

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK
NOT FOR PUBLIC USE

REGIONAL

SUPPORT FOR THE PREPARATION OF CREW RG-X1011

(RG-X1050)

PLAN OF OPERATIONS

This document was prepared by the project team consisting of: Maria Navia (INE/WSA); Lu Shen (INE/WSA); Rikke Olivera (INE/RND); Rosina de Souza (LEG/SGO); Javier Grau (WSA/CGY); Evan Cayetano (WSA/CJA); Yolanda Galaz (INE/WSA) and Yvon Mellinger, Team Leader.

CONTENT

I.	BACKGROUND AND JUSTIFICATION	1
A.	Justification for the Operation	2
B.	The Bank's Strategy	3
C.	Value added	3
II.	PROGRAM DESCRIPTION	3
A.	Program Objective and Purpose	3
B.	Components	3
III.	COST AND FINANCING	5
IV.	EXECUTING AGENCY AND EXECUTION STRUCTURE	5
V.	MONITORING AND EVALUATION	6
VI.	PROGRAM BENEFITS AND RISKS	6
VII.	ENVIRONMENTAL AND SOCIAL IMPACTS	7
VIII.	CERTIFICATION	7
IX.	APPROVAL	7

ANNEXES

ANNEX I	Detailed Budget
ANNEX II	Procurement Plan

BASIC SOCIOECONOMIC DATA

For basic socioeconomic data, including public debt information, please refer to the following address:

<http://www.iadb.org/countries/index.cfm?language=English>

TECHNICAL FILES

[Terms of Reference](#)

ABBREVIATIONS

CARSEA	Caribbean Sea Ecosystem Assessment
Cartagena Convention	Convention for the Protection and Development of the Marine Environment in the WCR
ESR	Environmental and Social Review
GEF	Global Environment Facility
GESAMP	Joint Group of Experts on the scientific aspects of marine environment protection
INE	Infrastructure and Environment Department
LAC	Latin American and Caribbean
LBS	Protocol on Land Based Sources (LBS) of Marine Pollution
PIF	Project Identification Form – GEF Terminology
PPG	Project Preparation Grant – GEF Terminology
SIDS	Small Island Developing states
TC	Technical Cooperation
TOR	Terms of Reference
UNEP	United Nation Environment Program
UNEP/GPA	Global Plan of Action for the protection of marine environment from land based activities
WSA	Water and Sanitation Division
W&S	Water and Sanitation
WCR	Wider Caribbean Region

PLAN OF OPERATIONS

SUPPORT FOR THE PREPARATION OF CREW – RG-X1011 (RG-X1050)

Beneficiary:	Countries of the Wider Caribbean										
Team Leader/Members:	Maria Navia (INE/WSA), Lu Shen (INE/WSA), Rikke Olivera (INE/RND); Rosina de Souza (LEG/SGO); Javier Grau (WSA/CGY); Evan Cayetano (WSA/CJA); Yolanda Galaz (INE/WSA), and Yvon Mellinger (INE/WSA), Team Leader.										
Executing agency:	Inter-American Development Bank (INE/WSA)										
Target Beneficiaries:	The principal beneficiaries will be the countries of the Wider Caribbean, including Antigua and Barbuda, Barbados, Costa Rica, Guatemala, Guyana, Honduras, Panama, Saint Lucia, Suriname, Saint Vincent and Grenadines ¹ .										
Sources of Financing:	<table><tr><td>Global Environment Facility (GEF)</td><td></td></tr><tr><td>Project Preparation Grant (PPG) : Total</td><td>US\$ 380,000</td></tr><tr><td>GEF – PPG: IDB Component:</td><td>US\$ 245,000</td></tr><tr><td>GEF – PPG: UNEP Component:</td><td>US\$ 135,000</td></tr></table>			Global Environment Facility (GEF)		Project Preparation Grant (PPG) : Total	US\$ 380,000	GEF – PPG: IDB Component:	US\$ 245,000	GEF – PPG: UNEP Component:	US\$ 135,000
Global Environment Facility (GEF)											
Project Preparation Grant (PPG) : Total	US\$ 380,000										
GEF – PPG: IDB Component:	US\$ 245,000										
GEF – PPG: UNEP Component:	US\$ 135,000										
Objectives:	The objective of this TC is to support the preparation of RG-X1011 – Testing a prototype Caribbean regional Fund for Wastewater Management (CReW).										
Execution timetable:	Execution:	9 months									
	Disbursement:	12 months									
Special contractual conditions:	None										
Exceptions to Bank Policies and Procedures:	None										
Environmental and social review:	Project classification is C. The TC profile was reviewed by the ESR Secretariat on January 12 th , 2009. No further action was required.										
Coordination with other Official DFIs:	Operation developed in coordination with the United Nations Environment Program (UNEP) for the Global Environment Facility (GEF), with the possibility of leveraging funds from UN-HABITAT										

