



INCEPTION REPORT

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Version 2 : 02/02/2012

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Acronyms

BWRF	Belize Wastewater Revolving Fund
CARSEA	Caribbean Sea Ecosystem Assessment
CAR/RCU	Caribbean Regional Coordinating Unit
CEP	Caribbean Environment Programme
AS	Budgetary/Administrative Specialist
CS	Communications Specialist
CRew	Caribbean Regional Wastewater Management Fund
CWWA	Caribbean Water and Wastewater Association
EAs	Executing agencies
ENRA	Environmental and Natural Resource Accounting
ESMS	Environmental and Social Management System
GEF	Global Environment Facility
GoB	Government of Belize
GoG	Government of Guyana
GoJ	Government of Jamaica
GoTT	Government of Trinidad and Tobago
GDP	Gross Domestic Product
GWRF	Guyana Wastewater Revolving Fund
IACG	Inter-Agency Coordination Group
IDB	Interamerican Development Bank
IW	International Water
LBS	Land Based Sources
M&E	Monitoring and Evaluation
NWC	National Water Commission
PAHO	Pan American Health Organization
PC	Project Coordinator
PCG	Project Coordination Group
PDS	Project Development Support
PEAs	Pilot Executing Agencies
PFM	Pilot Financing Mechanism
PIF	Project Identification Form – GEF Terminology

PMU	Pilot Management Unit
PMR	Project Monitoring Report
PPG	Project Preparation Grant – GEF Terminology
PSC	Project Steering Committee
SIDS	Small Island Developing States
TS	Technical Specialist
UNEP	United Nations Environment Programme
UNEP/GPA	Global Plan of Action for the Protection
WCR	Wider Caribbean Region

1. Background

1.1 Wastewater Management in the WCR

The management of wastewater in the Wider Caribbean Region(WCR) has been discussed over the period of several decades. As early as 1976, the United Nations Environment Programme (UNEP) launched the Caribbean Environment Programme (CEP) in response to the Regional Seas Initiative aimed at advancing economic prosperity and environmental health within the region; the management of wastewater was on the agenda. The CEP along with Regional Governments identified land based sources of pollution from municipal, industrial and agricultural sectors and the resultant impact on marine resources as a key priority area to be addressed within the CEP.

Today, the degradation of the Caribbean marine environment remains a serious concern for many countries in the region. In this regard, the recent Caribbean Sea Ecosystem Assessment (CARSEA) study found that “sewage pollution from land sources and from ships has been the most pervasive form of contamination of the coastal environment.”The consequences of this reality to the Region’s economic prosperity, its future development and the quality of life of its people are significant. As too are implications for public health, biodiversity, climate change adaptation, fisheries and the tourism industry. A 2001, UNEP/GPA ¹ concluded that pathogenic organisms in waters contaminated by wastewater discharges cause “massive transmissions of infectious diseases to bathers and consumers of raw and undercooked shellfish.” Additionally, GESMAP scientists concurred that infection of seafood and shellfish occurs through the disposal of urban/domestic wastewater and also pointed to epidemiological evidence that enteric and respiratory diseases can be caused by bathing/swimming in marine coastal beaches contaminated by sewage. Both of these issues are significant public health concerns which create an additional burden on public health services.

With respect to biodiversity, the CARSEA study² found that sewage was one of the main factors that had caused approximately 80% of living coral in the Caribbean to be lost over the past twenty years. For example, in the case of Jamaica Burke etc al (2001)³ reported that all of the island’s coral reefs are threatened by a combination of human induced natural stresses one of which was sewage discharge. In addition, in a recent economic valuation study of reefs conducted for the island of Tobago by the World Resources Institute, the investigators estimated that coral reefs currently provide upwards of US\$100 million per year in benefits associated with tourism, US\$18-33 million in shoreline protection, and another US\$1million in benefits to fisheries which collective represent 50% of the island’s annual Gross Domestic Product (GDP).

¹ State of Marine Environment Report found at <http://www.unep.org/dewa/assessments/Ecosystems/water/marineassessment/index.asp>

² The CARSEA was developed as part of the Millennium Ecosystem Assessment (MA). The MA was called for by the United Nations Secretary-General Kofi Annan in 2000 and initiated in 2001, with the objective of assessing the consequences of ecosystem change for human well-being and determining the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being. The document can be found at <http://www.millenniumassessment.org/en/SGA.Carsea.aspx>

³ National Environment and Planning Agency, State of Environment Report 2010, Jamaica

Additionally, as a result of rapidly expanding urban populations, poorly planned development, and inadequate or poorly designed and malfunctioning sewage treatment facilities in most Caribbean countries, untreated municipal sewage is often discharged into the environment with serious human and ecosystem health implications. Added to this is the discharge of untreated or partially treated sewage from many tourism facilities. Such a situation add to the serious health, environmental and economic impacts outlined above.

In light of this current realities and the potential economic harm to the region urgent action is required.

1.2 Scope of the Problem

In 2001 the UNEP/GPA study estimated that approximately 85% of wastewater entering the Caribbean Sea is currently untreated. In the same year, the Pan American Health Organization (PAHO) reported that 51.5 % households in the Caribbean Region lacked sewer connections of any kind and only 17 percent of households are connected to acceptable collection and treatment systems. Less than 2 % of urban sewage in Small Island Developing States (SIDS) in the Caribbean is treated before disposal and the percentage is even lower in rural communities. In some countries for example, Antigua and Barbuda, Dominica and Haiti there is no sewerage system and sewage is disposed mainly through septic tanks and pit latrines.

In Latin America,⁴ Panama reporting in 2010 found that 91.6 % of the sewage generated was collected. However, of that amount 29.6 % was treated in a centralised wastewater treatment facility and the remainder used septic tanks or pit latrines. In Guatemala the 2002 census reported that out of 2,200,548 households 46.6 % had adequate sewage treatment facilities . While in Honduras in 2009, 78 % of the sewage was collected of which only 27 % was treated.

What then are the underlying reasons for this persistent problem? Resource Mobilisation Advisors⁵, in a study conducted during the project development phase of this project found that there were three significant challenges. These are inadequate policy and legal framework, insufficient financing and the low priority placed on waste water treatment.

The WCR suffers from a dearth of integrated strategic policy instruments and the supporting laws and regulations to effectively and sustainably manage the wastewater sector. Additionally, the absence of discharge standards and limited enforcement of existing laws and regulations represent further barriers to addressing the problem of wastewater management. At the institutional level there is often limited communication and inadequate collaboration between key stakeholder agencies resulting in an oftentimes fragmented approach to wastewater management. Many of the region's institutions face technical capacity issues as it relates to knowledge of appropriate alternative and low cost wastewater treatment technologies, operating and maintaining wastewater treatment systems, and monitoring and analyzing wastewater discharges. All of which create challenges in effectively managing wastewater.

Survey results based on Resource Mobilisation Advisors' field work found that Water Utilities often assumed full responsibility for investment, financing, and operations of treatment systems, which presented particular challenges for financing and makes the water sector "particularly dependent on local sources of funding". In most cases, however, local financing is not practical because the cost of

⁴ LatinoSan 2010 Conferencia LatinoAmericana de Saneamiento

⁵ Assessment of Wastewater Management in the Caribbean

financing is high and lending institutions do not view water service providers as strong credit institutions.

Finally, wastewater treatment is considered by many government officials, policy makers, water utility managers and stakeholders as a low priority. Given the importance of water to public health and quality of life issues; water projects are generally given priority over wastewater. Regional governments and utilities therefore reserve financial resources on a priority basis for water supply initiatives. Table 1 provides a breakdown of water supply and wastewater treatment in some selected countries.

Table 1: Water Supply and Wastewater Coverage

	Latest year available	Total Water Supply Coverage	Population connected to wastewater collection system	Population connected to wastewater treatment plants
		%	%	%
Belize	2000	91.0	15.1	15.1
Bermuda	2005	...	5.0	5.0
British Virgin Islands	2001	98.0	24.5	24.5
Costa Rica	2000	97.0	24.8	2.4
Cuba	2005	91.0	38.8	
Dominica	2005	97.0	23.0	13.0
Dominican Republic	2000	93.0	31.4	12.0
Jamaica	2006	96.0		
Mexico	2005	94.0	67.6	35.0
Panama	2005	91.0	...	37.0
St. Lucia		98.0		
Trinidad and Tobago	2005	91.0	20.0	20.0

Sources: World Bank Key Global Indicators and United Nations Statistics Division

This apparent bias for water projects ignores the consequence of providing water supply, and that is, the generation of wastewater.

There is thus an urgent need to increase the coverage of wastewater treatment in the Caribbean, which at present is far below the required levels. Damage by untreated wastewater to the marine environment including living coral can bring about severe economic consequences for people in the Caribbean.

In recognition of the gravity of this situation, a number of Countries from the WCR⁶ have ratified the Convention for the Protection and Development of the Marine Environment in the WCR, also known as the Cartagena Convention (adopted in Cartagena, Colombia on 24 March 1983), and signed the Protocol on Land Based Sources (LBS) of Marine Pollution, which was adopted on October 6, 1999. The LBS Protocol sets several goals to govern domestic sewage discharges into the waters of the Wider Caribbean.

While countries thus increasingly recognize the importance of improving wastewater management, obstacles exist in implementing the obligations of the LBS Protocol and taking required national actions. UNEP GPA reported in their 2006 *State of the Marine Environment Report* that significant financial constraints exist: there is a lack of adequate, affordable financing available for investments in wastewater management in the Wider Caribbean Region. Smaller communities in particular often find it difficult to obtain affordable financing for such improvements.

Presently countries often engage in “opportunistic capital planning” based on the availability of funding from donors or governments, and not on best value and net economic benefit. Therefore, developing innovative financial mechanisms and making affordable resources available to assist countries in the WCR to establish or expand domestic wastewater management programs and policies, based on national and local community needs, constitutes a priority for the region.

1.3 Project Development Phase

The full scale project was developed with the support of the Global Environment Facility (GEF) in partnership with the Inter-American Development Bank (IDB) and the United Nations Environment Programme (UNEP). In September 2008, IDB and UNEP jointly applied for a grant of US\$20 million from the Global Environment Facility (GEF) to implement the CReW. The Project Identification Form (PIF) was submitted to the Secretary of the GEF on September 25, 2008 and received the GEF CEO’s endorsement on September 26, 2008. On December 22, 2008, the GEF granted a Project Preparation Grant (PPG) in the amount of US\$380,000.

Resource Mobilisation Advisors were contracted and asked to (i) review the financing, legal and institutional constraints in the implementation of sustainable wastewater treatment and management initiatives in the WCR; (ii) develop lines of action to address those constraints; and (iii) help the IDB with the initial design of a fund and definition of potential pilots to be financed for wastewater management in the Caribbean Basin. The May 2009 report entitled *Assessment of Wastewater Management in the Caribbean* is found in **Annex A**.

During the assessment the Consultant interviewed key policy makers, water utility executives, local commercial lenders, regional financial institutions, water sector vendors, and local NGO’s in the region. Also as part of this study they identified numerous impediments to the financing of water and wastewater projects in the wider Caribbean, which have made financing for water projects from the

⁶ As defined in the Cartagena Convention, the *Wider Caribbean Region* comprises the marine environment of the Gulf of Mexico, the Caribbean Sea and the areas of the Atlantic Ocean adjacent thereto, south of 30 north latitude and within 200 nautical miles of the Atlantic Coasts of the United States. The countries of this region (who are also members of the Caribbean Environment Programme) are as follows: Antigua and Barbuda, Bahamas, Barbados, Belize, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Venezuela.

private sector or through government sponsored loan programs difficult, and have generally resulted in grant-based capital improvement planning by many local water utilities.

In addition, with the assistance of an IDB Technical Cooperation Agreement (RG-X1050) additional work was carried out to design the financial modalities based on the finding and guidance provided in the May 2009 study (**Annex B**).

The selection and location of the PFMs and the first generation project selection were decided on by a demand-driven process based on requests following presentations made by the IDB staff and consultants at two annual meetings of the Caribbean Water and Wastewater Association (CWWA). These presentations focused on the scope and implementation of the CReW program and called on local utilities and wastewater project sponsors to come forward with project proposals. In addition the IDB conducted one-on-one meetings with utility representatives from the region to seek their input and response to the CReW initiative. This allowed the design of the financial models to reflect local financial conditions, regulatory frameworks, water utilities capacity and national government objectives.

The selection of pilot projects was an important activity during the project development phase. In consultation with local water utilities, key policy makers, and regional financial institutions key criteria for the selection were developed. These were:

- promote the broad goals of the CReW
- utilize sustainable financial mechanisms
- establish innovative financial models that could be replicated throughout the region
- move quickly to implementation due to expressions of strong support from national and local government officials
- be ready for financing by the beginning of 2010
- ratifying the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region, also known as the Cartagena Convention⁷

Initially, five countries showed interest in taking part in the pilot. These were Belize, Barbados, St. Lucia, Jamaica and Guyana. Later Trinidad and Tobago expressed an interest. The four pilot countries submitted in the GEF proposal were Belize, Jamaica, Guyana and Trinidad and Tobago.

The GEF approval process requires the endorsement of the projects by countries in the region. Endorsements were received from 13 countries: Antigua and Barbuda, Barbados, Belize, Costa Rica, Jamaica, Guatemala, Guyana, Honduras, Panama, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

The project was approved by the GEF in November 2010 the project document is found in **Annex C**.

⁷ Adopted in Cartagena, Colombia on 24 March 1983 and signing the Protocol on Land based Sources of Marine Pollution (LBS Protocol), which was adopted on October 6, 1999. The UNEP CEP Technical Report No. 33 of 1994, which informed the development of the LBS Protocol, identified sewage as the number one point source of pollution impacting on the marine environment of the Wider Caribbean and sets goals and guidelines to govern domestic sewage discharges into the waters of the Wider Caribbean (Annex III of the LBS Protocol).

The following sections of the Inception Report focuses on the project components, structure, financing and reporting requirements. In addition, the proposed Annual Operating Plan for year one is outlined.

2 Project Activities

2.1 Overview

The Caribbean Regional Fund for Wastewater Management (CReW) was established to respond and address in part the challenges that face the WCR in respect of wastewater management (refer to Chapter 1). High among the barriers was the challenge of affordable financing. In light of this, the overarching objective of the CReW is to create pilot financial mechanisms that can be used to provide sustainable financing for environmentally sound and cost-effective wastewater management. The other objectives of the project are to facilitate policy and legal reforms, regional dialogue, and knowledge exchange with the key stakeholders in the Wider Caribbean.

The CReW project comprises the following five components. The figure below provides an outline of the project structure its components and the primary responsibilities of the Implementing Agencies; IDB and UNEP.

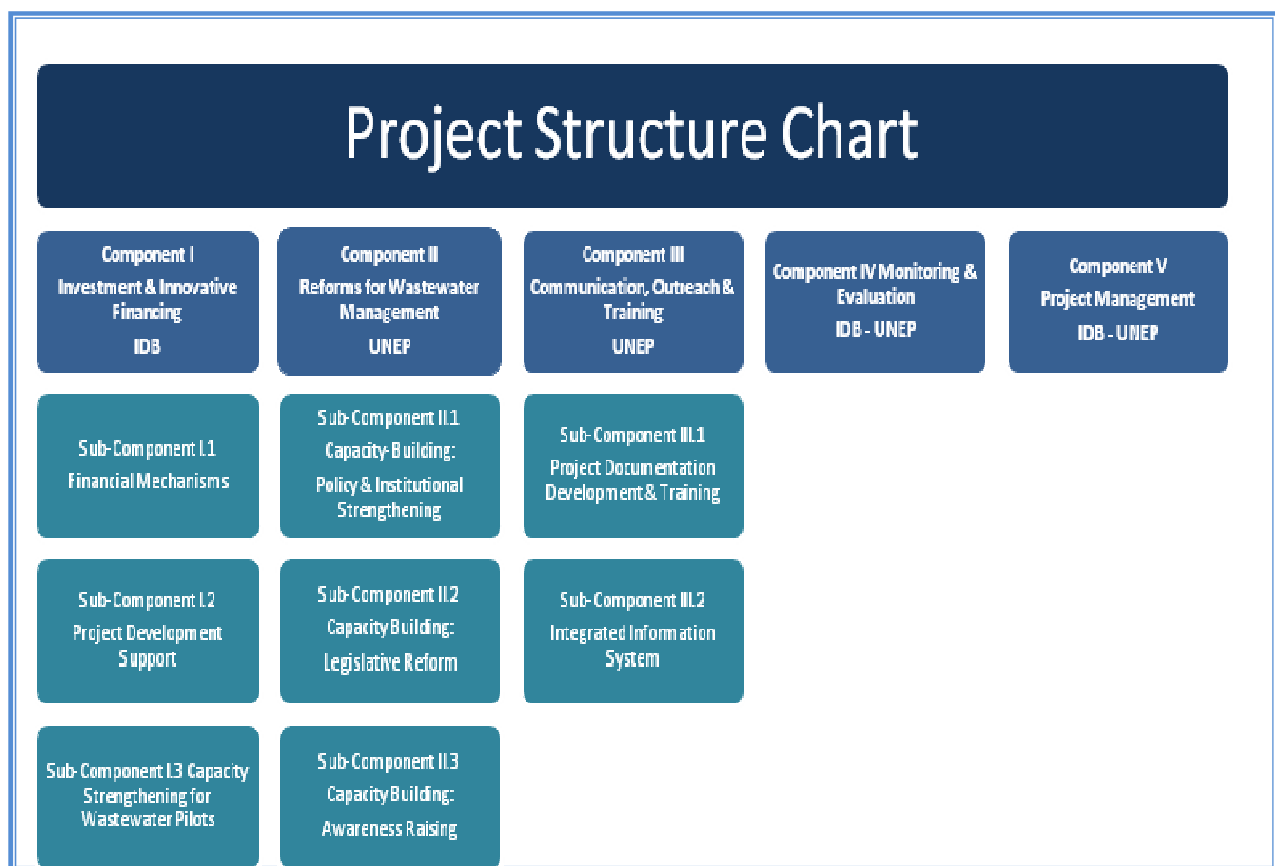


Figure 1: Project Structure

A brief description of each project component is found below.

