environmental services in the lower basin.	1. Guidance for Project Coordination for developing and implementing the WDA, SAP, and NSAP. 2. Women and men farmers trained in best environmental management practices, reduce contamination from agricultural-based solid waste and wastewater. 3. Technical staff of the SAG with increased knowledge and training in environmental management to reduce agricultural-based solid waste and wastewater. 4. Database with information about contaminators (agricultural businesses), contaminants (agricultural products) for the Río Motagua watershed updated and available.	1, 2, and 3	5 years
	Secretariat of Health (SESAL)	SESAL will provide support and coordination of actions to incorporate considerations related to human health within IRBM of the Río Motagua watershed	1. Will provide information about statistics, records, studies, intensity, and location regarding the prevalence of illnesses stemming from land-based pollution and wastewater in Río Motagua watershed. 2. Will support updating the national regulatory framework to create synergies for managing surface water and groundwater, including reducing contamination.	1. Database with records and statistics on the prevalence of illnesses stemming from land-based pollution and wastewater in the Río Motagua watershed. 2. Government and municipal authorities, private business officials, and the general population with better information for	1 and 2	2 years

				reducing illnesses related to land-based pollution and contributing to its reduction.		
	Secretariat of Human Rights, Justice, Governance, and Decentralization (SDHJGD)	SDHJGD will provide support and technical assistance to the municipalities of the Río Motagua watershed that participate in the implementation of the project.	1. Will play a central role in coordinating actions for the participation of the municipalities in the project, particularly in planning, studies, and local actions for IRBM, including: a) actions to reduce contamination within the framework of the Guatemala—Honduras SAP for IRBM of the Río Motagua; b) development of protocols for the Local Action Plans and monitoring actions; and c) implementation innovative investments to reduce water and coastal contamination from land-based sources.	1. The project is framed and executed within the guidelines and principals issued by the SDHJGD regarding participation and actions and the municipal level.	2 and 3	5 years
	Secretariat of Social Development and Inclusion (SEDIS)	SEDIS will facilitate and work alongside local groups participating in implementation in accordance with its institutional objectives.	1. Will provide support for the project to be implemented in line with the Social Development Policy and so that it contributes to reducing poverty. 2. Will facilitate information relevant to the Río Motagua watershed and will promote coordination among officials and the general population to support, stimulate, and facilitate actions related to IRBM in the municipalities.	1. The project's beneficiary population improves its quality of life. 2. Adequate coordination and support for the implementation of IRBM at the local level.	1, 2, and 3	5 years
	Secretariat of Foreign Relations (SRECI)	Will be responsible for providing legal and policy guidelines regarding Honduras's relations with Guatemala during the implementation and execution phase of the project.	1. Will establish legal, technical, administrative, and policy procedures to adequately implement the project within the framework of the Honduran Constitution and the laws related to aspects of the project. 2. Will maintain close relations with Mi Ambiente+ and other government institutions involved in the project to oversee guidelines that, regarding treaties, conventions, agreements, and other international accords, are signed and ratified between Honduras and Guatemala. 3. Will promote open and transparent dialogue, encouraging good relations between Honduras and Guatemala that will facilitate IRBM of the Río Motagua. 4. Will provide support to and participate in the Guatemala—Honduras High-Level Commission in its development of a framework for institutional cooperation that facilitates IRBM of the Río Motagua; in addition, will be a member of Honduras's TAC.	1. Legal, technical, administrative and policy procedures related to the project developed and implemented following the SER's guidelines. 2. Guatemala—Honduras High-Level Commission operating and executing its functions and tasks for IRBM of the Río Motagua. 3. The Honduras TAC performs its role following the directives provided by the SER.	1 and 2	5 years
Strategic Partners of the Project	National Institute of Forest, Protected Areas, Wildlife Conservation and	The ICF will provide technical assistance related to the identification of sources of land-based pollution, the identification of water recharge areas, and	1. Will support the WDA with information about changes in forest cover and their relation to land-based pollution, and the identification of water recharge areas. 2. Will provide guidelines to develop the NSAP for sustainable management of the Río Motagua watershed. 3. Will coordinate actions and provide technical guidance for the rehabilitation of riparian ecosystems and coastal ecosystems in the Río Motagua watershed in Honduras.	1. Studies about water recharge areas within watersheds available. 2. Project Coordination has support for developing the WDA, SAP, and NSAP regarding forestry issues that contribute to reducing land-based pollution.	1, 2 y 3	5 years