¹ Pending receipt of other endorsement letters in the course of the PPG, the project could apply to more countries.

I. BACKGROUND AND JUSTIFICATION

A. Wastewater management situation in the Wider Caribbean

- 1.1 The degradation of the Caribbean marine environment through discharge of untreated wastewater is a serious concern for those countries whose livelihoods depend heavily on natural marine resources. Numerous scientific studies, including the United Nations Environment Programme / Global Programme of Action (UNEP/GPA) 2006 report on the State of the Marine Environment, singled out untreated wastewater entering the world's oceans and seas as the most serious problem contributing to marine pollution. 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."
- 1.2 Scientists have identified a number of serious consequences of marine pollution caused by untreated wastewater. In 2001, UNEP/GPA 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"; researchers estimated the global impact at US\$10 billion per year. Discharge of untreated wastewater has other impacts as well. The CARSEA study found that sewage was one of the main factors that had caused living coral losses in the Caribbean over the past twenty years.
- 1.3 Damage by untreated wastewater to the marine environment, including living coral can bring about severe economic consequences for people in the Caribbean. The CARSEA study found that "the Caribbean is the region in the world most dependent on tourism for jobs and income," while "fishing is also a significant source of both income and subsistence." Yet both of these sectors are directly threatened by environmental degradation due to wastewater discharge. Take the example of Tobago: where the World Resources Institute recently estimated that coral reefs provide upwards of US\$100 million per year in benefits associated with tourism, US\$18-33 million in shoreline protection, and another US\$1 million in benefits to fisheries. These benefits represent about half of the island's annual GDP. The potential economic losses for the region from further degradation of the marine environment is enormous and is the reason why controlling untreated wastewater discharge has become the top priority for the wider Caribbean as well as seven other regions examined around the world.
- 1.4 The need to increase wastewater treatment in the wider Caribbean is urgent. UNEP/GPA estimates that as much as 85 percent of wastewater entering the Caribbean is currently untreated. According to the Pan American Health Organization (2001), 51.5 percent of households in the Caribbean Region lack sewer connections of any kind; only 17 percent of households are connected to acceptable collection and treatment systems. Within Caribbean Small Island Developing States (SIDS), less than two percent of urban sewage is treated before disposal; this is even lower in rural communities. On some islands (e.g., Antigua and Barbuda, Dominica, Haiti) there is no sewerage system; sewage is disposed mainly through septic tanks and pit latrines,

many of which do not comply with minimum technical specifications or are not adequately maintained. Indeed, as a result, untreated 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.

- 1.5 In recognition of the gravity of this situation, a number of Countries from the Wider Caribbean Region (WCR) 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.
- 1.6 While countries thus increasingly recognize the importance of improving wastewater management, obstacles exist to following the LBS Protocol and taking such steps. 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 WCR. Smaller communities in particular often find it difficult to obtain affordable financing for such improvements.
- 1.7 In addition to financial constraints and barriers, other substantial barriers also exist. These include inadequate national policies, laws and regulations; limited enforcements of existing laws and regulations; limited communications and collaboration between various sectors and agencies which contributes to a fragmented approach to wastewater management; and limited knowledge of and analytical capacity regarding appropriate, alternative and low cost wastewater treatment technologies. Other limitations in technical capacity (e.g., in developing project proposals, operating and maintaining treatment systems, and monitoring and analyzing wastewater discharges and impacts) constrain progress in effectively managing wastewater.
- 1.8 Thus, priorities for the region are to: (i) develop innovative financing mechanisms, (ii) assist countries in the WCR to establish or expand domestic wastewater management programs and policies, (iii) provide financing for cost effective sustainable and environmentally acceptable wastewater management facilities based on community needs.