2.2 Project Components

Component 1 – Investment and Innovative Financing for Wastewater Management- (US\$ 15.073 M)

This component will finance (i) the capitalization of four individual Pilot Financing Mechanisms (PFMs) that will provide and test pilot financing modalities for wastewater management projects; (ii) a Project Development Support (PDS) to provide technical assistance, such as design services, to ensure that the first generation projects to be financed under the PFMs satisfy the technical and environmental conditions of the local government; and (iii) strengthening the technical capacity at the pilot level. This component includes three subcomponents, which are described in further detail in the following sections.

Subcomponent 1.1: Pilot Financing Mechanisms

This subcomponent consists of the development and implementation of four PFMs and their respective first generation project that will be executed by the Pilot Executing Agencies (PEAs)⁸. The PFMs that have been identified are summarized below:

- Credit Enhancement Facility in Jamaica
- National Wastewater Revolving Fund in Belize
- National Wastewater Revolving Fund in Guyana
- National Wastewater Revolving Fund in Trinidad and Tobago

At the time of preparing this report, Trinidad and Tobago had recently confirmed their participation in the project.

A brief description of the PFMs is below.

National Wastewater Revolving Fund in Belize – US \$5 million: Creation of the Belize Wastewater Revolving Fund (BWRF) to provide below market interest rate loans for eligible wastewater treatment projects in Belize. The BWRF will be governed by a Board of Directors, who would have operational responsibilities for the BWRF. The first project to be financed under the BWRF would be an inter-municipal wastewater treatment system for the Placencia Peninsula, an area in Belize that is confronted by pressures from both the growth in tourism and the lack of wastewater collection and treatment. The Government of Belize (GoB) have borrowed an additionally, US \$ 5 million dollars to support the construction of the wastewater treatment facility. The long-term benefits from the establishment of a functioning wastewater collection and treatment system is recognized by the GoB who is ready and willing to adapt policy reforms to accommodate for the successful implementation of the project.

National Revolving Wastewater Fund in Guyana – US \$3 million: A PFM that would support the efforts of the Government of Guyana (GoG) to finance improvements in the wastewater sector in Georgetown. Currently, only two sewerage systems exist in Georgetown, which only serves 54,000 people out of a

⁸ The PEAs are (1) the National Water Commission in Jamaica (NWC); (2) the Ministry of Finance in Belize; (3) the Ministry of Housing and Water in Guyana; (4) Trinidad and Tobago - TBD.

population of 175,000. In areas not served by the sewerage systems in Greater Georgetown, wastewater disposal is by septic tanks and pit latrines with more than 90% of the housing units served by septic tanks. The intent in the establishment of a Guyana Wastewater Revolving Fund (GWRF) would allow for the financing of a variety of wastewater solutions through both public and private channels.

It is anticipated that one of the two first-generation projects will involve the participation of the largest beer brewery in Guyana, Banks DIH, with the installation of a wastewater treatment plant to ensure that all discharges from the production process into the rivers and streams are environmentally acceptable and conforms to all government requirements and EPA regulations. The proposed wastewater treatment plant is envisioned to be constructed in a modular fashion as to allow for expansion of wastewater treatment into the surrounding areas, which currently consists of a mixture of residential and industrial occupants, and will contribute directly to the expansion of wastewater services in the Greater Georgetown area.

Credit Enhancement Facility in Jamaica – US \$3 million: Credit enhancement support for local commercial bank financing of 11 wastewater projects in Jamaica. Under the proposed structure, the CReW funds will be pledged to local lenders as collateral for the financing of approximately US\$ 10 million in initial wastewater projects, to be executed by the National Water Commission (NWC), the national water and wastewater utility in Jamaica. Currently in Jamaica, a K-factor surcharge is collected through the water bill and is allocated into a special account for wastewater investment projects. As the K-factor funds are collected on a monthly basis, it was envisioned that rather than using the K-factor funds directly for capital investments, the funds can be better used as debt servicing for larger, commercial bank loans. In order to incentivize the commercial banks to lend to the NWC, the CReW funds will act as a secondary assurance to commercial lenders in the event that the flow of K-factor funds should become temporarily unavailable. The first projects to be implemented from this guarantee are 11 projects involving either the rehabilitation of an existing wastewater facility or the construction of a new wastewater facility.

Subcomponent 1.2: Project Development Support

This subcomponent will provide Project Development Support (PDS) to contract technical services, such as feasibility studies and design services, to assist with the development of first generation projects.

Subcomponent 1.3: Capacity Strengthening for Wastewater Pilots

This subcomponent will be used for the following:

- **Project Management Unit (PMU) support** – It is recognized that a good project management unit at the country level is key to the successful implementation of projects; therefore this subcomponent will be used to fund one technical staff for each PMU.
- **Technical Assistance** – This will be used to hire a technical specialist, fund travel to the projects for the technical specialist on a quarterly basis and as needed, participation in meetings, and other technical assistance activities. The technical specialist will provide technical support to the PMUs during the project design, procurement and construction activities to ensure that the appropriate industry best practices and project mandates are followed.

Component 1 will be executed by the four Pilot Executing Agencies.

Component 2 – Reforms for Wastewater Management (US\$ 2.500 M)

This component will finance actions and activities geared towards policy, institutional and legislative reform that will improve wastewater management. These actions and activities will be consistent with the UNEP/GPA Strategic Action Plan Guidelines on Municipal Wastewater Management.

Subcomponent 2.1: Capacity Building - Policy and Institutional Strengthening

This subcomponent will focus on improving the skills and knowledge at the national and local level needed in wastewater management policy formulation, planning and financing. The specific activities to be performed under this subcomponent are: (i) strengthening the policy and institutional frameworks for wastewater management in the WCR and engendering local and national reforms; (ii) enhancing the implementation of the LBS Protocol; (iii) providing training on the use of Environmental and Natural Resource Accounting (ENRA) in Wastewater Management; (iv) implementing the ENRA in two demo sites; (v) enhancing the financial management capacity of wastewater management utilities; (vi) building capacity for public-private partnerships and bottom-up planning within the wastewater sector; (vii) initiating a Regional Monitoring, Evaluation and Reporting (ME&R) framework for wastewater management; and (viii) developing training programs for wastewater professionals.

Subcomponent 2.2: Capacity Building for Legislative Reform

The key focus will be to develop tools that can be utilized over the long term by WCR countries to improve and strengthen the legislative framework for wastewater management. The three activities in this subcomponent are: (i) reviewing existing legislative frameworks for wastewater management in the WCR countries and developing a regional toolkit of templates for improving wastewater management legislation; (ii) improving compliance with the obligations of the LBS Protocol; and (iii) providing regional training on enforcement of wastewater legislation.

Subcomponent 2.3: Capacity Building for Awareness Raising

The activities to be undertaken in this subcomponent will focus on developing systemic education and awareness programmes on wastewater within WCR countries targeting local and national decision makers, the media, teachers and students in the formal education system, community members and the general public. This subcomponent contains three activities: (i) developing and disseminating outreach materials targeted for decision makers and the media on wastewater management; (ii) designing guidelines for incorporating wastewater management into formal educational curriculum; and (iii) developing community programs for enhancing public awareness on the importance of wastewater management.

Component 3 – Communications, Outreach and Information Exchange (US\$ 0.710 M)

Component 3 will finance activities related to the dissemination of information related to the CReW to counterpart agencies, implementing partners, related programs (e.g., in integrated water resources management), and relevant stakeholders from the WCR, including the private sector. The component will also share project information and results through the GEF International Waters Learning Exchange and Resource Network.

Subcomponent 3.1: Project Documentation Development and Training

In order to establish the grounds for replication of CReW activities in the future, this subcomponent will finance the preparation and dissemination of documentation on all phases of the CReW project, including case studies, lessons learned, and best practices. Multi-stakeholder consultations will also be held to bring representatives from different sectors together to discuss their experiences and potential for replication of the CReW. In addition, as part of this activity a strategy for promoting future replication of the PFMs will be developed.

Subcomponent 3.2: Integrated Information Management System

This subcomponent will focus on creating a clearinghouse mechanism and information system to provide information about wastewater management to countries in the WCR.

Component 4 – Monitoring & Evaluation - (US\$ 0.760 million)

Component 4 comprises the monitoring and evaluation activities along with the personnel to manage and coordinate these activities. It includes all monitoring and evaluation of the overall project and the activities of the individual Executing Agencies, which will meet the standard monitoring and evaluation (M&E) requirements and procedures of GEF, IDB & UNEP, including the GEF 4 IW Tracking System, the Mid Term Evaluation and Terminal Evaluation (MTE and TE)⁹.

Under this component, proposed indicators will be reviewed, and the methodology for establishing the baseline and reporting arrangements will be determined. All project reports (technical, environment, administrative and financial) will be prepared based on reports submitted by the PMUs and other executing agencies. These actions, in combination with regular meetings of the project Steering Committee that is part of Component 5, will be part of the continuous project monitoring and evaluation and enable adaptive management changes to be recommended, as appropriate.

All financial audits will be performed under this subcomponent.

Component 5 – Project Management - (US\$ 0.957 million)

Establishment of an efficient project management/coordination mechanism will be an important factor in minimizing the operational difficulties associated with implementing a regional project. This component will finance the key project management personnel and associated costs for the governance structure that has been established as the primary coordination mechanism for launching and implementing the CReW.

The work of the Project Coordinator (PC) and the Budget/Administrative Specialist (AS) is funded under this component. In addition, travel, including conferences such as Biennial International Waters Conferences will be supported from funds allocated to the activity.

Additionally, the component will cover the costs related to Project Steering Committee meetings.

⁹ GEF Terminology

2.3 Project Outcomes

In the submission to the GEF a total of ten (10) project outcomes were articulated along with a number of outputs set out in the project's results framework (**Appendix 1**).

The PCG working in tandem with the IACG and UNEP CAR/RCU have reviewed the results framework as part of the project mobilisation activities; to ensure that the programming developed for each of the components will support the achievement of the outcomes. During this process, the outcomes were tightened and updated to help to sharpen and clearly measure its performance. These rephrased/modified outcomes, outputs and targets are to be discussed at the level of the Project Steering Committee.

In keeping with a requirement of the IDB, to track the project's performance each output has been costed. The project inputs have been uploaded in the Bank's Project Monitoring Report (PMR) to facilitate the tracking process. The PMR is updated twice a year and these reports will be made available to all the participating countries. An example of PMR outcomes are shown in **Appendix 2** and **Annex D** provides a concept document explaining the PMR.

Table 2: Draft Revised Results Framework

Impact Indicators	Base Level	Target Level	Sources of Verification	Frequency & Responsible Party
PFM tested	0 PFM	4 PFMs	Project report completion	Once PCG
National legal, institutional and policy reforms adopted and implemented.	0 Countries	5 Countries	Project report completion	Once PCG

• Outcomes

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 1										
Outcome 1.1: Improved access to financing for wastewater management	Number of PFMs created.	0		3 PFMs • Belize • Jamaica • Guyana	1 PFM T&T			4 PFMs • Belize • Jamaica • T&T • Guyana	PMUs Reports Mid Term and Final Evaluation Reports	Annually PCG

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 1										
	Projects generate repayments into the PFMs.	0 PFMs generating repayments					3 PFMs generating repayments	3 PFMs generating repayments	PMUs Reports Mid Term and Final Evaluation Reports	
Outcome 1.2: Successful development of first generation projects.	Increase in populations with access to improved wastewater treatment facilities ¹⁰	0 Households					Population with improved access to wastewater treatment: Belize – TBD Jamaica – TBD T&T – TBD Guyana – TBD	Population with improved access to wastewater treatment: Belize – TBD Jamaica – TBD T&T – TBD Guyana – TBD	PMUs Reports Mid Term and Final Evaluation Reports	Annually PCG

¹⁰ Final baseline and target for some of the pilots to be determined in the first year.

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 1										
Outcome 1.3: Improvements in technical capacity for project implementation.	PEAs develop and apply Operation Manuals.	0 OM		3 OMs	1 OM			4 OMs OM developed and applied	PCG Report Mid-term report Project completion report	Annually PCG
Outcome 1.4: Reduced land based pollution to terrestrial and coastal waters from untreated wastewater	Volume: total annual volume (m ³) of wastewater treated (compliance with national discharge standards)	Belize - 0 m ³ Jamaica – 0 T&T 0 Guyana – 0					Belize ¹¹ - TBD Jamaica ¹² – TBD ³ T&T - TBD Guyana– TBD	Belize ¹³ - TBD Jamaica ¹⁴ – TBD T&T - TBD Guyana– TBD	PMUs Reports Mid Term and Final Evaluation Reports	Annually PMUs & PCG

¹¹ Based on a projected 0.43 MGD in 2006 as part of the Engineers without Borders Report.

¹² Based on a total capacity of the 11 plants of 11.9 mgd.

¹³ Based on a projected 0.43 MGD in 2006 as part of the Engineers without Borders Report.

¹⁴ Based on a total capacity of the 11 plants of 11.9 mgd.

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 1										
	Number of countries that have developed reforms to support implementation of the LBS Protocol.	0 countries.		1 country.	2 countries.	3 countries.	2 countries.	8 countries.	Secretariat to Cartagena Convention reports	Semi-annually CAR/RCU

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 1										
	Number of plants complying with effluent standards. (Improvements in the effluent quality indicators) (biological oxygen demand (BOD) levels, nutrient levels, faecal coliforms, and suspended solids)	0 plants					15 plants	National standards ¹⁵ and where absent LBS protocol used ¹⁶ domestic wastewater effluent limits for the appropriate class of water, where appropriate. <u>Class 1 Waters:</u> BOD ₅ – 30 mg/L TSS – 30 mg/L pH – 5-10 Faecal Coliforms – 200 mpn/100 ml <u>Class 2 Waters:</u> BOD ₅ – 150	PMUs Reports Mid Term and Final Evaluation Reports	Monthly information on a quarterly basis PMUs & PCG
¹⁵ 15 plants										
¹⁶ Final target for each project to be determined based on local standards, LBS protocol and other environmental factors.										