	Development (ICF)	their sustainable management and protection.	4. Will provide technical support to the Municipality of Nueva Frontera to reduce diffuse environmental contamination from soil erosion and increase water recharge of the aquifer through participatory sustainable reforestation initiatives on the Piladeros Mountain.	3. Key riparian ecosystems and coastal ecosystems in the Río Motagua watershed in Honduras rehabilitated. 4. The Municipality of Nueva Frontera and other local stakeholders reforest and protect key water recharge areas in the Piladeros Mountain		
	Honduran Institute of Tourism (IHT)	The IHT will provide technical assistance related to the identification of land-based sources of pollution affecting coastal areas of interest for the tourism sector	1. Will contribute to the development WDA with information on tourism sector activities and pollution in coastal areas, 2. Will provide guidelines to develop the NSAP for sustainable management of the Río Motagua watershed. 3. Will provide support to the binational environmental education program for the reduction of pollution in coastal areas.	1. Information available about commercial activities related to tourism, as well as the number of tourists, their characterization, and the environmental impact. 2. Available information and statistics about tourism sector activities in the Río Motagua watershed. 3. Population trained and made aware of the importance of the conservation of coastal ecosystems and areas of environmental importance.	2	3 years
Institution supporting the municipalities	Association of Honduran Municipalities (AMHON)	AMHON will provide technical and legal support to the municipalities in the Río Motagua watershed that participate in implementation of the project.	1. Will provide support by facilitating information about the municipalities and will act as the link between Mi Ambiente+ and the municipalities for IRBM of the Río Motagua. 2. Will facilitate project implementation, principally with those municipalities where pilot projects will be developed to reduce land-based pollution and planning for IRBM of the Río Motagua. 3. Will facilitate support for the project through socialization, participation, and implementation.	1. Municipalities with knowledge about the project, the actions that are being executed and implemented, and supporting these actions. 2. Project actions adequately disseminated at the national level.	2 and 3	5 years
Municipal governments	Municipalities	The municipalities will be directly responsible for reducing contamination from land-based sources and the implementation of actions at the local level for IRBM.	1. Will incorporate the principal findings of the WDA into the Municipal Development Plans and/or Investment Plans. 2. Will adapt the municipal regulatory framework for the management of surface water and groundwater. 3. Will participate in training technical staff, municipal officials, and the general population (including members of Patronatos and the Water Boards) to reduce land-based pollution. 4. Will participate in and coordinate actions for developing protocols for Local Action Plans and a proposed long-term monitoring system to monitor implementation of the SAP and NSAP. 5. Will participate in the Guatemala—Honduras High-Level Commission to develop the institutional framework for cooperation that facilitates IRBM of the Río Motagua. 6. Will participate in subnational committees to implement the SAP. 7. Will implement pilot projects for reducing land-based pollution: management and treatment of domestic wastewater, protection and restoration of water recharge areas, reforestation to reduce diffuse contamination from water erosion and runoff.	1. Municipal Development Plans and/ Investment Plans with considerations for IRBM and gender. 2. Technical staff, municipal officials, and the general population trained in reducing land-based pollution with a focus on gender equality. 3. Information about environmental indicators updated and available. 4. Land-based pollution reduced in prioritized municipalities, contributing to IRBM of the Río Motagua.	2 and 3	5 years

			8. Will promote the participation of the OMM, Women Commissions of the Municipal Development Council, and women in general in development of the WDA, and training and consultation for the IRBM.			
Civil society	Private sector	The private sector will participate by supporting project activities to reduce land-based pollution caused by agricultural, livestock, industrial, commercial, and tourism activities, among others.	1. Will support the development of protocols for Local Action Plans. 2. Will form part of joint actions with the governments of Guatemala and Honduras as part of the international cooperation task group's strategy to ensure economic support for implementation of the SAP. 3. Will participate in subnational committees for implementation of the SAP and NSAP. 4. Will benefit from incentives for implementing clean technologies and the adoption of sustainable production practices.	1. The private sector participates in and contributes to decision-making and actions to reduce land-based pollution and IRBM of the Río Motagua. 2. Clean technologies and sustainable production practices under implementation.	2 and 3	5 years
	Patronatos and Water Boards, and other CSOs	The CSOs will represent the interests of the community during project implementation. The Water Boards are organizations recognized by the municipalities for overseeing the management of water sources in their communities; as such, they will actively participate in IRBM at the local level.	1. Will participate in project activities to develop Local Action Plans and the implementation of actions to reduce contamination within the framework of the Guatemala—Honduras for IRBM of the Río Motagua. 2. Will be beneficiaries of training on issues related to reducing land-based pollution and IRBM of the Río Motagua, in which women's participation plays an important role. 3. Will participate in subnational committees for implementation of the SAP and NSAP. 4. Will participate in environmental awareness and education campaigns, including the active participation of women, to promote reducing land-based pollution. 5. Will support the municipalities in the implementation of pilot projects.	1. Active participation by Patronatos, Water Boards, and other CSOs in decision making and implementing actions for IRBM of the Río Motagua in its locations. 2. Members of Patronatos, Water Boards, and other CSOs trained and aware of the importance of reducing land-based pollution within IRBM.	2 and 3	5 years
	Local communities	Will participate and benefit from project implementation, including the reduction of land-based pollution improving their quality of life	1. Will participate in project activities for the development of Local Action Plans 2. Will participate in the implementation of actions for reducing pollution as part of the binational SAP and NPAS for the IRBM of the Río Motagua watershed. 3. Will be beneficiaries of training for IRBM and environmental education for the reduction and management of domestic solid waste. 4. Will directly participate and benefit from the implementation of pilot projects in prioritized municipalities. 5. Will participate in decision-making processes related to the implementation of the project through the Patronatos, Water Boards, and other CSOs, which represent them.	1. Active participation form local community members in decision making and implementing actions for IRBM of the Río Motagua at the local level 2. Community members trained and aware of the importance of reducing land-based pollution within IRBM. 3. Gender Strategy and Action Plan implemented (Annex L).	2 and 3	5 years
	Women organizations and groups	Women organizations will represent the interests views, and priorities of women	1. Will participate in project activities for the development of Local Action Plans. 2. Will participate in the implementation of actions for reducing pollution as part of the binational SAP and NPAS for the IRBM of the Río Motagua watershed.	1 Gender Strategy and Action Plan implemented (Annex L).	2 and 3	5 years

		during project implementation	3. Will be beneficiaries of training for IRBM and environmental education for the reduction and management of domestic solid waste. 4. Will directly participate and benefit from the implementation of pilot projects in prioritized municipalities. 5. Will represent women interests through organizations and offices such as OMM, Watershed Groups, and Municipal Water Boards.			

