



Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)

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Acknowledgements

This mid-term evaluation took place from October to December 2013. It provides an opportunity to reflect on the historical events and the ongoing activities of the CReW project, and to extract practical recommendations for effective and efficient implementation of the project and into the future.

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Disclaimer

The views expressed herein are those of the author and do not necessarily reflect the views of the Inter-American Development Bank, the United Nations Environmental Programme, the participating country governments or the partner agencies

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Executive Summary

The CReW Initiative

In 2011, the Global Environment Facility in partnership with the Inter-American Development Bank and the United Nations Environmental Program launched the **Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)**. In the context of the Cartagena Convention and its LBS Protocol, the dual objectives of the project are to pilot revolving 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. The CReW project is consistent with the GEF International Waters Focal Area Strategy to foster international, multi-state cooperation on priority water concerns, and to play a catalytic role in addressing trans-boundary water concerns through providing necessary technical, financial and institutional support.

This report is the culmination of a Mid-Term Evaluation carried out from October to December 2013 with a view to assessing: (i) progress in attaining the project objectives stated in the results matrix; (ii) acceptance of procedures developed under the project; and (iii) the degree of effectiveness of the IDB and UNEP monitoring and supervision system. It provides recommendations for remedial actions and revision of the upcoming work plan, as well as suggestions for preparing for a follow-on project.

Major Findings

CReW is an unconventional, regional, policy-oriented, non-reimbursable technical cooperation that fuses experimentation with financial models, execution of public works, reform of wastewater policy and alignment to international norms, institutional strengthening and public outreach and dissemination within one project. The broad array of project components is synchronous but non-sequential; the outcomes are conceptually linked but operationally independent. The diversity of the thirteen participating countries and the dynamics of working with an extensive number of autonomous stakeholders exacerbate the project's complexity. Project outcomes are highly dependent on the political and institutional environments in which it operates.

At its halfway mark, CReW has shown the potential to meet its primary objectives, although all components have taken longer to get underway than initially planned. Two of the four pilot countries have made progress towards establishing innovative financing mechanisms and should initiate construction on their first-generation wastewater projects in early 2014. The policy reform, capacity building and communications components are now making good progress through small-scale financial agreements that will deliver customized technical support to meet each country's individual needs. The potential quality of the outcomes offsets the gradual pace of project implementation.

The concept is relevant and the design responds to the most important environmental problem facing the Wider Caribbean Region. Although the project took into account regional socio-political, economic and environmental contexts, specific local conditions and institutional context might have deserved closer attention during the design phase. The need to engage a significant segment of national environment, regulatory and financial decision makers tempered the countries' readiness to pursue the four pilot financing mechanisms. Capacity issues hamper progress on achieving reforms related to strengthening the policy, legal and regulatory environment for wastewater. Nonetheless, CReW is generating a high degree of enthusiasm for reducing wastewater discharge into the Caribbean among stakeholders of all thirteen participating countries and beyond.

Linked to the pace of implementation, is the issue of replicability and sustainability. Nearly all the stakeholders interviewed during the evaluation expressed a high degree of ownership and conviction for reducing pollution in the marine environment, and willingness to try the pilot financing mechanisms. Nonetheless, the evaluation was unable to establish an informed opinion on replicability and sustainability of the pilot financing mechanisms. More specifically, until the revolving funds receive repayments based on user fees or additional capital infusion from local governments, it is not possible to assess their replicability and sustainability.

IDB and UNEP, as joint implementation agencies, have dedicated ample institutional resources to create an effective oversight and support system for the CReW project. The project design stipulates the creation of an Inter-Agency Coordination Group and a formal Memorandum of Understanding clearly defines their individual roles and functions. Their distinct institutional cultures, managerial approaches and operating procedures have presented some coordination and integration challenges. The delays in getting the pilot financing mechanisms underway may have affected the ability to generate interest in strengthening the legal and regulatory environment, and vice versa. The synergy between the pilot financing mechanism and the policy reform components has yet to materialize, yet the relationship between these two goals remains relevant and valid, and every effort should continue to pursue their inherent complementarity.

Recommendations

1. Documenting the experiences and lessons learned surrounding the pilot financing mechanisms should begin as soon as possible before institutional memory begins to fade. All four pilot countries have garnered ample experiences that offer analysis and ideas for replication. Documentation and discussions should include strategic issues faced in building the political will to move forward and in maintaining inter-institutional coordination, as well as the factors that contributed to delays and how were they resolved.
2. As soon as the respective first-generation wastewater treatment project is underway, each Pilot Executing Agency should prepare a financial status report on actual performance and expected repayments to the fund, which should include a medium-term "amortization" plan covering the initial capital amount provided by CReW. The financial status report should also include any changes to the policy for replenishing the wastewater revolving fund and expectations for additional capitalization.