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
Outcome 2.1: Improved local and national capacity for wastewater management.	Number of institutions participating in capacity building activities for wastewater management.	0 Institutions			2 institutions	3 institutions	2 institutions	7 institutions	CAR/RCU and PCG Reports	Semi-annually CAR/RCU
Outcome 2.2: Improved stakeholder awareness about acceptable, sustainable and cost-effective wastewater management solutions	Number of participating organizations in awareness building activities	0 organizations			12 Organizations	16 organizations	12 organizations	40 organizations.	CAR/RCU Reports	Annually CAR/RCU

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
Outcome 3.1: Increased demands for piloting FMs in the WCR.	Requests for establishment for FMs in WCR.	0 Requests			2 \ Requests	1 Requests		3 Requests	CAR/RCU and PCG Reports	Annually PCG
Outcome 3.2: Increased use and management of information on wastewater management in the WCR.	Percentage of workshops participants that perceive that their knowledge has increased.	0 %			75%	75%	75%	75%	Workshop evaluations	Semi-annually CAR/RCU
	Establishment of new information sharing mechanism.	No mechanism.				1 mechanism		1 mechanism	CAR/RCU reports;	Annually CAR/RCU
	Number of hits on the web site.	0 hits/year			500 hits/year	700 hits/year	800 hits/year	800 hits/year	Web site analytics	Annually CAR/RCU

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
Outcome 4: Effective project monitoring and oversight	Timely submission of M&E reports by the EAs	N/A		75% submitted on time.	75% submitted on time.	75% submitted on time.	75% submitted on time.	75% submitted on time.	PCG reports	Annually PCG
	Members of the Steering committee participating in the meetings	0 %			75%	75%	75%	75%	Steering Committee meetings reports	Annually PCG
Outcome 5: Effective project management and coordination	Grade obtained at medium and terminal evaluation.	0			Positive		Positive	Positive at medium and terminal	Evaluation reports	Midterm and end of project. Evaluator
Outcome 6: Improved policy, legal and institutional frameworks	Number of countries with improved policy, legal and/or institutional frameworks	0		0	1	2	5 countries	5 countries	PCG Reports	Annually PCG and CAR/RCU

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
Outcome 7: Strengthened Capacity for wastewater management in the WCR	Numbers of persons trained on selected wastewater management issues	0		50	100	150	200	500	PCG and EA Reports	Annually PCG and CAR/RCU
Outcome 8: Increased awareness of wastewater and sanitation issues by selected target groups	Awareness of wastewater issues.	TBD (2013)					TBD	TBD	KAP survey	Year one and year three PCG and CAR/RCU
Component 4 (IDB/UNEP)										
Outcome 9: Effective Project Monitoring and Oversight	Timely submission of M&E reports by the executing agencies	N/A						75% of reports from executing agencies are submitted on-time.	PCG Report	

Outcome	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
	Implementation of suggested modifications to the project based on M&E reporting to address the changing needs of the executing agencies.	N/A						Effective response to unforeseen changes in circumstances through approved adaptive management procedures	PCG Report, Project reports Mid-term report and Project Completion Report.	
Component 5 (IDB/UNEP)										
Outcome 10: Effective Project Coordination	Formation of PCG, PMUs and IACG Establishment of formal communication channels and project management tools	N/A						Minutes of meetings Mid-term and Terminal evaluation		

- **Outputs**

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 1										
Component 1.1 Outputs – Financial Mechanisms										
(SC. I.1) Financing mechanisms established	Financing mechanisms established.	Financing mechanisms		3	1			4 Financing mechanisms	PCG Reports, PMU Reports.	Annually PCG
Component 1.2 Outputs – Project Development Support										
(SC I.2.1) First generation projects designed	First generation projects designed	0 Projects designed			Belize - 1 Jamaica - 11	T&T – 1 Guyana - 2		Belize - 1 Jamaica - 11 T&T – 1 Guyana - 2	PMU and PCG Reports	Annually PMUs & PCG
Component 1.3 Outputs – Capacity Strengthening for Wastewater Pilots										

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
(SC I.3.1 Technical capacity provided	Technical specialists hired	0	1					One technical specialist hired	PCG Report	Once IACG

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
Component 2.1 Outputs – Capacity Building – Policy and Institutional Strengthening										
(SC II.1.1) Documented policy & legal reforms & institutional strengthening for wastewater management at national and local levels	Policy templates and tools kit developed.	0			1			1	CAR/RCU and /PCG reports	Semi-annually CAR/RCU
	Template for Wastewater management plan developed.	0			1			1	CAR/RCU reports	Annually CAR/RCU
	National capacity development plans implemented.	0				2		2	CAR/RCU reports	Annually CAR/RCU
	Regional evaluation workshop held	0					1	1	CAR/RCU reports	Annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
(SC II.1.2) Country reports demonstrate improved implementation of the LBS Protocol, and in particular its Annex III on domestic wastewater	Report on compliance of LBS protocol prepared.	0			1			1	CAR/RCU reports	Annually CAR/RCU
	Guidelines for compliance with LBS protocol developed.	0			2	2	2	6	CAR/RCU reports	Annually CAR/RCU
	Regional workshop on wastewater treatment technology held	0				1		1	CAR/RCU reports	Annually CAR/RCU
(SC II.1.3) Valuation for selected coastal resources in two pilot countries developed	Resource valuation reports	0				2		2	CAR/RCU reports	Semi-annually CAR/RCU
	Regional training workshops on resource valuation held	0				2		2	CAR/RCU report	Semi-annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
(SC II.1.4) Documented improvements in financial capacity of wastewater management utilities and service providers	Survey on best practices for funding wastewater utilities completed	0			1			1	CAR/RCU report	Semi-annually CAR/RCU
	Cost recovery models tested	0 countries			1	1		2	CAR/RCU report	Semi-annually CAR/RCU
	Regional workshops on cost recovery models held	0				2		2	CAR/RCU report	Semi-annually CAR/RCU
(SC II.1.5) Guidelines and best practice modalities for civil society involvement in wastewater management	Workshop for training of facilitators.	0			2			2	CAR/RCU reports	Semi-annually CAR/RCU
	Stakeholder consultation workshop held.	0			2	2	2	6		Semi-annually CAR/RCU
(SC II.1.6) Detailed implementation plan (resources, budget &)	Effluent discharge M&E database developed.	0				1		1	CAR/RCU reports	Semi-annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
timetable) for a Monitoring, Evaluation and Reporting (ME&R) system	National systems demonstrated.	0				2		2	CAR/RCU reports	Semi-annually CAR/RCU
(SC II.1.7) Training programmes for wastewater professionals	Number of regional and National workshops on different aspects of wastewater management held.	0			4	4	3	11	CAR/RCU reports	Semi-annually CAR/RCU
	Number of partnerships for delivery of training.	0			2	2		4	CAR/RCU reports	Semi-annually CAR/RCU
	Number of courses outline adapted.	0				2		2	CAR/RCU reports	Semi-annually CAR/RCU
Component 2.2 Outputs – Capacity Building – Legislative Reform										
(SC II.2.1) Regional toolkit of templates for wastewater management drafting	Drafting instructions template developed.	0			1			1	CAR/RCU reports	Semi-annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
instructions	Wastewater regulations enacted.	0 countries				2 countries		2 countries.		Semi-annually CAR/RCU
(SC II.2.2) Training workshops for enforcement personnel	Ner. of training workshops provided for enforcement personnel	0N/A			2	2	2	6	CAR/RCU report	Semi-annually CAR/RCU
(SC II.2.3) Regional training on enforcement of wastewater management legislation	Design and Conduct 2 regional training seminars for legal officers, drafters and policy makers (1 in English and 1 in Spanish).	0						2	CAR/RCU report	Semi-annually CAR/RCU
Component 2.3 Outputs– Capacity Building – Awareness Raising										
(SC II.3.1) Increased focus on wastewater management issues by national	KAP Regional surveys performed.	0		1		1		2	CAR/RCU reports Survey reports	Semi-annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
leadership from improved awareness of wastewater issues.	Communication products developed.	0		1	1	1	1	4	CAR/RCU reports	Semi-annually CAR/RCU
(SC II.3.2) Increased coverage of wastewater and sanitation issues in the media from improved awareness of wastewater issues	Number of stories in the media published.	0		4	20	30	30	84 stories	CAR/RCU reports PEAs quarterly reports and CReW National Focal Points reports	Semi-annually CAR/RCU
(SC II.3.3) Increased awareness of wastewater and sanitation issues in selected communities	Communication strategy for rural communities developed.	0		0	1			1	CAR/RCU and PCG reports	Semi-annually CAR/RCU
	Rural communication campaign on sanitation implemented.	0 countries		0	1 country	2 countries	1 country	4 Countries	CAR/RCU and PCG reports	Semi-annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 2 (UNEP)										
(SC II.3.4) Guidelines for enhancing incorporation of wastewater management issues into curricula.	Inventory of wastewater education in selected countries conducted.	0 Countries			1 Country			1 Country	0 PMU/PCG reports	Semi-annually CAR/RCU
	Guidelines for enhancing incorporation of wastewater management issues into curricula developed.	0				2			PMU/PCG reports	Semi-annually CAR/RCU
	Teaching learning toolkit developed and tested.	0 Countries				2 Countries		2 Countries	PMU/PCG reports	Semi-annually CAR/RCU

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
Component 3.1 Outputs - Project Documentation Development and Training										
(SC III.1) PFMs, demos and overall project activities, documented through lessons learned, experience notes, and feature articles, that highlight the potential for replication of the CREW project	Templates used to document the pilots, demos and overall project	0			4			Templates for the following: <ul style="list-style-type: none"> • Experience notes • Case studies • Documentaries Feature articles	CAR/RCU reports	Once CAR/RCU
	Workshops on how to use templates and selections of lessons learned	0			1 Workshop			1 Workshop	CAR/RCU reports	Every two years
(SC III.1.2) Replication strategy developed	Replication strategy developed	0				1		1	CAR/RCU reports	

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
(SC III.1.3) Increased dialogue among regional wastewater stakeholders through a series of stakeholder consultations.	Annual regional meetings with stakeholders (CWWA).	0		1	1	1		3 regional meetings (CWWA)	Meeting minutes	Annually PCG
	Presentations on the implementation of the CReW at regional and international conferences	0		2 Confer.	4 Confer.	4 Confer	4 Confer	14 Relevant Conferences.	Conference/ meeting agenda	Annually PCG
	Professional exchanges conducted.	0		1	1	1	1	4	Meeting minutes	Annually PCG
Components 3.2 Outputs - Integrated Information Management System										

Output	Indicator	Baseline	2011	2012	2013	2014	2015	Target	Sources of verification	Frequency & Responsible Party
Component 3 (UNEP)										
(SC III.2) Increased access to and use of information related to wastewater management through development of a 'Clearing House Mechanism' (CHM) for the WCR	IT based regional information management system developed	0 web site					1 information management system/website	Functional and utilised /information management mechanism/website / CHM	CAR/RCU and PCG reports / internet data on web access	Semi-annually CAR/RCU

3 Project Execution Structure

3.1 Overview

Comprehensive project management will be achieved through a range of coordination, supervisory and advisory bodies, at the regional and national levels. At the regional level coordination will be undertaken by the following groupings.

- 1) Inter-Agency Coordination Group (IACG)
- 2) Project Steering Committee (PSC)
- 3) Project Coordinating Group (PCG)
- 4) Pilot Executing Agencies (PEAs)
- 5) UNEP CAR/RCU as Executing Agency

At the national level Pilot Executing Agencies (PEAs) and their Project Management Units (PMUs) will be responsible for execution of Component 1. UNEP CAR/RCU will be responsible for the regional implementation of components 2 and 3. Figure 2 illustrates the organisational arrangement.

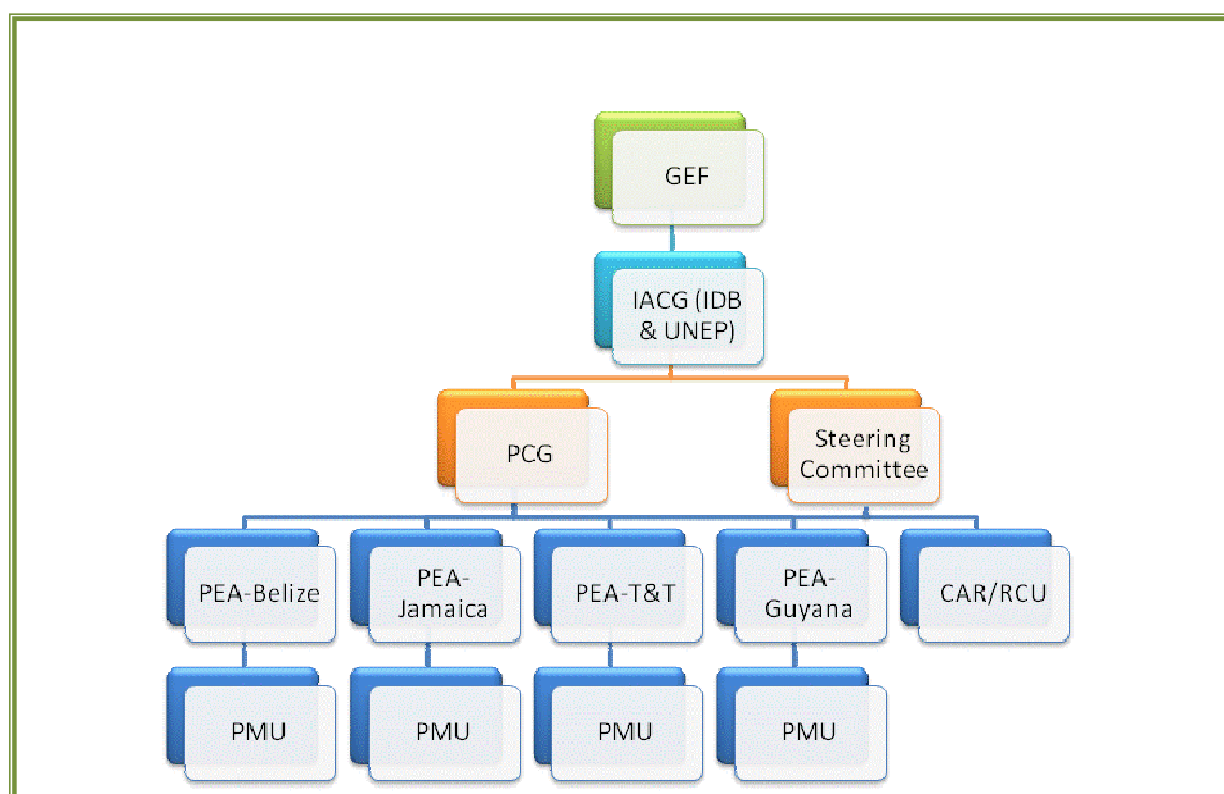


Figure 2: Organisational Arrangement

The following sections of the report briefly describe the role of each entity.

3.2 Interagency Coordinating Group

The IACG comprises the IDB and UNEP who will monitor project implementation, review progress and propose corrective measures as appropriate. The IACG will act as a progress review mechanism and interaction platform to ensure coordination of national and regional activities. UNEP and IDB have signed a Memorandum of Understanding for the joint implementation of this project.

It is intended that the IACG will have quarterly meetings, or more as appropriate. However, during the project mobilisation period the CG has met on several occasions with the PCG and GEF to guide and clarify the project implementation framework. Strong lines of communication and accountability have already been established between the IACG and PCG. The current members of the Group are Maria Navia, Water and Sanitation Specialist and Project Leader IDB WSA and Isabelle Vanderbeck, UNEP Task Manager GEF Projects in Latin America and the Caribbean.

The responsibilities of the IACG are:

- (i) IDB will assist the PCG in supporting the activities undertaken by the PEAs from its Headquarters and its relevant country offices;
- (ii) IDB and UNEP will assist the PCG in the coordination of monitoring activities and providing technical and administrative oversight and support to EAs (PEAs and CAR/RCU); and
- (iii) UNEP and the IDB will jointly retain overall responsibility for review and approval of reports, and will be held accountable to the GEF Council for ensuring that agreed outcomes are realized, and assuring the timely delivery and cost-effectiveness of activities.
- (iv) Both agencies will be responsible for clearance and transmission of financial and progress reports on the relevant project components to the GEF.

3.3 Project Steering Committee

The nineteen member PSC has been formed to provide guidance on overall strategic direction of the CReW project. The Committee comprises National Focal Points from the thirteen (13) countries which have endorsed the project, four (4) Pilot Coordinators and representatives from the Caribbean Environmental Health Institute (CEHI) and the Caribbean Development Bank (CDB).

The PSC will endorse annual operation plans and budgets, technical and financial reports, and will assist in providing project oversight.

The IACG will initiate the first meeting; thereafter, the chair will be undertaken on a rotational basis by a member of the PSC. The PCG will serve as the Secretariat of the PSC.

3.4 Establishment Project Coordinating Group

The PCG has been established with the responsibility of the day-to-day management of the CReW project. The PCG will coordinate execution of the project under the oversight of UNEP and IDB, drawing from their combined expertise.

The PCG has the following responsibilities:

- (i) coordinating day-to-day project activities, and supporting activities undertaken by the EAs;

- (ii) ensuring project quality assurance and quality control;
- (iii) ensuring the timely execution of the project components and activities;
- (iv) consolidating project reports, including technical environmental and financial progress reports;
- (v) facilitate communications to the public, including website and media;
- (vi) coordination of communications with the IDB, UNEP and EAs;
- (vii) coordinating monitoring & evaluation requirements; and
- (viii) compile and submit periodic reports and supporting documentation to UNEP and IDB in line with the M&E system, and following GEF and both agencies requirements.

The PCG is located Jamaica and is housed in the IDB's Country Office in the city of Kingston. To date the Project Coordinator (PC), Denise Forrest, Technical Specialist (TS), Alfredo Coello and Budgetary/Administrative Specialist (AS) Puneet Duggal have been contracted since July 2011 in the case of the PC and TS and September 2011 in the case of the AS. The Communication Specialist (CS), Donna Spencer will join the team officially in March 2012. The responsibilities of each member of the team are outlined below.