STAKEHOLDER PARTICIPATION PLAN FOR GUATEMALA AND HONDURAS						
Strategic Partner Of The Project	UNDP	The Implementing Agency of the GEF that will provide guidance, institutional support, and technical and administrative assistance, as well as theoretical knowledge and practices at the local level and for the effective execution of the project.	1. Will facilitate the communication, relationships, and coordination between GEF, the MARN, and Mi Ambiente+ for the adequate implementation of the project. 2. Will oversee compliance with procedures, standards, and other actions necessary for the adequate technical and administrative management of the project. 3. Will help the project to comply with agreements as to its objectives, results, outcomes, goals, and that the progress in achieving them is in line with the project's schedule. 4. Will facilitate and support the process of developing reports, and monitoring and evaluation of the project by the GEF.	1. Adequate communication, relations, and coordination between the GEF, MARN, and Mi Ambiente+ in the implementation of the project. 2. Procedures, standards, and other necessary actions for the adequate technical and administrative management of the project have been fully complied with. 3. The project's objectives, products, and outcomes have been achieved. 4. Process for creating reports, monitoring and evaluation has been appropriately executed and has allowed the evaluation of the project's results as well as the replication of best practices related to IRBM.	1, 2, 3, and 4	5 years

ANNEX L: GENDER STRATEGY AND ACTION PLAN

Guatemala and Honduras: Gender Context

The Río Motagua watershed has a population of 4,339,748; 94.8% of whom are Guatemalan and 5.2% are Honduran. 51.7% of the inhabitants of the watershed are women and 48.25% are men. Poverty significantly affects both country's populations, due to the inequalities in terms of income and resources, especially cultivatable land. The rural population, in addition to deterioration of its ways of life, faces environmental degradation, lack of basic public services, and the scarcity or completely lack of presence of State institutions.

Inequality in Guatemala and Honduras is increasing due to an economic system that puts the planet and its ecosystems at risk, leads to human displacement, little opportunity to earn income, reduces the ability of the population to influence public policy, especially women and indigenous communities. Per UNDP, in 2016 Guatemala and Honduras were highlighted among the countries with the highest levels of poverty in the region, ranked 125 and 130 in its Human Development Index (HDI). The Gini coefficient[15] for Honduras is 0.52 and for Guatemala it is 0.53. Both countries are considered the most unequal in Latin America and the Caribbean. The HDI is an aggregated metric that measures how populations achieve basic goals in three areas: life expectancy, education, and per capita income. The HDI for Guatemala is 0.49 and for Honduras it is 0.63.

According to household surveys conducted in both countries, the level of poverty in Guatemala is 59.3% of the population (in the rural areas up to 76% of the population lives in poverty). When the data are disaggregated by ethnic identification the poverty level reaches 69.3%. While the rural population indeed suffers the most from poverty, rural women, who comprise 50.5% of the rural population, suffer the most marginalization and deterioration of their living conditions. There are no available data for Honduras regarding poverty disaggregated by sex; nevertheless, the statistics on extreme poverty are very high, which indicates a high level of inequity. The difference between the rural and urban areas is just two points, which indicates that the level of inequality between the two is not pronounced.

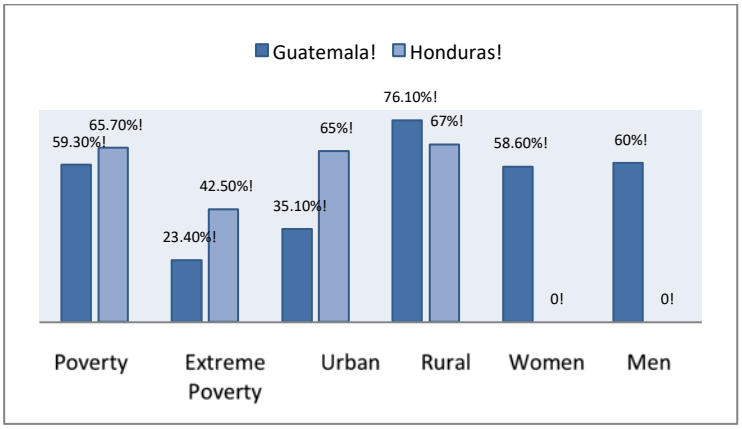


Figure 1 – Guatemala and Honduras: Persons in situations of poverty disaggregated by type, area, and sex (percentages). Source: INE, 2016.

[15] The Gini coefficient is an indicator that measures the concentration of income; that is, the inequality of income distribution among inhabitants of a country or region. It is measured between the values of 0 and 1: the closer to 0 it is, the greater distribution of income; conversely, the closer to 1, the greater the concentration of income.