A. Justification for the Operation

- 1.9 An initial study (Assessment of Wastewater Management in the Wider Caribbean – RG-T1529) was conducted to (i) review the financial, legal and institutional constraints in the implementation of sustainable wastewater treatment and management initiatives in the Wider Caribbean, (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.
- 1.10 In September 2008, IDB and UNEP jointly requested a grant of US\$ Million 20 from the Global Environment Facility (GEF) to test a prototype Caribbean Regional Fund

for Wastewater Management (CReW). The Project Identification Form (PIF) was submitted to the Secretary of the GEF on September 25th, 2008 and received its CEO's endorsement. A joint request for a Project Preparation Grant (PPG) in the amount of 380,000 US\$ (for both IDB – US\$ 245,000 and UNEP – US\$ 135,000 components) was also presented to the GEF, and approved on December 22, 2008.

- 1.11 This document describes the use of the PPG funds apportioned to the IDB and UNEP for the preparation of CReW.

B. The Bank's Strategy

- 1.12 In May 2007, the Board of Directors approved the Water and Sanitation Initiative (WSI), with the objective of helping countries in the region achieve universal access to sustainable services. The CReW supports and contributes to the goals of the WSI. Additionally, the Project supports the second strategic area of the IDB's Regional Strategy, "Enhanced regional cooperation to improve CARICOM's social and economic infrastructure", as described in IDB's Regional Strategy for support to the Caribbean Community (2007-20110) (GN-2436).

C. Value added

- 1.13 The operation being prepared through this TC would address projects that are not yet catered for within the IDB's range of products. The pilots to be developed by the CReW would not only benefit the host countries but also, through the experience gained, the other countries of the Wider Caribbean. Some of the pilots that are being proposed could build upon IDB's existing facilities like the AquaFund and could trigger requests for traditional lending activities. Additionally, some of the pilots are scalable and could open the way for a larger participation of the private sector in the financing of small and medium size wastewater projects. Finally, cooperation with UNEP brings in elements in policy reforms for wastewater management, including capacity building and technical assistance in accordance with UNEP's Strategic Action Plan on Municipal Wastewater that will cover the whole Wider Caribbean

II. PROGRAM DESCRIPTION

A. Program Objective and Purpose

- 2.1 The objective of this TC is to support the preparation of RG-X1011 – Testing a prototype Caribbean regional Fund for Wastewater Management (CReW).
- 2.2 The purpose of the TC is to define detailed implementation structures for the Fund, based on the initial designs for the Fund and the individual pilot projects (as pre-identified during the implementation of RG-T1529).

B. Components

- 2.3 The technical cooperation will be implemented through four different components under the responsibility of the two GEF implementing agencies (IDB and UNEP):