The PC is responsible for the overall performance of the project and production of the outputs/products, reporting directly to the IACG and informing the PSC. The PC will (i) oversee the preparation of all required reports and other outputs and ensure their timely delivery; (ii) provide day-to-day direction for the PCG and participating entities; (iii) liaise between the PCG and the EAs; and (iv) act as the public liaison of the project. The PC will coordinate all technical activities undertaken at the national level by each of the PMU (see below), and at the regional level by CAR/RCU.

The TS is the project's technical advisor on wastewater management and will (i) assist the PC with technical evaluation, including environmental and social issues, and documentation; (ii) review technical and scientific submissions and reports from the PMUs and CAR/RCU; and (iii) liaise with the PMUs on the development and implementation of the projects in accordance with the provisions of the GEF and IDB policies.

The CS will assist the PC in promoting and improving public understanding of the CReW project. The CS reports directly to the PC and assists all other members of the PCG as required. The CS will also support the overall implementation of components 2 and 3 on the use of the GEF International Water (IW) Tracking Tool and GEF IW Learn, and assist in coordinating the work of consultants and contractors recruited under these two components.

The AS assists the PC with contractual, administrative and budget management aspects of project. The Budget/Administrative Specialist will maintain records of the project and project activities, to facilitate financial reporting, maintain the project files, and assisting with the smooth operation of the PCG.

To date the PCG has been involved in assisting to mobilise the PEAs. In addition, the PC has represented the CReW at the CWWA Regional Conference in October 2011 where she made a presentation on the project, the International Water Conference and the Closing Conference of the GEF-IWCAM project.

The team has also been updating the results framework and developing the Annual Work Plan to be presented at the Inception Meeting.

3.5 Executing Agencies

To date three countries Belize, Guyana and Jamaica have signed agreements with the IDB to undertake the responsibilities and legal obligations of a Pilot Executing Agency (PEA). Trinidad & Tobago has recently confirmed their commitment to the project and in the coming months are expected to sign the contractual agreement.

The PEAs will assume responsibility for the administration of the resources assigned to each PFM under Component 1, and will ensure its successful implementation in each location. Each of the PEAs has the following responsibilities:

- (i) monitor the implementation of each PFM and ensure its successful implementation;
- (ii) create the PMUs and assign a Pilot Coordinator;
- (iii) provide institutional support for the PMU;
- (iv) (iv) sign loan/financing agreements with borrowers; (v) approve the operating and financial plans prepared by the PMUs; and
- (v) approve the Operations Manual for the PFM.

The PMUs will be established by and will be the responsibility of the PEAs to (i) manage the PFMs under Component 1 in accordance with the grant agreements between the PEAs and the IDB; (ii) oversee the development, implementation, and M&E of projects funded under the PFM; (iii) preparation of an Operations Manual for the PFM; (iv) evaluation of proposals from potential borrowers (Implementing Agencies); (v) financial administration of the resources; (vi) development of operating and financial plans; (vii) execution of procurement and contracting processes, and administration of all contracts; (viii) development of a monitoring and evaluation system (physical and financial progress) to ensure the achievement of outcomes and outputs established in the results matrix; (ix) development of an Environmental and Social Management System (ESMS) and verification of environmental and social measures application on projects financed by the PFM, including reporting; (ix) preparation of financial and progress reports; and (ix) M&E of the implementation of projects.

To date, no funds have been disbursed to the PEAs because the conditions prior have not been met. The PEA is working to complete the necessary tasks and will provide an update as to their progress at the Project Steering Committee Meeting scheduled for February, 9, 2012.

The UNEP Caribbean Regional Coordinating Unit (CAR/RCU) serves as Executing Agency (EA) for the regional Components 2 and 3. CAR/RCU will be responsible for the following: (i) implementation and management of the activities under these components; (ii) financial administration of the resources; (iii) development of operating and financial plans; (iv) execution of procurement and administration of all contracted services; (v) development of a monitoring and evaluation system for these components; and (vi) preparation of financial and progress reports on the activities performed.

4 Financing

The GEF has funded the project to the tune of US\$ 20 million dollars. This grant disbursement represents the largest grant in the GEF 4 replenishment cycle and indicates the importance of the project. The GEF is anticipating that the project outcomes can be replicated not only in the WCR but in other regions of the world.

The Figure below shows the distribution of the funds across the components and Implementing Agencies.

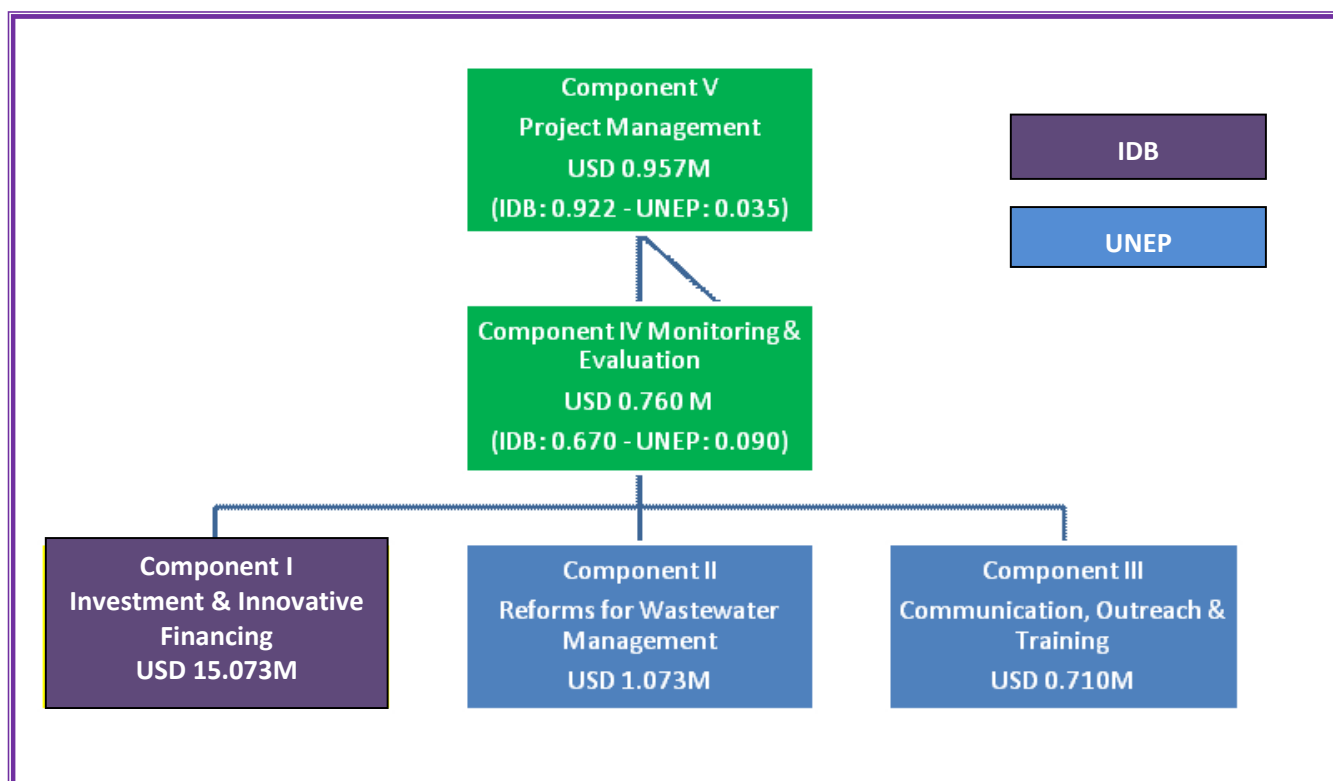


Figure 3: Costed Project Structure

4.1 Funds Allocation & Project Budget

The allocation of funding is briefly described below and outlined in the budget found in Table 4 and the overall budget breakdown for each Executing Agency is found in Table 5.

Component 1 – Investment and innovative financing for wastewater management - (US\$ 15.073 M) -

IDB: The component will finance: (i) US\$ 13 M for individual Pilot Financing Mechanisms (PFM) that will provide and test pilot financing modalities for wastewater management projects; (ii) US\$ 1.0M for a Project Development Support (PDS) to provide technical assistance, such as design assistance, to bring the first generation of projects to be financed by the PFMs to a “bankable” status; And (iii) US\$ 1.073 M to support the PFM and PDS.

Component 2 – Reforms for wastewater management - (US\$ 2.500 million) – UNEP

The component will finance: (i) US \$ 1.540 for capacity building for institutional strengthening; (ii) US \$ 660,000 for capacity building legal reform; and (iii) US \$300,000 for capacity building awareness rising.

Component 3 – Communications, Outreach and Information Exchange. (US\$ 0.710 million)-UNEP

This component will finance activities related to (i) project documentation development & training and (ii) integrated information system.

Component 4 – Monitoring & Evaluation - (US\$ 0.760 million) – IDB/UNEP

This component will finance the monitoring and evaluation activities along with the personnel to manage and coordinate these activities.

Component 5 – Project Management - (US\$ 0.957 million) – IDB/UNEP

This component will finance the key project management personnel and associated costs for a governance structure that would be established as the primary coordination mechanism for launching and implementing the CReW.

Table 4. CReW Project Budget

Project Components/Sub-projects/Activities	GEF Funding USD		Total Cost USD
	IDB	UNEP	
Component I: Investment and Innovative Financing for Waste Water Management	15,073,000		15,073,000
Sub-project I.1: Investment and innovative financing for wastewater management	13,000,000		13,000,000
Sub-project I.1: Project Development Support	1,000,000		1,000,000
Sub-project I.3: Capacity Strengthening for Wastewater Pilots	1,073,000		1,073,000
Component II: Reforms for Waste Water Management		2,500,000	2,500,000
Sub-project II.1: Capacity Building - Policy and Institutional Strengthening		1,540,000	1,540,000
Activity II.1.1 - Strengthening the policy and institutional frameworks for wastewater management in the Wider Caribbean Region and engendering local and national reforms		230,765	230,765
Activity II.1.2 - Enhancing implementation of the LBS Protocol		222,167	222,167
Activity II.1.3 - Training on the use of Environmental and Natural Resource Accounting (ENRA) in Wastewater Management		245,167	245,167
Activity II.1.4 - Enhancing the Financial Capacity of Wastewater Management Utilities and Service Providers		183,167	183,167
Activity II.1.5 - Building Capacity for Public-Private Partnerships (PPP) and Bottom-Up Planning within the Wastewater Sector		177,967	177,967

Project Components/Sub-projects/Activities	GEF Funding USD		Total Cost USD
	IDB	UNEP	
Activity II.1.6 - Initiation of Regional Monitoring, Evaluation and Reporting (ME&R) Framework for Wastewater Management		240,767	240,767
Activity II.1.7 - Development of training programmes for wastewater professionals		240,000	240,000
Sub-project II.2: Capacity Building - Legislative Reform		660,000	660,000
Activity II.2.1 - Review existing legislative frameworks for wastewater management in the WCR countries and develop regional toolkit of template for improving wastewater management legislation		256,000	256,000
Activity II.2.2 - Improving compliance with obligations of the LBS Protocol and its Annex III on Wastewater Management		202,000	202,000
Activity II.2.3 - Regional training on enforcement of wastewater management legislation		202,000	202,000
Sub-project II.3: Capacity Building - Awareness Raising		300,000	300,000
Activity II.3.1 - Development and dissemination of outreach materials targeted for decision makers and the media on wastewater management		220,000	220,000
Activity II.3.2 - Design of guidelines for incorporating wastewater management into formal educational curriculum		50,000	50,000
Activity II.3.3 Development of community programmes for enhancing public awareness on the importance of wastewater management		30,000	30,000
Component III: Communication, Outreach and Information Exchange		710,000	710,000
Sub-project III.1: Information Sharing and Dissemination		300,000	300,000
Activity III.1.1 – Development of knowledge management products and publications documenting CReW's best practices and experiences		150,000	150,000
Activity III.1.2 – Regional multi-stakeholder consultation		150,000	150,000
Subproject III.2: Integrated Information System		410,000	410,000
Activity III.2.1 – Clearing house mechanism/Center of Excellence in Waste Water Management		125,000	125,000
Activity III.2.2 – Knowledge and information system/DSS for the Wider Caribbean		75,000	75,000
Communications Specialist		210,000	210,000

Project Components/Sub-projects/Activities	GEF Funding USD		Total Cost USD
	IDB	UNEP	
Component IV: Monitoring & Evaluation	670,000	90,000	760,000
Sub-project IV.1: Monitoring and Evaluation	500,000	90,000	590,00
Sub-project IV.2: Financial & Operations Audits	170,000		170,000
Component V: Project Management	922,000	35,000	957,000
Sub-project V.1: Project Coordination	510,000		510,000
Sub-project V.2: Steering Committee	162,000	35,000	197,000
Sub-project V.3: Administrative Assistance	250,000		250,000
TOTAL PROJECT COST (\$)	16,665,000	3,335,000	20,000,000
	20,000,000		

Table 5: Budget Allocation for each Executing Agency

Description	Jamaica PFM					
	Component 1	Component 2	Component 3	Component 4	Co-financing	Total
Pilot Fund Administration	125,000	0	0	137,500	1,032,000	262,500
Project Management	125,000				648,000	125,000
Monitoring and Evaluation				95,000	384,000	95,000
External Financial Auditing				42,500		42,500
Pilot Funds	3,250,000	0	0	0	11,000,000	3,250,000
Pilot Fund	3,000,000				10,000,000	3,000,000
Project Development Support	250,000				1,000,000	250,000
Total	3,375,000	0	0	137,500	12,032,000	3,512,500

Description	Belize PFM					
	Component 1	Component 2	Component 3	Component 4	Co-financing	Total
Pilot Fund Administration	0	0	0	137,500	300,000	137,500
Project Management	0				300,000	0
Monitoring and Evaluation				95,000	0	95,000
External Financial Auditing				42,500		42,500
Pilot Funds	5,375,000	0	0	0	0	5,375,000
Pilot Fund	5,000,000					5,000,000
Project Development Support	375,000					375,000
Total	5,375,000	0	0	137,500	300,000	5,512,500

Description	Trinidad and Tobago PFM					
	Component 1	Component 2	Component 3	Component 4	Co-financing	Total
Pilot Fund Administration	125,000	0	0	137,500	0	262,500
Project Management	125,000				0	125,000
Monitoring and Evaluation				95,000	0	95,000
External Financial Auditing				42,500		42,500
Pilot Funds	2,250,000	0	0	0	0	2,250,000
Pilot Fund	2,000,000					2,000,000
Project Development Support	250,000					250,000
Total	2,375,000	0	0	137,500	0	2,512,500

Description	Guyana PFM					
	Component 1	Component 2	Component 3	Component 4	Co-financing	Total
Pilot Fund Administration	125,000	0	0	137,500	560,000	262,500
Project Management	125,000				368,000	125,000
Monitoring and Evaluation				95,000	192,000	95,000
External Financial Auditing				42,500		42,500
Pilot Funds	3,250,000	0	0	0	0	3,250,000
Pilot Fund	3,000,000					3,000,000
Project Development Support	250,000					250,000
Total	3,375,000	0	0	137,500	560,000	3,512,500

Description	CAR/RCU					
	Component 1	Component 2	Component 3	Component 4	Co-financing	Total
Project Management		17,500	17,500		500,000	35,000
Consulting services		1,280,000	610,000		100,000	1,890,000
Monitoring and Evaluation				90,000		90,000
Other expenses		1,220,000	100,000			1,320,000
Total	0	2,517,500	727,500	90,000	600,000	3,335,000

4.2 Cofinancing

4.2.1 Overview

The project has a total of US \$250,999,203¹⁷ in cofinancing. Cofinancing contributions are a key performance parameter for the GEF and requires an effective reporting framework in order to track its performance.

The main contributions to cofinancing come from the Implementing Agencies, the PEAs and the Governments who have endorsed the CReW. The table below provides a breakdown based on the source of financing. A detailed breakdown of cofinancing is found in **Appendix 2**.

Table 6: Breakdown of Cofinancing Contributions

Source of Cofinancing	Type	Components	US\$
PEAs			
Government of Belize	In Kind	1, 4 & 5	300,000 ¹⁸
Government of Guyana	In Kind	1, 4 & 5	560,000
Government of Jamaica	In Kind and Loan	1, 4 & 5	12,032,000
Implementing Agencies			
IDB	In Kind	5	772,000
IDB	Grants	1 & 5	27,506,960
IDB	Loans	1 & 5	131,500,000
UNEP	In-kind	2, 3, & 5	600,000
Governments WCR¹⁹			
Government	Grant and In Kind	1	62,728,243
Government	Loans	1	15,000,000

Against this background, Project Coordinators for the PEAs/PMUs and National Focal Points will be required to prepare and submit periodical co-financing reports. The reports will provide details on the specific co-financing by the participating countries to each of the specific project components and activities and will be submitted semi-annually to the PCG who will in turn submit annually to GEF, IACG and PSC.