The female index of poor households[16] developed by the Economic Commission for Latin America (CEPAL) through the Gender Equality Observatory indicates that in 2014, for every 100 men living in the region's poor households, there were 101 women in Guatemala and 100 women in Honduras living in a similar situation. For the project region, the index reaches 118, which provides evidence of the lack of women's economic self-sufficiency, who in the absence of other inputs into the household are more predisposed to being in a situation of poverty, which becomes more acute in households with a greater number of children.

Another important indicator for measuring access of the population to economic opportunity is income. Receiving one's own income enables decision-making power over the management of payments to cover one's own needs and those of household members, which makes this a key indicator to characterize the lack of economic independence of women. Per CEPAL, if indeed the increase in women's participation in the labor market has contributed to the reduction of the percentage of women not earning their own income as first measured at the end of the 1990s, this percentage in 2014 still reached a regional average of 31.1 %, while the percentage for men was 11.4%. In the case of Guatemala, the percentage of women who do not earn their own income is almost 40%. In Honduras, this statistic exceeds 50% of the population, indicating the economic dependence of women in the country.

At the same time, women in both countries perform the majority of unpaid labor, mostly in the form of domestic care work. According to Guatemala's National Institute of Statistics (ENCOVI), in 2014 women spent 6.1 hours of their day doing unpaid labor that contributes to the family's wellbeing and society´s development while men spent 2.6 hours. In Honduras…

In Guatemala, after the signing of the Peace Accords in 1996 several mechanisms specifically for women were created, including the Office for the Defense of Indigenous Women (DEMI) and the Presidential Secretariat for Women (SEPREM). Several laws and policies addressing women's rights were issued including the National Policy for the Promotion and Comprehensive Development of Women - PNPDIM).

Guatemala ranks among the countries with the highest rate of violent deaths among women (9.7 in 100,000). In 2013, according to data from the National Institute of Forensic Sciences (INACIF), 748 women lost their lives to violence, a 10% increase compared to 2012,this is an average of 2 death per day.[17] The situation is similar in Honduras. In 2012, 606 cases of femicides – the intentional killing of women or girls because of their sex - were reported, which represents, on average, 51 women murdered per month.[18] In 2013, 629 cases of femicide were registered.[19] These statistics are relevant when considering how to approach women's engagement in the IRBM process, particularly at the decision-making level and in terms of increasing economic empowerment, and the need to involve men in efforts to promote gender equality.

Women play a vital role in environmental management, and successful IRBM will require women's inclusion and participation. Women in Río Motagua watershed play a key role in natural resource management in the areas of :

- Water collection:
- Waste disposal and management

[16] Technical note: the female poverty index: Ratio between: ((Number of women in poor households between 20-59 years old / Number of men in poor households between 20-59 years old) / (Number of women in all households between 20-59 years old / Number of men in all households between 20-59 years old))*100 (CEPAL, 2014)

[17] UN Women: Where we are: Guatemala

[18]National Autonomous University of Honduras (UNAH), "Boletin especial: violencia contra las mujeres y femicidios en el Distrito Central año 2012", special edition No. 12 (June 2013) (www.unicef.org/honduras/Mujeres_DC_2012.pdf).

[19] United Nations Report of the Special Rapporteur on violence against women, its causes and consequences, on her mission to Honduras (1–8 July 2014)

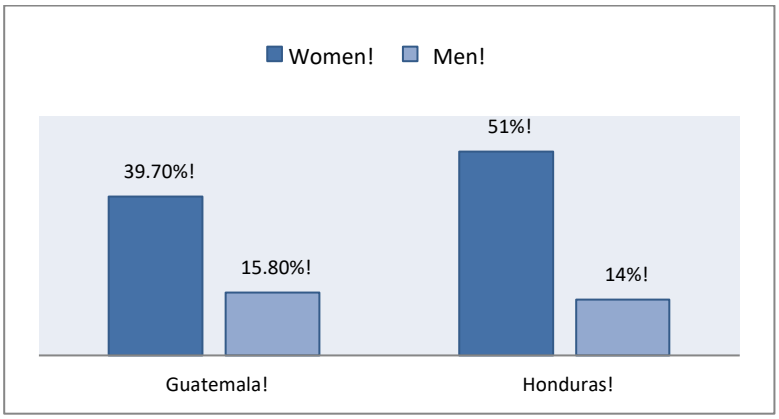


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Figure 2 – Guatemala and Honduras: Persons earning their own income, disaggregated by sex (percentages) Source: CEPAL, 2014.

Barriers and opportunities for gender equality

The project for the IRBM of the Río Motagua watershed spans a wide geographical area—14 departments in Guatemala and three departments in Honduras, that are within the watershed. The IRBM of the Río Motagua watershed involves a participatory approach for the various stakeholders who reside within the watershed and are involved in its environmental management. The environmental institutions, municipalities, and others, will have the opportunity to interact during the IRBM processes. This will require that the gender mechanisms and leadership of women's organizations have the opportunity to become involved in the environmental, cultural, and educational activities of the project, with major emphasis placed on watershed planning and management.

The actions planned for the project include participatory watershed management processes that are focused on improved surface and groundwater, soil management and domestic wastewater and solid waste management, and as well as an analytical and planning process focused on improving the livelihoods of the populations living in the watershed, especially in the priority sites identified for specific investments such as the pilot projects. The successful interventions will be replicated in other sites within the watershed through future investments.