- 2.4 **Component 1 Fund operational structure and preparation of pilot projects:** will further develop the structure and the operation mechanisms of the Fund and will be under the responsibility of the IDB. This component will include: (i) development of the CReW operational protocols, (ii) evaluation of five pre-identified pilot projects to be financed under the CReW, (iii). development of necessary documents for the implementation of the CReW pilot projects² (including templates for operations manual, loan agreements templates and security pledges when necessary)
- 2.5 Selection of the five pilot projects was based on the interest and initiative of the stakeholders approached during the PIF preparation phase, and their potential for representing a diverse range of financial options. Pre-identified projects would be: i) a lease facility for small-scale packaged wastewater treatment solutions; ii) an inter-municipal wastewater system for the Peninsula of Placencia in Belize (Inter-municipal water services); iii) a financial arrangement with the National Water Commission (NWC) of Jamaica to secure funding through the pledging of resources for the rehabilitation of wastewater facilities; iv)/ a zero interest loan to the National Housing Corporation (NHC) of Barbados to lower the cost of wastewater treatment solutions in housing developments; and v) support to the Water and Sewerage Authority (WASA) of Trinidad and Tobago for the development of wastewater solutions for developments.
- 2.6 **Component 2 inputs on wastewater management and capacity building:** will define the measures required to enhance the impact of the Fund, specifically for capacity building, awareness and policy setting. This component will be under the responsibility of UNEP. Activities to be implemented are: (i) Collate documentation on appropriate technology and use in the region, ii) wastewater needs assessment and subsequent training needs assessment at intervention sites, (iii) survey of Knowledge Attitude Practices related to wastewater management, (iv) assessment and preliminary identification of the mechanism for information dissemination, (v) review of policies and legislation as well as relevant gap analysis in support of wastewater management at demo sites in support of capacity building needs, and (vi) sectoral overview of waster water management for the region.
- 2.7 **Component 3 Inputs in support of a regional dialogue:** will support regional dialogue through the following activities: (i) a needs assessment and gap analysis for existing clearing house mechanisms for wastewater management, including the formulation of a Terms of Reference for a clearing house mechanism on wastewater management, (ii) survey for identification of stakeholders at the national and sub national level and (iii) design and initial implementation of project communication and outreach plan for project preparation and implementation. The responsibility will be divided between UNEP and the IDB.
- 2.8 **Component 4 Definition of the execution mechanism:** will define the project execution arrangements for the Project; including allocation of responsibilities and implementing procedures. This component will be developed under the responsibility of UNEP.

² As described in footnote 2. The five projects have been selected based on the demand from the stakeholders approached during the PIF preparation phase, and their potential for representing a diverse range of financial options.

- 2.9 To comply with the above mentioned objectives and components, the IDB will use its portion of the GEF PPG fund to contract a consulting firm to (i) develop the CReW operational protocols, (ii) evaluate five pre-identified pilot projects to be financed under the CReW and bring them to final design stage, (iii) develop a survey of stakeholders for a possible CReW II and (iv) design and initial implementation of project communication and outreach plan for project preparation and implementation.

III. COST AND FINANCING

- 3.1 The amount of the GEF funded PPG is US\$380,000; US\$135,000 for the UNEP components and US\$ 245,000 for the IDB components. For the execution of the IDB components, a consulting firm with wide experience in the financial sector will be hired for a total cost of US\$245,000. A detailed budget can be found in Annex I.

List project preparation activities	GEF – PPG: IDB Component	GEF – PPG: UNEP Component	Total
Component 1	210,000		210,000
Component 2		112,500	112,500
Component 3	35,000	10,000	45,000
Component 4		12,500	12,500
Total project preparation financing	245,000	135,000	380,000

IV. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 4.1 Executing agency: The IDB and UNEP, as GEF executing agencies will be in charge of the execution of the technical cooperation components as presented in section 1.16. The IDB, through INE/WSA will be the executing agency for component 1 and parts of component 3 of the Project, while UNEP will be the executing agency for components 2, 4 and parts of component 3.
- 4.2 Executing mechanism: Within the IDB, the project will be executed under the coordination of the Water and Sanitation Division of the Infrastructure and Environment Department (INE/WSA). IDB (INE/WSA) will be responsible for hiring the consulting firm and monitoring its progress. Similarly, UNEP will contract independent consultants for the development of the components under their responsibility. Periodic meetings will be held with UNEP, through the proposed Coordination Committee under the initial proposal, to ensure an optimal coordination between the components. An agreement for the execution of this TC will be signed between UNEP and IDB.
- 4.3 Program implementation readiness: The project is ready to enter the procurement process for the required consulting services as soon as approval by the Bank has been granted, since the Terms of Reference (ToR) for the consulting services to be contracted have been finalized.
- 4.4 Execution period and disbursement schedule: It is anticipated that the project will have an execution period of 9 months and a disbursement period of 12 months.