Reports from the PEAs as well as national co-financing reports prepared by the National Focal Points should be submitted in June and December each year. This recommendation is subject to modification following comments received at the PSC meeting.

¹⁷ Originally US \$ 251,702,403 reduced by US \$703,200 from GoB

¹⁸ Originally US \$1,003,200

¹⁹ Costa Rica, Guatemala, Panama, Belize, Barbados

4.2.2 Proposed Cofinancing Reporting Templates

The PCG have developed the following reporting templates depending on the source of the contribution. Each template has been prepared based on consideration of the commitment letters of the contributing entities and therefore relates specifically to the components to which the cofinancing contribution should be credited.

In the case of Governments the template refers only to components 1-3 as only Executing Agencies are likely to be contributing to those aspects of the project.

Table 7: Reporting Template for Pilot Executing Agencies

Activities	IDB Component US \$	UNEP Component US \$	Total GEF Financing US \$	Cofinancing Contribution US \$	Amount Spent US\$	%	Means of Verification
Comp 1 Investment & Innovative Financing for WM							
1.1 Pilot Financing Mechanism							
1.2 Project Development Support							
Comp 4 Monitoring & Evaluation							
Project Monitoring							
Staffing							
Office facilities							
Meetings							
Field Work							
Comp 5 Project Management							
Project Management Unit							
Staffing							
Office Facilities							
Utilities							
Total for the Quarter							

Table 8: Reporting Template for UNEP CAR/RCU

Activities	IDB Component US \$	UNEP Component US \$	Total GEF Financing US \$	Cofinancing Contribution US \$	Amount Spent US\$	%	Means of Verification
Comp 2 Reforms for WM							
2.1 Capacity Building Policy							
2.2 Capacity Building Legislative Reforms							
2.3 Capacity Building Awareness Raising							
Comp 3 Communication Outreach and Information Exchange							
3.1 Information Sharing & Dissemination							
Staffing							
Equipment							
3.2 Integrated Information Systems							
Office facilities							
Meetings							
Comp 5 Project Management							
Project Management Unit							
Staffing							
Office Facilities							
Utilities							
Total for the Quarter							

Table 9: Reporting Template for Participating Countries

Activities/Component	Loan US \$	Grant US \$	Meetings US \$	Other Types of Activities US \$	Cofinancing Contribution US \$	Means of Verification
Comp 1 Investment & Innovative Financing for WM						
1.1 Pilot Financing Mechanism						
1.2 Project Development Support						
1.3 Capacity Building for Pilot Implementation						
Comp 2 Reforms for WM						
2.1 Capacity Building Policy						
2.2 Capacity Building Legislative Reforms						
2.3 Capacity Building Awareness Raising						
Comp 3 Communication Outreach and Information Exchange						
3.1 Information Sharing & Dissemination						
3.2 Integrated Information Systems						
Total for the Period						

In the calculation of co-financing, the time and effort expended by the experts in participating countries institutions need to be taken into consideration. The estimation of the level of co-financing can also be based local prevailing rates. For example for remuneration of staff (salary and benefits), operating costs in terms of office and laboratory spaces, supplies, utilities and transport expenses.

The IDB is by far the greatest source of cofinancing through loans and grants. The IDB also makes contributions to component 5. In this regard when reporting on that activity the Bank will utilise/modify the template found in Table 7. Table 10 found below will be used to report on grants and loans.

Table 10: Reporting Template for Implementing Agency (IDB)

Sources of Co-financing	Type of Co-financing	Project Status		Inception Status	
		Amount	%	Amount	%
Project	Loan/Grant				

4.2.3 Verification

The experience from similar multinational projects shows that the major part of the in-kind co-financing is derived from individuals time contributed either through (a) attendance to meetings; or (b) in terms of additional work and inputs to the preparation of documents; (c) technical contribution of specialized knowledge and information; and (d) national coordination activities.

Some elements of the in-kind co-financing that are amenable to independent verification include:

- Government budgetary allocation & expenditure on activities of National Focal Point organisations and related entities;
- Contribution of Revolving Fund Boards
- Costs on individuals' time in meetings of Working Groups and Inter-Ministry Committee meetings;
- Costs of individuals' participation in meetings of the Project Steering Committee and Regional Workshops;
- Cost of individuals' time spent for preparation and comments of documents, contribution of specialized information, and national wastewater management activities; and
- Cost of individuals' time spent on preparation of meetings and workshops.

In submitting reports a brief summary verifying the basis of the submission should be attached. It should be noted that this approach has its own limitations and are subject at times to estimations.

4.2.4 Annual Reporting

The PCG will compile the data and prepare annual reports on the cofinancing performance for submission to the IACG and the PSC Meeting. The report will be based on the sources of financing as shown in Table 11.

Table 11: Annual Report on Sources of Cofinancing

Source	2011	2012	2013	2014	2015	TOTAL
Executing Agency						
Belize						
Guyana						
Jamaica						
Guyana						
UNEP CAR/RCU						
Participating Countries						
Implementing Agencies						
Total						

The proposed methodology for reporting co-financing is subject to continual improvement over the life of the project based on experiences with its use and feedback from participating countries.

5 Monitoring & Evaluation

5.1 Monitoring

The proposed monitoring and evaluation system will comply with consolidated requirements of the IDB, GEF and UNEP. The system is composed of two elements: (a) monitoring of progress, and (b) evaluation of performance and achievement of targets, and includes: (i) the Project Execution Plan; (ii) the Procurement Plan; (iii) Annual Operating Plans, including actions to mitigate identified risks; (iv) the Results Framework; (v) a supervision plan for the evaluation of the program's performance and the verification of targets set in the results framework; (vi) quarterly progress reports including progress and results, and an action plan to improve performance; (vii) annual progress reports; (viii) annual cofinancing reports; (ix) external audits; (x) project completion report; and (xi) mid-term and terminal/final evaluations.

Each EA will be in charge of M&E of the performance and execution of project activities under their responsibility. CReW resources have been allocated to this task (see Section 4.3).

The monitoring tools are briefly described in the following section of the report.

Annual Operating Plan (AOP) - a planning exercise will be performed by each Executing Agency, leading to the development of an AOP for the first year of the Project, which is consistent with the PEP. The AOP will be revised and updated based on comment received during the Inception Workshop and before the end of each implementation year. If required the AOP will be adjusted regularly according to project implementation circumstances.

Procurement. Each PMU will follow the procurement plan developed for each year of the Project, which is consistent with the AOP. The procurement plan includes (i) list of goods or services to be procured; (ii) quantity and timing; (iii) applicable procurement method; and (iv) supervision procedures. Each Executing Agency will update the Procurement Plan every 12 months (for a period of 18 months), and as needed throughout project implementation.

External Financial Audit. As part of the fiduciary control of the project, during the first 120 days of each year, and for the duration of the project, each PEA will present the audited financial statement of the project to the Bank²⁰. The audit will be performed by an external auditor in accordance with Bank's requirements in documents AF-100 and AF-300.

Indicators -project indicators have been selected to represent the essential activities within the project scope and are in line with the principles of SMART²¹. In order to evaluate effective operations of the project, the M&E Plan will include indicators related to timeliness of progress reports; achievement of performance targets, outputs and outcomes; promptness of the implementation of corrective actions when required; timeliness of disbursements; and evidence of sound financial practices in audits reports.

The PCG will be in charge of collecting the information and reports from each PEA and CAR/RCU and consolidating them to monitor the performance and progress of project execution as a whole.

²⁰ This requirement only applies to the PEAs, which are the Executing Agencies of component 1, under the responsibility of the IDB.

²¹ SMART Indicators are specific, measurable, achievable, relevant, and time bound

5.2 Evaluation

A MTE and a TE will be conducted. The Executing Agencies will be responsible for providing the required information for the evaluation of the CReW project. Each Executing Agency is in charge of collecting data on indicators progress and the evaluation methodology will be reflexive that is, reviewing results before and after. In order to do this baseline data must be established at the start of project activities. Evaluations will be performed by persons external to the project.

The evaluation tools are described below.

Mid-Term and Terminal Evaluation will be performed during the quarter immediately after the mid-term point of project execution (at the end of 24 months from the date of GEF approval), regardless of the level of execution and disbursement. The purpose of the MTE is to identify corrective measures and/or changes to the intended work plan of the CReW. The MTE will focus on the following: (i) level of progress in attaining the project objectives stated in the Results Matrix; (ii) identify execution problems and propose mitigation or corrective measures; (iii) level of acceptance of procedures developed under the project; and (iii) degree of effectiveness of the internal and the IDB's and UNEP's monitoring and supervision system. The TE will take place two months prior the project end date and will assess: (i) degree of attainment of project objectives and results in relation to plans and reasons for any variances; (ii) the organization established for project execution; (iii) implementation and acceptance of procedures and systems developed through the project; (iv) sustainability of the activities funded under the project; and (v) lessons learned that could be applied to future public sector reform projects.

The table below outlines the overall reporting requirements.

Table 11: M&E Reporting Requirements

Report and Content	Timing	Responsibility
Inception Report		
Project Execution Plan (PEP)	Draft developed. Final version following inception workshop. Updated as needed.	PCG building on Executing Agency inputs and in consultation with IDB and UNEP
Annual Operating Plan		
<ul style="list-style-type: none"> List of activities to be implemented each year Timeline 	Draft for first year developed. Final version after inception workshop	Executing Agencies- coordination by PCG, in consultation with IDB and UNEP
Quarterly Progress Report		
<ul style="list-style-type: none"> Progress and activities completed; Progress against annual work plan; Review of implementation plans, Summary of problems and adaptive management; Activity plans for the next quarter; and Project outputs for review 	Quarterly, within 15 days of each reporting period	Executing Agencies- coordination by PCG

Report and Content	Timing	Responsibility
Quarterly and Annual Financial report		
<ul style="list-style-type: none"> - Project expenditures according to established project budget and allocations; - Budgetary plans for the next quarter; - Requests further cash transfers; - Requests budget revision as necessary; and - Inventory of non-expendable equipment procured for project 	Quarterly, within 15 days of each reporting period	Executing Agencies- coordination by PCG
Annual Progress Reports (Project Implementation Review - PIR)		
<ul style="list-style-type: none"> - Consolidated review of progress and outputs of project actions; - Progress against Annual work plan; - Best practices and lessons learned; - Progress plans and budgetary requirements for the following reporting period; - General source of information for general project reporting; and - PIR 	30 days after the end of the period	Executing Agencies- coordination by PCG in consultation with IDB and UNEP
Procurement Plan		
<ul style="list-style-type: none"> - Procurement plan for upcoming 12 months 	Annually	Executing Agencies- coordination by PCG
External Financial Audit		
<ul style="list-style-type: none"> - Audited Financial Statements 	Annually and at project completion	Independent auditor – hired by Executing Agencies
Co-financing Report		
<ul style="list-style-type: none"> - Co-financing provided to the project; and - Co-financing inputs against GEF approved financing plan 	Annually	Executing Agencies- coordination by PCG
Mid-term Evaluation		
<ul style="list-style-type: none"> - Detailed independent evaluation of project management, actions; - Outputs and impacts at mid-term; - Recommendations for remedial action and/or revision of work plans as appropriate 	Quarter immediately following project mid-term	Independent Evaluator – hired by IDB and UNEP as GEF agencies
Project Completion Report		

Report and Content	Timing	Responsibility
<ul style="list-style-type: none"> - Consolidated review of project effectiveness, progress towards outcomes and technical outputs of project actions; - Final best practices and lessons learned; - Report on project expenditures 	Two months before project completion	PCG with input from Executing Agencies
Terminal Evaluation		
<ul style="list-style-type: none"> - Independent evaluation of project management, actions, outputs and impacts; - Sustainability analysis - Project effectiveness; - Technical outputs; - Lessons learned; - Progress towards outcomes 	Within 6 months of project completion	Independent Evaluator(s) – hired by IDB and UNEP as GEF agencies

6 Risk Management

The initial review of the project identified two main categories of risks;

- (i) environmental and social safeguard risks; and
- (ii) special risks.

A risk matrix has been prepared for the project and is found in **Appendix 3**.

6.1 Environmental and Social Safeguard Risks

The different financing modalities will have a positive social and environmental impact as they will finance investments that contribute to improving the environment and the quality of life of the benefited population. It is anticipated that the construction phase will have environmental impacts. The main negative impacts and risks associated with the construction phases are likely to be related to waste and wastewater generation, noise, traffic interference, occupational risks. While in the operational phase the risks could include noise, odours, residuals, degradation of receiving waters due to the risk of plant shutdowns and occupational risks.

Each PEA is required to develop an Environmental and Social Management System (ESMS) to manage and mitigate its environment and social risks. Each PEA will ensure that projects financed by the PFM comply with social and environmental requirements, and that all necessary social and environmental safeguards have been put in place. A PEA will not begin activities until a final ESMS is in place and until the PEA demonstrates its capacity to implement the Environmental and Social Management Report to the satisfaction of the PCG.

6.2 Special Risks

A number of special risks have been identified. These are:

Performance of Pilot Executing Agencies. A certain risk would be associated with the weak performance in the implementation of the PFMs and the execution of the first generation projects. To mitigate these risks, operations manuals are being developed for each PEA to establish the operating guidelines for the revolving fund and the

selection, development and implementation of the project financed under the fund. Each PMU will be strengthened by hiring one professional, and providing training directed to PMU members. Throughout project execution, the PCG will also provide the required guidance, and develop templates for project management and reporting.

Lack of Government Counterpart Resources. From the financial point of view, a possible risk is the lack of availability or effective integration of counterpart resources to co-finance various activities. To mitigate this risk, each PEA has set aside cofinancing resources and provided a confirmation of co-financing letter prior to the beginning of project activities.

Innovation in Financing. Testing the investment potential for wastewater and creating innovative financing mechanisms can represent risks. Given that the financing mechanisms are being implemented

as pilots, the project will have the advantage of experimenting on small-scale initiatives, thereby limiting the downside exposure for the investment. Each PFM has been designed to fit the needs and characteristics of each country and the capacity of the PEAs. A PMU will be created within each PEA to take care of PFM day to day management. The PMU members will be trained and will receive support from the PCG, IDB and UNEP.

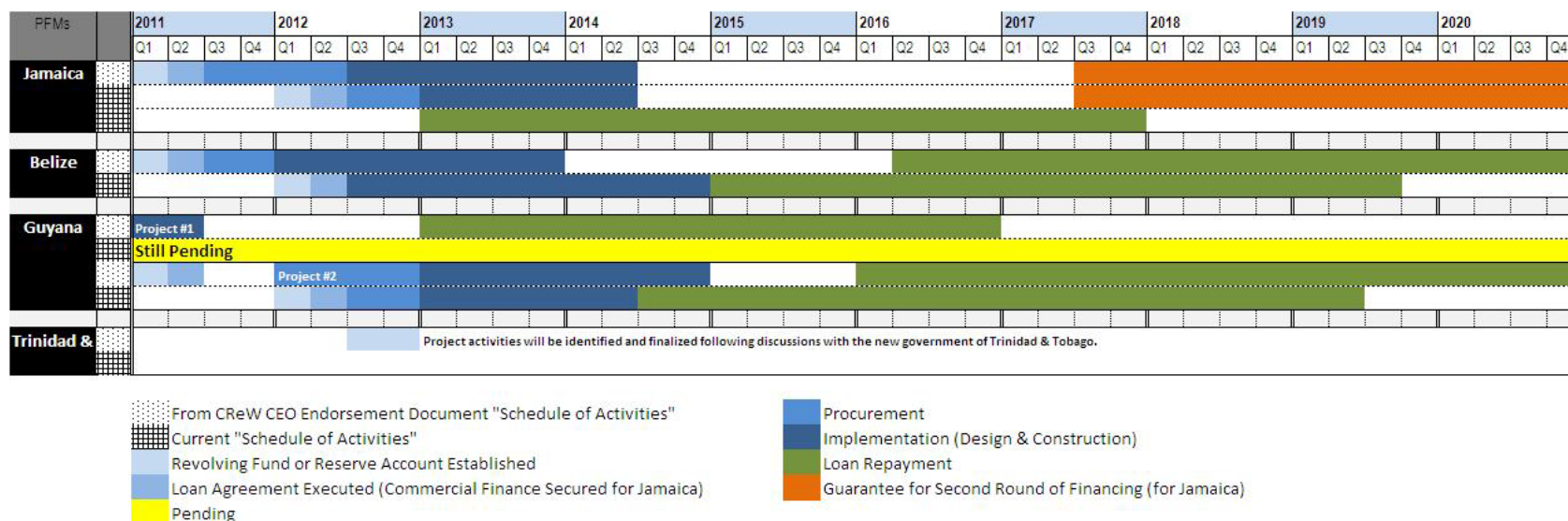
Sustainability. Lack of loan repayment can put the PFMs financial sustainability at risk. In order for the PFMs created by the CReW to be sustainable, one of the requirements is that all projects financed by each PFM must be financially viable with a dedicated source of income. The failure of a project to repay would undermine the credibility and viability of the PFM and ultimately the CReW program and would fail to meet GEF objectives.