This wide range of actions will be the catalyzing point for creating the IRBM process for the watershed; however, the following barriers must be considered for the effective incorporation of a gender responsive approach into the project:

- Women's unpaid domestic work, including as family caregivers and small-scale farmers, limiting their participation in planning and other themes related to environmental issues.
- Poor families often require the added labor of children to help make ends meet; for girls, this may also include providing childcare for siblings. In Guatemala, 25.8% of children ages 5-14 are engaged in child labor (Global Education Fund, 2015).
- Large distances between communities and municipal or departmental capitals, where planning meetings, trainings, and public actions take place may limit women participation. Also, meetings that take place at inconvenient times for women to attend or that do not provide child care.
- Difficulty accessing transportation and the time required to make the trips for participation including transportation costs, as most women do not have permanent incomes.
- Prevalence of men as the decision makers for community, local, departmental, regional, and national development plans.
- Cultural patriarchal patterns that inhibit women's participation in spaces where men are present, which limits their interventions, or many times they are not considered.
- The participation of women may reaffirm the gender roles, highlighting discrimination, limiting their participation to logistical activities such as food preparation.
- Violence against women can prohibit or interfere with women's participation in environmental, planning, or solution-seeking projects.

- Disparity in their knowledge about environmental issues, especially issues that are technical in nature, which creates apathy, or in many cases, their exclusion because they are thought of as "men's" concerns.
- Lack of knowledge about the region's institutional framework, which is managed primarily by men.
- Unfamiliarity with the problems that specifically concern women, so that they are not identified or feel that they are represented in the project, and as a result do not consider their participation as particularly important.
- The municipalities see women as potential voters, which is why they are organized around processes that reaffirm their gender roles and do not promote their participation in decision-making processes.
- The national, regional, department, and municipal institutions create gender mechanisms but do not strengthen their structure or roles in the strategic action framework that ensures women's empowerment. This is the case with the OMM and DMM.

It is also important that the project values the positive elements that women's participation would bring to the transformation processes, which will create opportunities that make these processes more successful. The opportunities are identified as follows:

- Strengthening the political autonomy of women by recognizing their leadership and proposals for solving problems that affect them, particularly regarding environmental, natural resources, water, livelihood issues, etc.
- Empowering women to create actions focused on their priorities and needs, such as facilitating access to livelihoods to strengthening the family economy.
- Improve their capacity for planning, especially regarding IRBM methodologies, with which women can identify proposed solutions to the contamination caused by domestic solid waste and wastewater.
- Improve women's knowledge of environmental issues, especially regarding domestic solid waste and wastewater management.
- Strengthen women's and men's knowledge about the management of agrochemicals and the various ways to replace their use or improve management of the runoff.
- Commitment to the development of activities related to the reduction of land sources of pollution and solid waste management that improve the household economy and way of life.
- Facilitate women's direct participation in leadership and management of programs related to environmental education; support men's engagement in gender equality as a way to improve IWRM.
- Development of short-, medium-, and long-term programs that create environmental awareness and cultural changes related to the management of domestic solid wastes and wastewater.
- Participation in roundtables that generate decision-making regarding the pilot projects that are supported by this project.

Objectives and components of the Gender Strategy and Action Plan

The objective of the Gender Strategy and Action Plan is to incorporate a gender responsive approach in the IRBM of the Río Motagua watershed through the inclusion of a gender analysis in the WDA/SAP, the framework of cooperation between Guatemala and Honduras, strategic action plans, and municipal development plans and investment plans.

In line with GEF and UNDP guidelines[20], a gender responsive approach means that the particular needs, priorities, power structures, status and relationships between men and women are recognized and that measures to actively address these areas have been incorporated in project design, implementation and evaluation so that both women and men can proportionately participate in and benefit from an intervention.

The goal of the gender responsive approach and inclusion of a gender analysis in the WDA/SAP is to better deliver the environmental outcomes of project while also promoting gender equality and women's empowerment.

In order to respond to achieve this, it is important that the project undertake the following actions:

- Strengthen the institutional capacities for gender transversality within the project.

[20] GEF Policy on Gender Mainstreaming (2012): UNDP Gender Equality Strategy (2014-2017)

- Disaggregate the information about the different activities that the project develops according to sex, to identify the direct or indirect beneficiaries and the differentiated impacts.
- Support the equal participation of women and men in the project, especially at the decision-making level, as well as actions that help to make visible and diminish gender inequalities, with specific budget to facilitate these activities.
- Establish indicators that help to measure the progress of gender equality and women's empowerment to those that the project will directly contribute.
- Develop methods and tools that will allow gender transversality within the project.