- 4.5 Procurement: The IDB portion of the project will finance a single procurement process, namely the selection and contracting of a consulting firm to carry out the entire work required for the IDB component of the present TC, as stipulated in the Terms of Reference (See Link) and the Procurement Plan (See Annex II). Procurement of these services will be carried out by the Bank's project team according to the IDB Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-7) of July 2006, under the modality of sole source selection (SSS).
- 4.6 The aforementioned modality for contracting Resource Mobilization Advisors (RMA) to carry out the Project activities financed by the Bank, is justified by the fact that the firm will be contracted to continue services previously rendered for operation RG-T1529 which is linked to the present Project, in consistency with clause 3.10 (a) of Policy GN-2350-7 for the selection and contracting of consultants. The GEF and UNEP, as well as the Bank, are satisfied with the previous performance of RMA as well as with its excellent coordination regarding the preparation of a regional operation that should result from RG-T1529 and RG-X1050. This precedent accounts for the clear advantage in utilizing SSS modality over a competitive process for contracting RMA . This selection option has been ratified by the operations Procurement Office³.

V. MONITORING AND EVALUATION

- 5.1 Monitoring: The work of the consulting firm and its compliance with the Terms of Reference for this project will be monitored by INE/WSA, based on the submission of intermediate and final products as required in the TOR.
- 5.2 Technical and basic responsibility: Technical and basic responsibility for the project rests with the Water and Sanitation Division of the Infrastructure and Environment Department (INE/WSA). Additional support will be provided by the Bank's Country Offices in the Caribbean.
- 5.3 Evaluation: This project will be evaluated based on the intermediary and final products listed in the Terms of Reference. Given that the project has an execution period of 9 months, no logical framework will be developed. Nevertheless, the ToR clearly detail the contents of the various reports, and strict adherence to the requirements in the TOR will be ensured by the project team, as well as verified during the consultations with stakeholders.

VI. PROGRAM BENEFITS AND RISKS

- 6.1 Program benefits and development impacts: The principal benefit of this TC will be to structure a Fund that will test innovative financing options on pilot projects. Those pilots can subsequently be established as feasible instruments to provide sustainable

³ Approval for SSS will be requested concurrently with the approval of this operation. The e-Sourcing approval by PDP initiated prior to the operation's approval will be used to continue the contracting process.

financing for the implementation of environmentally sound and cost-effective wastewater management measures.

- 6.2 Target beneficiaries: The countries of the Wider Caribbean and the populations of the wider Caribbean basin. OECS countries will only benefit marginally from the financing (Bank portion of GEF-PPG) for this operation. This "de minimis" approach does not require an intermediary role for the CDB.
- 6.3 Risks: The lack of support or commitment of some counterparts on the development of some of the pilot projects could affect the level of preparation and the expected results of those projects. Some delays in the presentation of the final operation documents to the Board of IDB and to the GEF could result from the interaction required with the UNEP components

VII. ENVIRONMENTAL AND SOCIAL IMPACTS

- 7.1 The TC Profile was reviewed by the ESR Secretariat on January 12th, 2009. No further action was required in the ESR process. The present technical cooperation has positive social and environmental effects, because it will pilot wastewater management projects in the Wider Caribbean. The operation itself doesn't have either negative environmental nor social aspects, because only studies will be elaborated. The classification and evaluation of risk according to the criteria set out in "screening and safeguard" of ESR is C.

VIII. CERTIFICATION

- 8.1 The Grants and Cofinancing Management Unit (VPC/GCM) certifies that the amount of US\$245,000 from the Global Environmental Facility –GEF (FMM) are available for the financing of the proposed program budget of the current Plan of Operations.

*Paula
Pérez
5/19/09*

Marguerite S. Berger

Marguerite S. Berger
Chief

Grants and Cofinancing Management Unit
VPC/GCM

5/20/09

Date

IX. APPROVAL

Approved:

C. Federico Basaños

C. Federico Basaños
Chief
INE/WSA

5/21/09

Date