7 Proposed Annual Operating Plan

The chart below provides an overview of the Project Execution Plan and shows both the projection which was submitted to the GEF and the revision which has become necessary for a number of reasons. The two main revisions are: (i) an adjusted in the start up time from January 2011 to June 2011 and (ii) an adjustment to the start time for repayments to the PFM to allow the results to be part of the evaluation of the prototypes during the life of the project.

With regards to the Annual Operating Plan (AOP), to date these plans have not been received from the Executing Agencies, has none have yet fully established their PMU. We anticipate however, that this activity will soon be completed. In the interim, the PCG have been working with the IACG, the PEAS in Jamaica, Belize and Guyana and the UNEP CAR/RCU regarding project activities. The proposed AOP has been prepared based on those discussions but also reflects the view of the PCG in respect of the rate of start up which is required to give the Region a good opportunity of achieving the project outcomes within the proposed four year timeframe. Also provided is the budget for Year 1.

Project Execution Plan (PEP)



Proposed Annual Operation Plan 2012

		2012												Target & Comments
		Q1			Q2			Q3			Q4			
		J	F	M	A	M	J	J	A	S	O	N	D	
Component 1 Investments and Innovative Financing for Wastewater Management														
Subcomponent 1.1 – Financial Mechanisms (PFMs)														
Financing mechanisms established	Belize (\$5M)													Extension request
	Jamaica (\$3M)													Extension request
	Guyana (\$3M)													Extension request
	Trinidad & Tobago (\$2M)													Agreement to be signed
Subcomponent 1.2 – Project Development Support														
First generation projects designed	Belize (1)													Design ready in January 28-2013
	Jamaica (11)													Including RFP and paper work. Design and Constr. on Nov.
	Guyana (2)													Design finalization depends on outcome of Proc. Process
	Trinidad & Tobago (1)													Proposed project identified
Subcomponent 1.3 – Effective management and development of the pilots through capacity building Capacity Strengthening for Wastewater Pilots														
Technical capacity provided	Technical specialists hired													Supervision plans for the year
Component 2 Reforms for Wastewater Management (UNEP)														UNEP/RCU will prepare detail work plan after PSC meeting
Subcomponent 2.1 – Capacity Building – Policy and Institutional Strengthening														
II.1.1 Documented policy & legal reforms & institutional strengthening for wastewater management at national and local levels	Policy templates and tools kit developed.													Target 1 for 2013
	Template for Wastewater management plan developed.													Target 1 for 2013
	National capacity development plans implemented.													Target 2 for 2014
	Regional evaluation workshop held													Target 1 for 2015
		2012												Target & Comments

		Q1			Q2			Q3			Q4			
		J	F	M	A	M	J	J	A	S	O	N	D	
II.1.2 Country reports demonstrate improved implementation of the LBS Protocol, and in particular its Annex III on domestic wastewater	Report on compliance of LBS protocol prepared.													Target 1 for 2013
	Guidelines for compliance with LBS protocol developed.													Target 6 2 2013 2 2014 & 2 2015
	Regional workshop on wastewater treatment technology held													Target 1 for 2014
II.1.3 Valuation for selected coastal resources in two pilot countries developed	Resource valuation reports													Target 2 for 2014 - Countries identified in 2012
	Regional training workshops on resource valuation held													Target 2 for 2014
II.1.4 Documented improvements in financial capacity of wastewater management utilities and service providers	Survey on best practices for funding wastewater utilities completed													Target 1 for 2013 - Scoping of projects
	Cost recovery models tested													Target 2 for 1 2013 & 1 2014
	Regional workshops on cost recovery models held													Target 2 for 2014
II.1.5 Guidelines and best practice modalities for civil society involvement in wastewater management	Workshop for training of facilitators.													Target 2 for 2013
	Stakeholder consultation workshop held.													Target 6 2 2013 2 2014 & 2 2015
II.1.6 Detailed implementation plan (resources, budget & timetable) for a Monitoring, Evaluation and Reporting (ME&R) system	Effluent discharge M&E database developed.													Target 1 for 2014
	National systems demonstrated.													Target 2 for 2014
II.1.7 Training programmes for wastewater professionals	Number of regional and National workshops on different aspects of wastewater management held.													Target 11 4 2013 4 2014 & 3 2015
	Number of partnerships for delivery of training.													Target 4 2 2013 & 2 2014
	Number of courses outline adapted.													Target 2 for 2014
Subcomponent 2.2 – Capacity Building – Legislative Reform														
II.2.1 Regional toolkit of templates for wastewater management drafting instructions	Drafting instructions template developed.													Target 1 for 2013
	Wastewater regulations enacted.													Target 2 for 2014
II.2.2 Training workshops for enforcement personnel	# of training workshops provided for enforcement personnel													Target 6 2 2013 2 2014 & 2 2015

		2012												Target & Comments
		Q1			Q2			Q3			Q4			
		J	F	M	A	M	J	J	A	S	O	N	D	
Subcomponent 2.3 – Capacity Building – Awareness Raising														
II.3.1 Increased focus on wastewater management issues by national leadership from improved awareness of wastewater issues.	KAP Regional surveys performed.													Target 2 1 2012 & 1 2014
	Communication products developed.													Target 4 1 2012 1 2013 1 2014 & 1 2015
II.3.2 Increased coverage of wastewater and sanitation issues in the media from improved awareness of wastewater issues	Number of stories in the media published.													Target 84 4 2012 20 2013 30 2014 & 30 2015
II.3.3 Increased awareness of wastewater and sanitation issues in selected communities	Communication strategy for rural communities developed.													Target 1 for 2013
	Rural communication campaign on sanitation implemented.													Target 4 1 2013 2 2014 & 1 2015
II.3.4 Guidelines for enhancing incorporation of wastewater management issues into curricula.	Inventory of wastewater education in selected countries conducted.													Target 1 for 2013
	Guidelines for enhancing incorporation of wastewater management issues into curricula developed.													Target 2 for 2014
	Teaching learning toolkit developed and tested.													Target 2 for 2014
II.3.5 Increased participation of community members and other members of the public in process to develop and implement wastewater policy and practices through availability and use of guidelines on public involvement														Seek guidance at PSCM
Component 3 Communications, Outreach and Information Exchange (UNEP)														
Subcomponent 3.1 - Project Documentation Development and Training														
III.1.1 PFMs, demos and overall project activities, documented through lessons learned, experience notes, and feature articles, that highlight the potential for replication of the CREW project	Templates used to document the pilots, demos and overall project													Target 4 for 2013
	Workshops on how to use templates and selections of lessons learned													Target 1 for 2013
III.1.2 Replication strategy developed	Replication strategy developed													Target 1 for 2014

		2012												Target & Comments			
		Q1			Q2			Q3			Q4						
		J	F	M	A	M	J	J	A	S	O	N	D				
III.1.3 Increased dialogue among regional wastewater stakeholders through a series of stakeholder consultations.	Annual regional meetings with stakeholders (CWWA).													Target 3 1 2012 1 2013 & 1 2014			
	Presentations on the implementation of the CReW at regional and internat. conferences													Target 14 2 2012 4 2013 4 2014 & 4 2015			
	Professional exchanges conducted.													Target 4 1 2012 1 2013 1 2014 & 1 2015. Identify opportunities.			
Subcomponents 3.2 - Integrated Information Management System																	
III.2.1 Increased access to and use of information related to wastewater management through development of a ‘Clearing House Mechanism’ (CHM) for the WCR	IT based regional information management system developed													Target 1 for 2015 review data from PEAs			
Component 4 Monitoring & Evaluation																	
Development of a standardized M&E approach																	
Component 5 Project Management																	
Project Coordination Group (PCG) established																	
Steering Committee (SC), and Inter-Agency Coordination Group (IACG) established														PSC Meeting annually and IACG meetings monthly			
Exit strategy successfully implemented																	

GEF CReW Year One Budget

Project Components/Sub-projects/Activities	GEF Funding USD		Total Cost USD	2012 Budget	% Expenditure
	IDB	UNEP			
Component I: Investment and Innovative Financing for Waste Water Management	15,073,000		15,073,000	11,662,000	77.4%
Sub-project I.1: Investment and innovative financing for wastewater management	13,000,000		13,000,000	11,000,000	
Sub-project I.1: Project Development Support	1,000,000		1,000,000	375,000	
Sub-project I.3: Capacity Strengthening for Wastewater Pilots	1,073,000		1,073,000	287,500	
Component II: Reforms for Waste Water Management		2,500,000	2,500,000		
Sub-project II.1: Capacity Building - Policy and Institutional Strengthening		1,540,000	1,540,000	250,000	16.2 %
Activity II.1.1 - Strengthening the policy and institutional frameworks for wastewater management in the Wider Caribbean Region and engendering local and national reforms		230,765	230,765	90,000	
Activity II.1.2 - Enhancing implementation of the LBS Protocol		222,167	222,167		
Activity II.1.3 - Training on the use of Environmental and Natural Resource Accounting (ENRA) in Wastewater Management		245,167	245,167	50,000	
Activity II.1.4 - Enhancing the Financial Capacity of Wastewater Management Utilities and Service Providers		183,167	183,167	30,000	

Project Components/Sub-projects/Activities	GEF Funding USD		Total Cost USD	2012 Budget	% Expenditure
	IDB	UNEP			
Activity II.1.5 - Building Capacity for Public-Private Partnerships (PPP) and Bottom-Up Planning within the Wastewater Sector		177,967	177,967		
Activity II.1.6 - Initiation of Regional Monitoring, Evaluation and Reporting (ME&R) Framework for Wastewater Management		240,767	240,767		
Activity II.1.7 - Development of training programmes for wastewater professionals		240,000	240,000	80,000	
Sub-project II.2: Capacity Building - Legislative Reform		660,000	660,000	60,000	<1%
Activity II.2.1 - Review existing legislative frameworks for wastewater management in the WCR countries and develop regional toolkit of template for improving wastewater management legislation		256,000	256,000	60,000	
Activity II.2.2 - Improving compliance with obligations of the LBS Protocol and its Annex III on Wastewater Management		202,000	202,000		
Activity II.2.3 - Regional training on enforcement of wastewater management legislation		202,000	202,000		
Sub-project II.3: Capacity Building - Awareness Raising		300,000	300,000	122,500	40.8%
Activity II.3.1 - Development and dissemination of outreach materials targeted for decision makers and the media on wastewater management		220,000	220,000	107,500	
Activity II.3.2 - Design of guidelines for incorporating wastewater management into formal educational curriculum		50,000	50,000	15,000	
Activity II.3.3 Development of community programmes for enhancing public awareness on the importance of wastewater management		30,000	30,000		

Project Components/Sub-projects/Activities	GEF Funding USD		Total Cost USD	2012 Budget	% Expenditure
	IDB	UNEP			
Component III: Communication, Outreach and Information Exchange		710,000	710,000		
Sub-project III.1: Information Sharing and Dissemination		300,000	300,000	130,000	43.33%
Activity III.1.1 – Development of knowledge management products and publications documenting CReW's best practices and experiences		150,000	150,000	70,000	
Activity III.1.2 – Regional multi-stakeholder consultation		150,000	150,000	60,000	
Subproject III.2: Integrated Information System		410,000	410,000	70,000	17.00%
Activity III.2.1 – Clearing house mechanism/Center of Excellence in Waste Water Management		125,000	125,000		
Activity III.2.2 – Knowledge and information system/DSS for the Wider Caribbean		75,000	75,000		
Communications Specialist		210,000	210,000	70,000	
Component IV: Monitoring & Evaluation	670,000	90,000	760,000	291,250	38.29%
Sub-project IV.1: Monitoring and Evaluation	500,000	90,000	590,00	163,750	
Sub-project IV.2: Financial & Operations Audits	170,000		170,000	127,500	
Component V: Project Management	922,000	35,000	957,000	353,000	36.89%
Sub-project V.1: Project Coordination	510,000		510,000	191,250	
Sub-project V.2: Steering Committee	162,000	35,000	197,000	68,000	
Sub-project V.3: Administrative Assistance	250,000		250,000	93,750	
TOTAL PROJECT COST (\$)	16,665,000	3,335,000	20,000,000		
	20,000,000				

8 Challenges

The PCG is conscious of the time sensitive nature of the project and the potential risk that delays in timely implementation pose to achieving project outcomes. It will be of the utmost importance that the construction activities associated with first generation projects be completed in time, to firstly allow for the repayments into the PFM to commence and secondly to facilitate the monitoring of plants' performance. To achieve the project outcomes, and particular in light of the issues highlighted above a relatively aggressive approach to implementation will be required in the first two years of the project. Any issues which could potentially delay the implementation of Component 1 are therefore of concern to the PCG. We will strive to work with the PEAs to avoid/minimize these concerns.

We are also mindful of the need within the constraints of the budget, to ensure meaning involvement and participation of all 13 participating countries. To address this issue will require close communication and collaboration as well as an effort to leverage other resources where possible. The responsibility for doing so is a collective one to be borne by all stakeholders the PCG, the Executing Agencies and the participating countries working with our strategic partners and seeking to build new alliances where possible.

The PCG is committed to working closely with all involved. We are confident that a close and collaborative working relationship will yield the results which are vitally important to contributing to addressing waste water management issues in the WCR.

9 APPENDICES

Appendix 1 – Original Results Framework

Objective / Outcome	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
Project Objective: In the context of the Cartagena Convention and its LBS Protocol, to pilot financing mechanisms and their related wastewater management reforms that can be subsequently established as feasible instruments to provide sustainable financing for the implementation of environmentally sound and cost-effective wastewater management measures.	PFMs developed, tested and documented; Policy, institutional and regulatory barriers to financing wastewater investments addressed through national reforms;	No innovative funding mechanisms for wastewater management in the Wider Caribbean Region; Limited wastewater management reforms;	4 PFMs developed, tested and documented in 4 locations; (Belize, Jamaica, Guyana, Trinidad & Tobago (T&T)) At least 5 of the WCR countries adopt wastewater management reforms.	PMUs Reports Mid Term and Final Evaluation Reports	Countries remain supportive of the need for reforms in wastewater management.

Outcome	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 1: Improved access to financing for wastewater management	Number of PFMs implemented.	0	4 PFMs <ul style="list-style-type: none"> National Revolving Fund (Belize) Credit Enhancement Guarantee Facility (Jamaica) National Revolving Fund (Guyana) National Revolving Fund (T&T) 	PMU Reports Mid Term and Terminal Evaluation Reports	
	Disburse \$13 M to first generation projects through PFMs	\$0 M	Belize - \$5M Jamaica - \$3M Guy Ana - \$3M T&T - \$2M	PMU Reports Mid Term and Terminal Evaluation Reports	
Outcome 2: Successful development of first generation projects.	Number of wastewater treatment facilities constructed or rehabilitated through the implementation of first generation projects.	0	Belize - 1 Jamaica - 11 Guyana – 2 T&T- TBD	PMU Reports Mid Term and Terminal Evaluation Reports	
Outcome 3: Improvements in technical capacity for project implementation	PMUs are capable of fully managing all of the elements of the PFM.	0	4 self-sufficient PMUs with the ability to manage the financial, procurement, project management, technical and environmental component of the PFM and projects.	PCG Report Mid-term report Project completion report	

Outcome	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 4: Reduced land based pollution to terrestrial and coastal waters from untreated wastewater	Volume: total annual volume (m ³) of wastewater treated compared to baseline volume (prior to project)	Belize - 0 m ³ Jamaica - TBD Guyana – TBD T&T- TBD	Belize ²² - 600,000 m ³ Jamaica ²³ – 19.7 million m ³ Guyana – TBD T&T - TBD	PMU Reports Mid Term Report Project Completion Reports	Governments ratify LBS Protocol and establish standards to comply with regional effluent requirements
	Quality of treated effluents: Improvements in the effluent quality indicators (biological oxygen demand (BOD) levels, nutrient levels, faecal coliforms, and suspended solids) at exit of discharge compared to baseline values	Typical domestic untreated wastewater quality: BOD ₅ – 190 mg/L TSS – 225 mg/L pH - Varies Faecal Coliforms – 100 to 1000 mpn/100 mL: ²⁴	LBS Protocol ²⁵ domestic wastewater effluent limits for the appropriate class of water, where appropriate. <u>Class 1 Waters:</u> BOD ₅ – 30 mg/L TSS – 30 mg/L pH – 5-10 Faecal Coliforms – 200 mpn/100 ml <u>Class 2 Waters:</u> BOD ₅ – 150 mg/L TSS – 150 mg/L pH – 5-10 Faecal Coliforms – n/a	PMU Reports Mid Term Report Project Completion Reports	

²² Based on a projected 0.43 MGD in 2006 as part of the Engineers without Borders Report.