Gender Action Plan

Component 1: Diagnostic analysis of Surface and Groundwater Resources of the Río Motagua watershed that are shared by Guatemala and Honduras						
Output 1.1. A Watershed Diagnostic Analysis (WDA), following the Transboundary Diagnostic Analysis/Strategic Action Program (TDA/SAP) methodology identifying the main environmental water resource issues in both countries, finalized and agreed upon.						
Gender-related activity	Indicator	Target	Baseline	Budget (USD)	Timeline	Responsibility
Incorporate economic, social, and environmental indicators disaggregated by sex, age, and ethnicity in the watershed diagnostic methodology (TDA/SAP).	The WDA/SAP has disaggregated all socioeconomic information for the watershed by sex, ethnicity, and age range.	Incorporate a gender focus in the WDA/SAP.	WDA/SAP has not been developed.	12,000	Year 1	Gender Expert MARN/ MiAmbiente+
Identify the social, economic and cultural impacts differentiated by gender, disaggregated by natural resources, water, wastewater contamination, wastes and solid wastes in tributaries, including groundwater.	The WDA/SAP includes an analysis of the impacts of the division of work between men and women, a gender analysis in the quality of natural resources, wastewater and solid waste contamination in tributaries, including groundwater.	The WDA/SAP includes an analysis of the impacts of the division of work between men and women.	WDA/SAP has not been developed.	2,400	Year 1	Gender Expert MARN/ MiAmbiente+
Establish participation strategies with gender equality in the process for the formulation of proposals and decision-making in the IRBM process.	Participation of women and men in the consultation process to develop the diagnostic analysis (WDA/SAP).	Equal participation of women and men in the consultation process to develop the diagnostic analysis (WDA/SAP).	Consultation process to develop the diagnostic analysis (WDA/SAP) has not started.	8,250	Year 1	Gender Expert MARN/ MiAmbiente+
Incorporate requirements into the terms of reference to contract a consultant who specializes in gender issues.	Gender considerations regarding the drafting of terms of reference, contracting process, and monitoring of the WDA/SAP hiring process.	Gender units of the MARN and MiAmbiente+ participate in the drafting of terms of reference for the development of the WDA/SAP.	WDA/SAP process has not started.		Year 1	MARN/ MiAmbiente+

Incorporate into the terms of reference for the hiring of WDA/SAP a gender focus into all components, including fieldwork.	WDA/SAP terms of reference are gender responsive in its components, including fieldwork, with gender expertise capacity to provide support.	Gender responsive focus included in terms of reference for the hiring of WDA/SAP staff.	WDA/SAP process has not started.		Year 1	Gender Expert MARN/ MiAmbiente+
Component 2: Binational Strategic Action Program (SAP) for the integrated management of the Río Motagua watershed (Guatemala and Honduras) is agreed upon for implementation						
Output 2.1. Binational SAP completed and endorsed at the highest (ministerial) level in each country. Output 2.2. High-level commission established that includes a Technical Committee and promotes permanent dialogue and coordination on Río Motagua management between Guatemala and Honduras.						
Include as a requirement that the process for developing the SAP, NSAP, and local action plans ensures a gender responsive focus in the proposed methodology for development and consultation.	The SAP, NSAP, and municipal action plans incorporate a cross-cutting gender responsive approach.	SAP, NSAP, and municipal action plans include a gender focus.	SAP, NSAP, and municipal action plans do not include a gender focus.	4,595	Year 1	Gender Expert MARN/ MiAmbiente+
SAP between Honduras and Guatemala is created with participation from SEPREM and INAM as national gender mechanisms.	Gender-based national mechanisms are part of the SAP.	SEPREM (Guatemala) and INAM (Honduras) participate in the development of the SAP.	SAP has not been developed.	4,595	Year 1	Gender Expert MARN/ MiAmbiente+ SEPREM INAM
Women's organizations represented in departmental development councils (CODEDES) in Guatemala and Watershed Committees in Honduras are consulted in the process to develop the NSAP in each country.	Women represented in CODEDES and Watershed Committees participate in the development of the NSAP.	At least 80% of the women represented in CODEDES and Watershed Committees participate in in the development of the NSAP.	Process to develop the NSAP has not started.	3,000	Year 1	MARN/ MiAmbiente+
The DMM (Guatemala) and OMM (Honduras) participate in the process to develop the local	Offices or municipal divisions representing women participate in the	At least eight offices or municipal divisions representing women participate in the	Process to develop the NSAP has not started.	2,000	Year 1	MARN/ MiAmbiente+

action plans in the prioritized municipalities.	process to develop local action plans.	process to develop local action plans.				
Women who participate in the COMUDES in Guatemala and the CDMs in Honduras take part in the process to develop the local action plans in the prioritized municipalities.	Women participate in the development of local action plans.	At least 40% of the stakeholders who participate in the process to develop local action plans are women.	Process to develop the local action plans has not started.		Year 1	MARN/ MiAmbiente+
The monitoring system set up for the SAP, NSAP, and local plans incorporates gender responsive indicators to measure the impacts of their implementation.	The monitoring system for the SAP, NSAP, and local plans is gender responsive.	The monitoring system incorporated gender responsive indicators to measure impacts related to workload, women's participation, and women's livelihoods.	The monitoring system for the SAP, NSAP, and local plans has not been developed.	4,595	Year 1	MARN/ MiAmbiente+
Output 2.3. Two (2) national-level proposals for updating the regulatory framework allow synergies for surface and groundwater management, including reducing pollution (solid waste, sedimentation, wastewater, etc.) considering the regulations and international conventions to which both countries are parties.						
Review the international commitments related to the environmental issue at hand and assess the gender implications; the gender strategy framework and action plan serve as a guide for the project.	Regulatory framework for surface and groundwater management includes gender aspects.	Two (2) national-level proposals for updating the regulatory framework for surface and groundwater management include gender aspects.	There is no analysis of the gender aspects in the regulatory framework for surface and groundwater management	2,000	Year 1	MARN/ MiAmbiente+
Output 2.4. An IRBM Binational Coordination Unit established within the Binational Framework Agreement between Guatemala and Honduras. Output 2.5. Memorandum of Understanding between the countries for the implementation of the IRBM.						
The Gender Units of the MARN and Mi Ambiente are part the Binational Committee and SEPREM and INAM are accepted as members of the National Technical Committees (also know as TACs).	Gender institutional representation in the TACs.	SEPREM and INAM are members of the TACs.	Gender units of MARN and MiAmbiente+ participate in the national TACs; SEPREM and INAM do not.	11,000	Year 2	MARN/ MiAmbiente+

The gender component is integrated into the Binational Framework Agreement, in which the countries commit to concrete actions for incorporating a gender focus into the framework for implementation of the project, including affirmative measures for participation, economic empowerment of women, and steps to take to eliminate all forms of discrimination against women in the project implementation framework.	Gender aspects incorporated in the Binational Framework Agreement.	At least one gender component is incorporated in the Binational Framework Agreement.	There is no gender component in the existing binational agreements.		Year 2	MARN/ MiAmbiente+
Gender considerations are included in the guidelines for reducing water contamination and in the technical studies in three municipalities of the Motagua River watershed.	Technical studies at the municipal level incorporate a gender responsive focus.	Three technical studies at the municipal level incorporate a gender responsive focus.	There are no gender considerations, nor technical studies in the municipalities of the Motagua River watershed.		Year 2	MARN/ MiAmbiente+
Output 2.6. Targeted institutional capacity-building programs for IRBM and reduce land-based pollution.						
Identify the gender responsive variables to include in the environmental information system, including data disaggregated by sex, life cycle, and area.	Gender responsive variables included in the environmental information system.	Gender responsive variables in at least three areas: livelihoods, workload, and participation.	There is no articulated environmental information system between Guatemala and Honduras, and in-country existing systems do not include gender disaggregated variables.	11,600	Years 1/Year 2	MARN/ MiAmbiente+
Training of women in IRBM and the sound management of chemical and toxic wastes.	Women and men participate in capacity-building activities.	At least 30% of stakeholders who participate in IRBM capacity-building activities are women.	Limited or no participation of women in capacity-building activities related to IRBM.	23,900	Years 1/Year 2	MARN/ MiAmbiente+

Include women's participation in the information exchange process for IRBM.	Women and men participate in the information-exchange meetings for IRBM.	At least 30% of stakeholders who participate in the IRBM information-exchange meetings are women.	No participation of women in the information exchange meetings for IRBM.	2,125	Year 2/Year 3	MARN/ MiAmbiente+
Include a gender component in the environmental education program.	Gender aspects included in the environmental education program of the project.	One gender component included in the environmental education program of the project.	MARN and MiAmbiente+ have included gender modules in their environmental training processes.	27,525	Year 1	MARN/ MiAmbiente+
Include women's participation in prioritizing and defining the environmental education programs.	Training modules incorporate a gender responsive focus into its materials and methodologies, with women participation.	At least 80% of the training modules incorporate a gender responsive focus into its materials and methodologies, with women participation.	There is no participation of women in the definition and content of environmental training.		Year 1	MARN/ MiAmbiente+
Output 2.7. Program for the sound environmental management of harmful wastes (U-POPs emissions reduction along the river and plastics disposed of near and in surface water bodies) by key institutions in place: a) Departmental (8) and municipal (3) development plans incorporate the sound environmental management of harmful chemicals and waste; b) 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). Output 2.8. Technical guidelines for the handling, transport, storage, and disposal of waste. Output 2.9. Program to monitor effects of U-POPs emissions and plastic waste disposal on human and environmental health, including improved laboratory and analytical competencies developed.						
Women represented in the CODEDES (Guatemala) are consulted during the process to develop the eight departmental plans and three municipal plans for the incorporation of the sound environmental management of harmful chemicals and waste.	Women from CODEDES participation in the consultation process.	Documented participation of women from CODEDES participation in the consultation process.	The development of the eight departmental plans and three municipal plans has not started.	18,000	Year 2/ Year 3	Gender Expert MARN
Design and incorporate gender components into the departmental plans and municipal plans in Guatemala.	Gender aspects included in the eight departmental and three municipal plans.	One gender component included in each of eight departmental plans and three municipal plans.	The development of the eight departmental plans and three municipal plans has not started.		Year 2/ Year 3	Gender Expert MARN