²³ Based on a total capacity of the 11 plants of 11.9 mgd.

²⁴ Final baseline to be determined for each project in the first year.

²⁵ Final target for each project to be determined based on local standards, LBS protocol and other environmental factors.

Outcome	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
	Increase in population with access to improved wastewater treatment facilities	Population with access to wastewater treatment: Belize - 0 Jamaica - TBD Guyana - 0 T&T - TBD	Population with improved access to wastewater treatment: Belize – 6,400 Jamaica - TBD Guyana – TBD T&T - TBD	PMU Reports Mid Term Report Project Completion Reports	
Outcome 5: Improved local and national capacity for wastewater management resulting in reduced land-based pollution of terrestrial and coastal waters in the WCR.	Number of countries that have ratified the LBS Protocol and implementing it accordingly	6 countries ratified and 3 countries implementing	3 additional countries ratify LBS Protocol and 3 additional countries have plans to further implement LBS Protocol	Secretariat to Cartagena Convention reports	Governments comply with regional effluent requirements
	Number. of countries introducing new / revised policies, legislation or other regulatory frameworks on wastewater management including plans and strategies for effective enforcement of wastewater regulations	To be established	At least 75% of countries that endorsed the CReW have revised current policies, laws etc	CAR/RCU and PCG Reports	
Outcome 6: Improved stakeholder awareness about acceptable, sustainable and cost-effective wastewater management solutions.	Increased awareness about wastewater management by: (i) policy makers (ii) wastewater managers (iii) National & regional institutions (iv) wastewater professionals (v) Selected Communities (vi) General public	To be established	>75% of surveyed show increased awareness	Survey data	Broad stakeholder interest Active engagement in the process

Outcome	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 7: Increased demands for piloting FMs in the WCR.	Requests for replication of PFMs in WCR.	0	3 requests for establishing PFMs besides the 4 PFMs planned as part of Component 1.	CAR/RCU and PCG Reports	Willingness of countries to adopt approach and to replicate Broad stakeholder interest and engagement in the process remains active
Outcome 8: Increased knowledge, dissemination of information and the use of participatory methods and practices by government agencies, private sector and civil society on wastewater management in the WCR.	Increased dialogue and sharing of data knowledge and skills by government personnel with responsibility for wastewater management	Limited dialogue and sharing of information on wastewater management	> 75% of surveyed indicate increased knowledge and skills	Survey results,	Broad stakeholder interest and engagement in the process remains active
	Compiled knowledge and experience about the project shared with other GEF projects and GEF Sec	0	At least one case study or documentation of each pilot and demonstration performed as part of CReW	Pilot project case studies;	
Outcome 9: Effective Project Monitoring and Oversight	Timely submission of M&E reports by the executing agencies	N/A	75% of reports from executing agencies are submitted on-time.	PCG Report	
	Implementation of suggested modifications to the project based on M&E reporting to address the changing needs of the executing agencies.	N/A	Effective response to unforeseen changes in circumstances through approved adaptive management procedures	PCG Report, Project reports Mid-term report and Project Completion Report.	PMUs with support from PCG establish and operate revised indicators to monitor project performance

Outcome	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
Outcome 10: Effective Project Coordination	Formation of PCG, PMUs and IACG Establishment of formal communication channels and project management tools	N.A.	Project is successfully executed and results realized and disseminated	Minutes of meetings Mid-term and Terminal evaluation	Successful recruitment PCG members

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
Subcomponent I.1 – Financial Mechanisms					
(SC I.1.1) Innovative financing mechanisms established and functioning	Grant agreements with local counterparts executed.	0	4 executed grant agreements with PEAs <ul style="list-style-type: none"> • National Revolving Fund (Belize) • Credit Enhancement Guarantee Facility (Jamaica) • National Revolving Fund (Guyana) • National Revolving Fund (T&T) 	PMU and PCG Reports, Grant Agreements	
	PMU at PEAs established at execution of the grant agreement.	0	4 PMUs established <ul style="list-style-type: none"> • National Revolving Fund (Belize) • Credit Enhancement Guarantee Facility (Jamaica) • National Revolving Fund (Guyana) • National Revolving Fund (T&T) 		
	On-lending documentation completed and executed.	0	4		

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
(SC I.1.2) Projects are generating repayments into the local revolving financing mechanism.	Projects are scheduled to generate repayment into the local revolving financial mechanism.	0	<ul style="list-style-type: none"> Belize: repayment into the revolving fund starting in year 6 from project initiation Jamaica: Guarantee facility will be reutilized for second round of commercial financing in year 7 from project initiation Guyana: repayment into the revolving fund starting in year 2 from project initiation T&T: TBD 	PMU and PCG Reports	
Subcomponent I.2 – Project Development Support					
(SC I.2.1) First generation projects prepared and developed sustainably	Number of pilot projects that have 100% design documents at the end of year 2.	0	Belize - 1 Jamaica - 3 Guyana - 2 T&T -TBD	PMU and PCG Reports	
	Number of pilot projects that have 100% design documents at the end of year 4.	0	Belize - 1 Jamaica - 11 Guyana - 2 T&T - TBD		
Subcomponent I.3 – Capacity Strengthening for Wastewater Pilots					
(SC I.3.1) Effective management and development of the pilots through capacity building.	PMU Staff hired by the execution of the grant agreement.	0	Belize - 1 Jamaica - 1 Guyana – 1 T&T - 1	PCG Report	

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
	Technical specialist recruited	0	One technical specialist hired prior to the execution of the pilots.	PCG Report	
	PMU staff trained	0	Conduct training with the PMU staff on the following topics: <ul style="list-style-type: none"> • Project Management • Financial Management • Procurement • Environmental & Social Safeguards 	PMU & PCG Report	
(SC 1.3.2) Successful implementation of the first generation projects.	Number of projects in construction by the end of year 2.	0	Belize - 1 Jamaica - 3 Guyana – 1 T&T - TBD	PMU Report	
	Number of projects fully implemented at the end of year 4.	0	Belize - 1 Jamaica - 11 Guyana – 2 T&T - TBD	PMU Report	

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
Subcomponent II.1 – Capacity Building – Policy and Institutional Strengthening					
(SC II.1.1) Documented policy & institutional reforms for wastewater management at national and local levels	No. of policy reforms introduced	No. frameworks or templates for policy reforms available	>50% of countries endorsing CReW introduce at least 1 policy reform	CAR/RCU and /PCG reports Survey reports	Duration of project too short to introduce policy/institutional reforms
	No. of institutional reforms introduced.	No. frameworks or templates for policy reforms available	>50% of countries endorsing CReW introduce at least 1 institutional reform		Duration of project too short to introduce policy/institutional reforms
	No. of countries adopting templates	No. frameworks or templates for policy reforms available	>50% of countries endorsing CReW adopt templates		
	No. of policymakers aware of templates & tools	No. frameworks or templates for policy reforms available	Policymakers in >75% of countries endorsing CReW are aware of tools & templates		Limited acceptance of templates and tools developed
(SC II.1.2) Country reports demonstrate improved implementation of the LBS Protocol, and in particular its Annex III on domestic wastewater	No. of countries with amended or new national development plans (e.g. housing, industry, tourism) that integrate wastewater management	Approx. 10% of countries endorsing the CReW have national development plans that include wastewater issues.	At least 50% of countries endorsing CReW include wastewater related issues in National development plans.	National Reports CAR/RCU and PCG Reports	Lack of acceptance of need to amend policies in sectors Lack of resources for policy amendments

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
	Number of national sanitation policies in place	Approx. 10% of countries endorsing the CReW have national development plans that include wastewater issues.	> 50% of countries endorsing CReW have introduced at least 1 new sanitation policy.		Political willingness absent Lack of inter-sectoral co-ordination
(SC II.1.3) Preliminary accounts for coastal resources and water for 2 demo sites using Environmental and Natural Resources Accounting (ENRA) in wastewater management	Satisfaction levels of stakeholders on ENRA outputs	Low number of countries applying environmental economics and ENRA in wastewater policy formulation	Survey data indicating >75% satisfaction of ENRA outputs in demo sites	Survey data	ENRA methodology not accepted or usable in WCR Stakeholders fail to understand the results
	No. countries adopting ENRA approach		>50% countries express willingness to accept approach	CAR/RCU and PCG reports	Institutions do not accept ENRA methods
	No. of staff trained in ENRA approach		50 staff in 2 demo sites trained in ENRA approach		
(SC II.1.4) Documented improvements in financial capacity of wastewater management utilities and service providers	No. wastewater utilities utilising business plan templates/ cost recovery strategies proposed	N/A	> 50% of utilities across WCR utilising approaches	Survey data CAR/RCU and PCG reports	Acceptance of methodology by wastewater utilities Approach fails to deliver improvements in costs etc.
	No. wastewater utilities demonstrated improvements in cost recovery etc.	N/A	> 25% of utilities in participating countries with demonstrable improvements	CAR/RCU and PCG reports	Willingness of wastewater managers to train staff in approach

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
	No. of operators trained in methods to increase the level of funding for wastewater projects from state budgets or international lending institutions	N/A	>30 wastewater management staff trained	CAR/RCU and PCG reports	
(SC II.1.5) Guidelines and best practice modalities for civil society involvement in wastewater management	Level of involvement & acceptance of civil society in wastewater governance	N/A	>30% countries have increased civil society involvement in wastewater management	Survey data CAR/RCU and/PCG reports	Wastewater operators / authorities do not accept public involvement in wastewater management
	No. countries adopting involvement of civil society in wastewater management	N/A	50 participants attend 2 regional seminars		Mechanisms for involvement of public sustained;
(SC II.1.6) Detailed implementation plan (resources, budget & timetable) for a Monitoring, Evaluation and Reporting (ME&R) system	No. countries committed to participating in regional ME&R mechanism and providing data	No regional ME&R system for data collection on wastewater discharged to the marine environment	>30% of counties supply data within 3 years	Survey data CAR/RCU and PCG reports	Acceptance by countries / operators of ME&R system
	No. development / donor partners endorsing ME&R approach	No regional ME&R system for data collection on wastewater discharged to the marine environment	At least 2 development / donor partners in WCR endorse ME&R	CAR/RCU and PCG reports	Acceptance of data provided by development/donor partners

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
(SC II.1.7) Institutionalized training programmes for wastewater professionals	No. of national & regional institutions providing training programs for wastewater professionals	N/A	4 national institutions providing courses based on material developed and at least 2 regional institutions from the WCR providing wastewater management courses based on material developed	Survey data CAR/RCU and PCG reports Course Curriculum published	Acceptance of partnerships by national / regional institutions Approval of material by national / regional institutions Approval of material by wastewater managers and professionals Budget for continued training of staff insufficient
	Number of course outlines developed	N/A	At least 3 course outlines developed as per training needs assessment	CAR/RCU and PCG reports Course Curriculum published	
	Satisfaction of participants on courses	N/A	>75% of countries in the WCR sending participants to training courses	CAR/RCU and PCG reports	
Subcomponent II.2 – Capacity Building – Legislative Reform					
(SC II.2.1) Regional toolkit of templates for wastewater management drafting instructions	National effluent standards developed based on regional guidelines under LBS Protocol	N/A	At least 50% increase in number of countries that develop national effluent standards	Survey data CAR/RCU and PCG reports	Governments ratify LBS Protocol and establish standards to comply with regional effluent requirements
	No. of stakeholders satisfied with toolkit of templates for wastewater management drafting instructions	N/A	75% of stakeholders express satisfaction in survey		Stakeholders do not accept need for templates on management
	No. of countries indicate willingness to use templates	N/A	> 50% of countries that endorsed the CReW agree to use templates		

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
	No. of policy makers aware of templates	N/A	75% of policy makers indicate familiarity in survey on templates		
(SC II.2.2) Training workshops for WCR enforcement personnel	No. of training workshops provided for enforcement personnel	N/A	2: 1 in English and 1 in Spanish	Survey data CAR/RCU and PCG report	Manuals accepted by legal experts / policy makers Participants willing to attend training workshops
	Training workshop satisfaction index		At least 'high' level approval obtained in post workshop survey		
	No. of legal experts / policy makers trained		>30 experts attend in 2 regional workshops		
Subcomponent II.3 – Capacity Building – Awareness Raising					
(SC II.3.1) Increased focus on wastewater management issues by national leadership from improved awareness of wastewater issues	Percentage of government leaders declaring level of knowledge of wastewater issues is "high"		Increase by 20% of government decision-makers with increased awareness	CAR/RCU and PCG reports Survey reports	Lack of interest in topic or surveys
	Percentage of budget allocated to wastewater management		Increase in available national budget of 10% in at least 6 countries	CAR/RCU and PCG reports National budget data	Failure to secure increase in national budget

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
(SC II.3.2) Increased coverage of wastewater and sanitation issues in the media from improved awareness of wastewater issues	Number of stories in newspapers and on radio and television that include wastewater-related issues		<p>Increase in number of stories by 50% of current level</p> <p>At least two national press briefings held per annum in each demo site and one in each participating country</p>	<p>Survey data</p> <p>CAR/RCU and PCG reports</p>	<p>Media interest</p> <p>Public interest</p>
(SC II.3.3) Increased awareness of wastewater and sanitation issues in selected communities	Percentage of community members who say their knowledge level is “high”		Increase by 50% of surveyed persons	<p>Survey data</p> <p>CAR/RCU and PCG reports</p>	Presentation of information sufficient to engage communities
(SC II.3.4) Increased teaching of wastewater and sanitation issues in schools	Number of subjects that include wastewater issues	Typically science and social studies may include wastewater issues	Inclusion of wastewater issues in core subjects - language and math and 3 other subjects in at least 6 countries	<p>Survey data</p> <p>PMU/PCG reports</p>	<p>Teachers/Schools interest in wastewater material</p> <p>Curriculum designers approve material developed by CReW for inclusion</p>
	Number of schools that include wastewater issues in their classes.	Typically science and social studies may include wastewater issues	At least 20 schools in participating countries include wastewater material in courses	<p>Survey data</p> <p>PMU/PCG reports</p>	
(SC II.3.5) Increased participation of community members and other members of the public in process to develop and implement wastewater policy and practices through availability and use of guidelines on public involvement	Mechanisms established to facilitate public involvement in decision making processes		Mechanisms for public involvement established in > 50% of participating countries	<p>Survey reports</p> <p>CAR/RCU and PCU reports</p>	<p>Willingness of communities to be involved</p> <p>Willingness of wastewater operators / policy makers to involve public</p>

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
Subcomponent III.1 – Project Documentation Development and Training					
(SC III.1.1) PFMs, demos and overall project activities, documented through lessons learned, experience notes, and feature articles, that highlight the potential for replication of the CReW project	Development of templates used to document the pilots, demos and overall project by the end of year 1.	0	Templates for the following: <ul style="list-style-type: none"> • Experience notes • Case studies • Documentaries • Feature articles 	CAR/RCU and PCG reports	Countries do not deliver documents Lack of willingness
	Number of people trained on how to use templates and selections of lessons learned	0	2 staff trained from each PMU and demo project.	CAR/RCU and PCG reports	
	Number of documents prepared summarizing the project, pilots and demos	0	For each pilot and demo prepared at least two experience notes and case study.	CAR/RCU and PCG reports	
(SC III.1.2) Replication strategy	Development of a replication strategy for the PFMs	0	Development of 1 overall strategy with specific components to address the unique features of each PFM.	CAR/RCU and PCG reports	
(SC III.1.3) Increased dialogue with regional wastewater stakeholders through a series of stakeholder consultations.	Annual regional meetings with stakeholders.	0	4 annual regional meetings	Meeting minutes	Countries and Agencies unwilling to participate in stakeholder meetings
	Presentations on the implementation of the CReW at regional conferences	0	Presentations made at 4 Annual CWWA Conferences and other relevant conferences.	Conference/meeting agenda	

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
	Identification of twinning opportunities for implementation through CARIWOP and WOP.	0	4 twinning opportunities identified	Meeting minutes	
Subcomponent III.2 – Integrated Information Management System					
(SC III.2.1) Increased access to and use of information related to wastewater management through development of a 'Clearing House Mechanism' (CHM) for the WCR	On-line portal on wastewater information available	No web site/ CHM	Functional and utilised website / CHM	CAR/RCU and PCG reports	Web site structure and content agreed
	Data sharing agreement between WCR countries	No Agreement	All countries agree to data sharing	CAR/RCU and PCG reports	Countries fail to agree data sharing
	Maintenance protocol developed and agreed to ensure web data current	No protocol	Latest data available on website	CAR/RCU and PCG reports / no negative comments from WCR countries	Failure to agree protocol Failure to maintain data Budget insufficient
	Increasing use of website by wastewater managers	No website	All countries access website.	CAR/RCU and PCG reports / internet data on web access	Users not aware or not interested in website

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
Component IV – Monitoring & Evaluation					
(SC IV.1.1) Development of a standardized M&E approach	Report templates developed.	N/A	Templates developed within the first 4 months of the project, with annual updates as required.	PCG Report	
	Terms of Reference templates for M&E activities developed	N/A	Templates developed within the first 6 months of the project	PCG Report	

Outputs	Indicator	Baseline	Target	Sources of verification	Risks and assumptions
Component V – Project Management					
Project Coordination Group (PCG) established	PCG staff hired, and work plan and budget approved by IACG	No PCG	<p>PCG staffed and project executed according to approved work plan and budget with agreed terms of reference</p> <p>PCG follows the requirements of M&E plan and responds to unforeseen changes to circumstances through approved adaptive management procedures</p>	<p>IACG minutes</p> <p>APR/PIR reports</p> <p>Mid-term and terminal evaluations</p> <p>Financial audit reports</p>	<p>PCG staff successfully recruited</p> <p>Support for work plan by SC</p>
Steering Committee (SC), and Inter-Agency Coordination Group (IACG) established	<p>SC meetings</p> <p>IACG meetings</p>	No SC and no IACG	<p>SC and IACG meetings completed according to plan.</p> <p>Adaptive management changes to project recorded</p>	SC and IACG minutes	Representatives of SC participate in meetings
Exit strategy successfully implemented	Exit strategy accepted	N/A	Exit Strategy accepted and executed 6 months before project completion	IACG and SC meeting minutes	<p>Agreement from all stakeholders to continue activities</p> <p>Willingness of countries to adopt approach and to replicate and /or expand</p>

Appendix 2 – PMR graphs output example



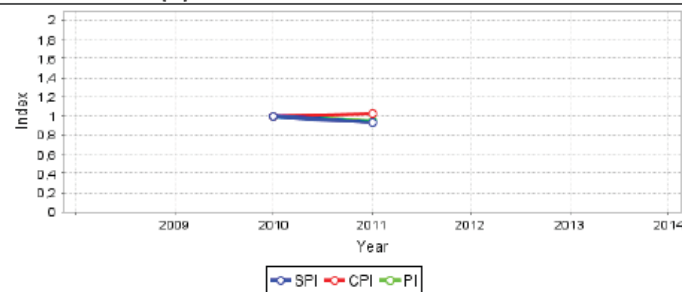
PROGRESS MONITORING REPORT

Last Update: 09/12/2011

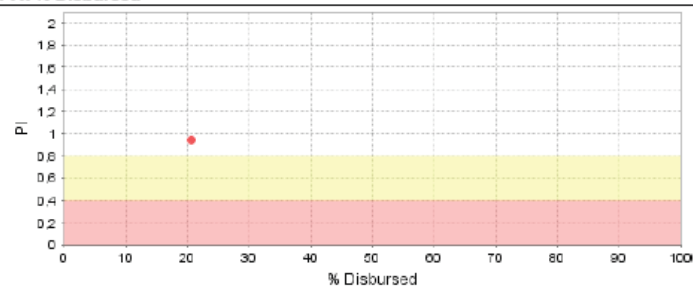
Inter-American Development Bank - IDB
Office of Strategic Planning and Development Effectiveness
Validated by Division Chief:
Validated by Country Representative:

Performance

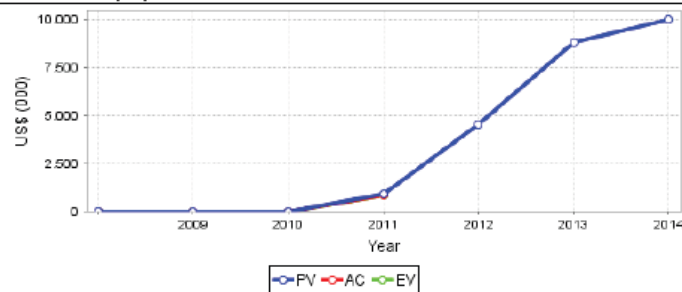
Performance Index (PI)



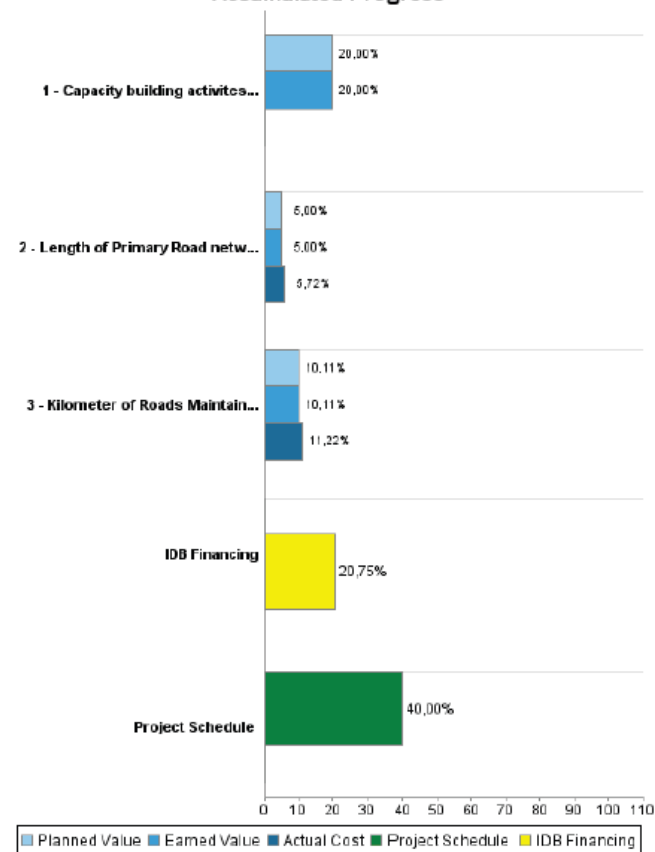
PI x % Disbursed



Earned Value (EV)



Accumulated Progress



Appendix 3 – Detailed Information on sources of Cofinancing

The following should be noted in the review of the co-financing table:

1. The co-financing is presented in summary by component and corresponds to the information presented in Table A.
2. The co-financing for Component 1 has been divided into co-financing directly related to the Pilot Financing Mechanisms and co-financing within the WCR with the main goal of reducing pollution caused by discharges of untreated wastewater into the Wider Caribbean basin, including IDB loans or grants. These co-financing:
 - (a) expand the *resources* available to finance wastewater treatment activities in the WCR and maximizes the impact of the CReW.
 - (b) are key indicators of the strength of the *commitment* of the countries in the WCR region and the IDB as GEF agency
3. In cases where an IDB operation includes water and wastewater investments, only the amount allocated for wastewater was accounted for.

Country/ Entity	Project #	Project name	Status	Type of co-financing	Total Loan Amount	Amount Allocated for Wastewater	Documentation provided in Annex H
Component 1 - Pilot Financing Mechanisms							
Co-financing from wastewater operations in countries that endorsed the CReW							
Costa Rica	CR-L1024	Water and Sanitation Program	Pipeline	IDB loan	85,000,000	49,823,529	Letter of Interest
				Government grant and in-kind	231,500,000	58,159,827	
Costa Rica	CR-T1034	Water and Sanitation Subnational Program Design	Approved	IDB Grant	1,413,920	693,140	Loan Agreement
				Government grant and in-kind	266,486	109,173	
Guatemala	GU-L1039	Water and Sanitation Program for Human Development-Phase I	Approved	IDB loan	50,000,000	23,700,000	Loan Agreement
	GU-X1005		Approved	IDB Grant	50,000,000	25,000,000	TC Agreement
Guatemala	GU-T1134	Preparation of the Water and Sanitation Program for Human Development	Approved	IDB Grant	1,200,000	600,000	Loan Agreement
				Government grant and in-kind	130,000	-	
Panama	PN-L1042	IDAAN Water and Sanitation Investment Program	Pipeline	IDB loan	40,000,000	11,400,000	IDB Operation Document
				Government grant and in-kind	10,000,000	2,500,000	
Panama	PN-L1053	Panama City and Bay Sanitation Project Supplemental Financing	Approved	IDB loan	30,000,000	29,450,000	IDB Board Resolution of Approval
				Government grant and in-kind	9,180,000	8,080,000	
Panama	PN-T1064	Studies and design of Drinking and Sanitation Systems IDAAN	Approved	IDB Grant	750,000	375,000	TC Agreement
				Government grant and in-kind	50,000	25,000	
Subtotal					509,490,406	209,915,669	
Co-financing directly related to the Pilot Financing Mechanisms							
Belize	BL-L1015	Integrated Water and Sanitation Program	Pipeline	Government loan	5,000,000	4,750,000	IDB Operation Document
Jamaica		K-factor based private sector finance		Government loan		10,000,000	NWC Letter
Guyana	GY-L1025	Georgetown Sanitation Improvement	Pipeline	IDB loan	9,500,000	9,025,000	IDB Operation
Subtotal					14,500,000	23,775,000	
Subtotal for the PFMs and Other Wastewater Operations in WCR						233,690,669	
Co-financing for Project Development Support							
Guyana	GY-T1072	Designs for Improvements in Water and Sanitation Infrastructure	Approved	IDB Grant	650,000	325,000	TC Agreement
				Government grant and in-kind	50,000	-	
Belize		Funding for design services	Pipeline	IDB Grant	500,000	475,000	IDB Co-financing Letter
Jamaica		Design Services		Government grant and in-kind	1,000,000	1,000,000	NWC Letter
USTDA		Technical Assistance for Jamaica and Belize	Approved	Grant	500,000	500,000	USTDA Co-financing Letter
Subtotal					2,700,000	2,300,000	
Total for Component 1						235,990,669	
Component 2 - Capacity Building							
UNEP		UNEP Wastewater Projects and Training in Participating Countries		In-Kind		50,000	CAR/RCU Letter
Barbados	BA-L1015	Water and Sanitation Systems Upgrade	Approved	IDB loan	50,000,000	5,000,000	Loan Agreement
				Government grant and in-kind	3,000,000	-	
Total for Component 2						5,050,000.00	
Component 3 - Communication, Outreach and Information Exchange							
UNEP		Communication Support		In-Kind		50,000	CAR/RCU Letter
Total for Component 3						50,000.00	
Component 4 - Monitoring & Evaluation							
PMUs		M&E Co-financing		Government grant and in-kind		840,000	NWC, GOB, GOG Letters
Total for Component 4						840,000	
Component 5 - Project Management							
IDB		CReW PCG Office & Equipment		In-Kind		692,000	IDB Co-financing Letter
IDB		Hosting SC Meetings (location or video conference)		In-Kind		80,000	IDB Co-financing Letter
Jamaica - NWC		PMU and office expenses		Government grant and in-kind		648,000	NWC Letter
Belize - GOB		PMU and office expenses		Government grant and in-kind		739,200	GOB Letter
Guyana - GOG		PMU and office expenses		Government grant and in-kind		368,000	GOG Letter
UNEP CAR/RCU		PMU and office expenses		in-kind		500,000	CAR/RCU Letter
WCR Countries		Overall Wastewater PM Support to WCR				6,744,534	See IDB loans under Component 1 and 2
Total for Component 5						9,771,734	
TOTAL for						251,702,403	

Appendix 4 – Risk Matrix

Identified Risk	Risk Rating	Risk Mitigation Measures
Limited political will of participating governments to push the implementation of the necessary pollution reduction measures at both national and local levels.	Low	<p>The mere existence of the financial mechanism will not compel any government to participate, but it will offer them a highly efficient, highly-leveraged means of dealing with a growing problem that they have pledged to address through their adherence to the Cartagena Convention and in particular the Land Based Sources of Marine Pollution Protocol.</p> <p>Similarly, there are cadres of NGOs and CBOs dedicated to improving the lives of the people in WCR, the involvement of these NGOs and CBOs will be also critical to the success of the Project. Efforts will be made to provide the NGOs with capacity-building assistance and training to undertake sustainable water/wastewater projects. A major focus will be on engaging overall public and community support and also to demonstrate the value of wastewater improvements to human health and economic livelihoods.</p>
Testing a revolving fund mechanism in connection to wastewater management and creating innovative financing mechanisms can represent risks.	Low	<p>Given that the financing mechanisms are being implemented as pilots, the Project will have the advantage of experimenting on small-scale initiatives, thereby limiting the downside exposure for the investment. Each PFM has been designed to fit the needs and characteristics of each country and the capacity of the PEAs. A PMU will be created within each PEA to take care of day to day management of the PFM. The PMU members will be trained and will receive constant support from the PCG and IDB and UNEP staff.</p>
Lack of loans repayment can put the PFMs financial sustainability at risk.	Low	<p>In order for the PFMs to be created by the CReW to be sustainable, one of the requirements is that all projects financed by each PFM must be financially viable with a dedicated source of income in order to sustainably replenish the PFM. The failure of a project to repay would undermine the credibility and viability of the PFM and ultimately the CReW program and would fail to meet GEF objectives. For this reason, all projects funded under the CReW program will need to demonstrate financial viability on an individual basis prior to consideration under the PFMs.</p>

Identified Risk	Risk Rating	Risk Mitigation Measures
The numbers and diversity of participating countries in the project may limit (1) the effective and efficient participation and active involvement of stakeholders, and (2) the development of appropriate regional guidelines that respond to different policy, legal and institutional country frameworks.	Moderate	This risk will be minimized through the use of experienced technical experts, frequent consultation with national focal points, and regional consensus-building opportunities (meetings, seminars).
Domestic wastewater management is not a priority shared by all stakeholders in the region. In fact wastewater treatment is often outranked by water supply and wastewater collection and hence there is a low environmental consciousness as it related to wastewater management. Therefore there is a risk that this will limit consensus-building on regional principles for wastewater management.	Moderate	This risk will be mitigated through the development of activities to assess stakeholders' needs and interests, providing opportunities for stakeholder participation, and promoting broad-based information exchange amongst the stakeholders.
Weak institutional capacity in participating countries.	Low	This risk will be mitigated through the involvement of consultants with expertise in certain core areas, who will work with local stakeholders to encourage "learning-by-doing".
Inputs from the national governments required for the regional and national databases are not provided in a timely manner.	Moderate	This risk will be minimized through the establishment of a close working relationship between the project coordinating unit, national focal points, national stakeholders and execution agencies, along with the development of Memoranda of Understanding (MOUs) outlining expectations.
Cultural resistance to accept new wastewater management measures.	Medium	To minimize this risk, all activities will be based on the principles of participation including the implementation of clear and direct communication and participation strategies. Institutional and local community resistance will be mitigated through direct engagement, awareness building and partnership.

Identified Risk	Risk Rating	Risk Mitigation Measures
Incompatibility of national interests. At the national level, there is a risk that competing political priorities could hinder the implementation and sustainability of the project and national interests could prevail over regional efforts.	Low	The process of renewing and strengthening commitments to the Cartagena Convention and the LBS Protocol for domestic wastewater management will minimize this risk. Also, the endorsement of the CReW at the highest political levels in the participating countries will improve the chances of success.
In some WCR member countries, the legal competencies of wastewater management agencies are not properly defined and/or fall within different sectors and/or institutions, often with conflicting interests. If not addressed properly, this could undermine broad national agreement and obstruct implementation of activities.	Moderate	To reduce these risks, the project includes an institutional capacity-building component and capacity assessment and development activities. The project will build from a common strategic vision for the region, with the direct participation of key institutions and stakeholders.
Lack of government counterpart resources. From the financial point of view, a possible risk is the lack of availability or effective integration of counterpart resources to co-finance various activities.	Moderate	Formal agreements and confirmation of co-financing commitments of the pilot countries prior to the beginning of project activities will limit this risk.
Negative impact of governmental changes in one or more countries. Often a political change at government level leads to changes of technical leadership and discontinuation in an ongoing project or process.	Low	This risk to the extent possible will be minimized through (1) The establishment of project executing agencies for the pilot project countries and (2) finalization of the grant agreement between the project executing agencies and the IDB and incorporation of the creation of the PMU as a condition precedent.
Potential issues arising from inadequate communication between UNEP and the IDB.	Low	Clear and aligned roles, responsibilities, policies, procedures, and effective communication channels are in place.
Hazard and climatic events, especially hurricanes are threats to the project. For example, hurricanes could delay project start up, impact on construction of facilities especially when located in low lying or coastal areas.	Moderate	Construction times and activities will be scheduled to ensure minimum loss and appropriate protective measures will be established