A gender analysis in the information systems and databases related to U-POPs.	Gender component included in the U-POPs information system.	At least one gender component is included in the U-POPs information system.	There is no gender analysis associated an information systems and databases on U-POPs.	15,000	Year 2/ Year 3	MARN
Guidelines contain an analysis of women's roles in the processed of handling, transport, and disposal of wastes, including negative impacts (including Information about the handling of waste in the landfills disaggregated by sex and age).	Information of role of women and men in handling, transport, and disposal of wastes in landfills disaggregated by type of activity, age, and ethnicity.	Database with information regarding the Role of women and men in handling, transport, and disposal of wastes in landfills disaggregated by type of activity, age, and ethnicity.	There is no information available on the gender roles or negative impacts on the process of handling, transport and waste disposal.	8,000	Year 2/ Year 3	MARN
Analysis of the impact of U-POP emissions on human health and the sex-differentiated vulnerabilities.	Information on vulnerabilities to U-POPs based on gender roles.	Database with information on gender vulnerabilities related to U-POPs	No studies on U-POPs and gender vulnerabilities.	23,000	Year 2/ Year 3	MARN
Component 3: Innovative pilot initiatives for the IRBM of the Río Motagua watershed (Guatemala and Honduras) generate knowledge and lessons learned, thereby allowing the replication and scaling-up of successful experiences.						
Output 3.1. Innovative investments to reduce Río Motagua watershed contamination and coastal pollution from land-based sources:						
Cross-cutting focus of gender responsiveness in six pilot projects, inclusion of awareness-raising campaigns and environmental education with the participation of the OMM, students, men and women from local organizations.	Women participate as direct beneficiaries of six pilot projects.	At least 30% of direct beneficiaries of six pilot projects are women.	No pilot projects on IRBM and no participation of women.	51,527	Year 2, 3, 4, 5	MARN/ MiAmbiente+
Women farmers and women-owned businesses with access to incentives to implement clean technologies and adopt sustainable production practices.	Women farmers and women-owned businesses use incentives.	At least 30% of direct beneficiaries of incentives are women farmers and women-owned businesses.	No incentives available for women farmers and women-owned businesses.	43,500	Year 2, 3, 4, 5	MARN/ MiAmbiente+

Output 3.2. Municipal solid waste management practices improved (with cofinancing and CW GEF funds):						
Solid waste management plans contain strategies to ensure women's participation as "environmental advocates" for the separation and management of organic and nonorganic wastes, recycling, and composting.	Men and women participating in the benefits and actions promoted in the solid waste management plans.	At least 30% of people participating in the benefits and actions promoted in the solid waste management plans are women.	There are no solid waste management plans or women participating in environmental-related actions.	147,500	Year 2/ Year 3	MARN
Inventory of landfills, count of the number of people disaggregated by sex and age who work in the management of solid waste.	Men and women participating in the management of solid waste.	At least 30% of stakeholders participating in the management of solid waste are women.	No information available regarding gender in the management of solid waste.		Year 2/ Year 3	MARN
The management of solid waste includes women, who benefit in terms of improving living conditions, health, and income generation.	Women participate of the benefits of management of solid waste in landfills.	At least 30% of stakeholders who participate in the management of solid waste in landfills are women under healthy and safe conditions, and generating income.	30% of people who participate in the management of solid waste in landfills are women but in unhealthy and unsafe conditions.		Year 2, 3, 4, 5	MARN
Women of the beneficiary communities actively participate in the solid waste management best practices program and are trained.	Men (ages) and women (ages) trained in solid waste management best practices program.	At least 30% of stakeholders trained in best practices for solid waste management are women.	Women are no trained in best practices for solid waste management.		Year 2/ Year 3	MARN
Output 3.3. 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 and furan emissions and plastic wastes						
Three pilot projects include strategies and campaigns for domestic solid waste management, and which include women's participation in decision-making and access to direct benefits.	Women participate as direct beneficiaries from three pilot projects for domestic solid waste management.	40% of the direct beneficiaries from three pilot projects for domestic solid waste management are women.	No pilot projects for domestic solid waste management and no participation of women.	15,000	Year 2, 3,3 4, 5	MARN

Development of protocols and implementation of best practices and techniques for the reduction of solid wastes and proper handling and disposal of domestic waste is done in a participatory manner.	Women participate in the development of protocols and implementation of best practices and techniques for the reduction of solid wastes and proper handling and disposal of domestic waste.	40% of local stakeholders participating in the development of protocols and implementation of best practices and techniques are women.	No protocols and techniques available for the reduction of solid wastes and proper handling and disposal of domestic waste.	80,000	Year 2, 3, 4, 5	MARN
Output 3.4. Rehabilitation (conservation and protection, reforestation, natural regeneration, remediation) of 250 ha of riparian ecosystems in the watershed in Honduras.						
Rehabilitation process delivers benefits including ensures generation of income.	Women participating in rehabilitation activities as direct beneficiaries.	At least 30% of direct beneficiaries of rehabilitation activities are women.	There are no rehabilitation initiatives for the rehabilitation riparian of ecosystems in the watershed in Honduras.	16,800	Year 2, 3, 4, 5	MiAmbiente+
Component 4: Knowledge Management and Monitoring and Evaluation.						
Output 4.1. Best practices documented and experiences shared (media, short videos, etc.) with other IW and CW projects using existing information-exchange platforms.						
Lessons learned documented and shared, highlighting overcoming barriers for participation and the role of women in IRBM, domestic solid water management, and the reduction of U-POPs in the Motagua River watershed.	Number of shares experiences of women participation in IRBM and domestic solid waste management.	Ten (10) experiences of women's participation in IRBM, domestic solid waste management, and the reduction of U-POPs in the Motagua River watershed documented and shared.	The participation of women in watershed management, domestic solid waste management, and the reduction of U-POPs has not documented.	46,180	Years 2, 3, 4, and 5	Communication /Knowledge Management Specialist Gender Expert
Total budget allocation (% or amount):				584,362		