3. The Guyana approach through public-private partnerships is facing unique challenges, resulting in four interrelated recommendations: First, the Project Management Unit should develop a robust list of potential projects in both the public and private sectors, to serve as a backup in the event the current projects do not come to fruition.
4. Second, Guyana's unique public-private partnership model requires specific technical inputs to help the PCG structure operations and perform requisite due diligence. The PMU should access conceptual orientation, specialized training and technical advice on developing PPPs through a recognized source of this expertise.
5. Third, small-scale enterprises that are interested in presenting wastewater treatment projects do not have the skill and capacity to develop technical designs and acceptable project proposals. The IACG should identify and approve an appropriate mechanism to assist Guyana in providing requisite assistance to these small firms. The IDB has several appropriate models for providing technical assistance to the private sector.
6. Fourth, to assist the GoG's efforts in building a strong enabling environment to motivate the private sector wastewater pilots, the SSFA should support the Guyana Environmental Protection Authority's efforts in strengthening the framework for enforcing environmental regulations.
7. The IACG should continue to meet regularly on a quarterly basis, as set forth in the Memorandum of Understanding, which will allow it to monitor implementation progress and propose timely corrective measures. The effective use of a web-based format will continue to keep transaction costs to a minimum. Formal face-to-face meetings could continue on an annual basis, as needed and appropriate.
8. Both IDB and UNEP should each assign an additional permanent representative to the IACG. These individuals should be full-time staff of IDB and UNEP, based in the region, who can bring sufficient on-the-ground familiarity of CReW to contribute to management oversight and decision-making.
9. The MTE recommends two actions to bolster CAR/RCU's implementation capacity in order to accelerate the policy reform, capacity building and communications components and, in particular, to expedite the approval and implementation of the SSFAs. First, allocate a specific percentage of the Financial/Administrative Specialist's time to assist the CAR/RCU in specific functions related to administering the SSFAs. Second, transfer necessary financial resources to CAR/RCU to provide for an additional consultant position to provide substantive technical support for implementing the regional level activities under Components 2 and 3.
10. The MTE recommends that CReW prioritize and commence two activities as soon as possible. The first is the environmental and natural resource assessments (ENRA) that contribute to public policy discussions by demonstrating the economic impact of pollution. The second activity is training in, and preparation of, a detailed implementation plan

(resources, budget and timetable) for a regional monitoring, evaluation and reporting (M&E) framework for wastewater management.

11. The MTE recommends de-emphasizing or dropping two activities that are ancillary to the objectives of CReW. The first is the incorporation of wastewater management and sanitation into education curricula throughout the region. The second activity to drop is the development of a communication strategy to build awareness on sanitation issues in rural communities.
12. CReW should make every effort to ensure that the four Central American countries participate as full beneficiaries for the remainder of the project. Specifically, the PCG should assign the Technical Specialist, who is the only native Spanish-speaking staff member, to be the CReW liaison to these four countries. His role will be to ensure agile implementation of the SSFAs, to capture unique and valuable lessons learned from Central American experiences that are applicable to the WCR, establish contact with relevant Central American institutions working in the wastewater sector and identify potential first-generation projects for a possible CReW II.
13. Over the remainder of the project, and with the support of outside technical assistance, CReW should consider a broader menu of learning and training approaches, in order to enhance potential impact and replicability of training events, expand opportunities to a larger pool of participants and reduce the cost per participant. Options should consider formal and non-formal learning, on-line and face-to-face venues, equivalent content in both English and Spanish, and open access by working professionals and technicians.
14. Considering the wealth of information and experience that is available in the Caribbean on wastewater management, the CReW should enhance the content of its communication and outreach instruments. Topics should include the economics of wastewater, sanitation infrastructure financing, sector policy debates, pros and cons of various technological options, and the role of successful regulation, just to name a few. Print media, electronic bulletins, website content and Facebook have an important role to play in networking and dissemination of ideas to set the groundwork for future replication. Content should focus more on wastewater issues and less on CReW-sponsored activities and personalities.
15. The IACG with support of the PCG should review the performance of the national focal points during the first two years of CReW to assess whether assumptions and expectations about their role are still valid. The review should gauge the extent to which NFPs are able to engage effectively in dialogue on wastewater management (often beyond their official mandates) with essential government, media and private sector actors.
16. To celebrate moving toward compliance with the LBS Protocol or discuss results of technical analysis preformed under an SSFA, or other CReW-related achievement, the PCG and CAR/RCU should conduct a joint high-level mission to at least three CReW countries. The purpose of the missions will be to dialogue with country decision-makers on wastewater challenges, celebrate important progress, and encourage the continued consolidation of an informal national wastewater coalition. Secondly, these missions will help to create a unified “face” of CReW by publicly linking the financial and policy components, and can help countries consolidate a national message with respect to their wastewater management agenda.

17. Given the delays in implementing the pilot financing mechanism and rolling out the support for policy, legal and regulatory reforms, the IACG should request at least a one-year extension.
18. To avoid unclear lines of authority and duplicative reporting requirements, in those countries where IDB loan co-finances the first-generation CReW project, responsibility for oversight and support during the construction phase of sanitation works should be passed from the PCG to the IDB specialist.
19. Prior to year four of project execution, the Pilot Executing Agencies should identify the financial and human resources required to internalize the operating costs of the wastewater revolving fund once CReW project financing ends.
20. IDB and UNEP, in consultation with the Project Steering Committee, should consider developing a follow-on project to pursue replicating the PFM in additional countries, and to move all countries of the Wider Caribbean Region closer to compliance under the LBS Protocol through policy reform and institutional strengthening. Due to the long gestation period for acquiring funding, activities to conceptualize and design a follow-on project should begin as soon as possible.

Resumen ejecutivo

La iniciativa CReW

En 2011, la Facilidad Ambiental Mundial (GEF^{*}), en sociedad con el Banco Interamericano de Desarrollo (BID) y el Programa de Naciones Unidas para el Medio Ambiente (PNUMA), lanzó el proyecto **Prueba de un Prototipo de Fondo Regional del Caribe para el Manejo de las Aguas Residuales (CReW[†])**. En el contexto de la Convención de Cartagena y el Protocolo LBS, los objetivos interrelacionados del proyecto son de probar mecanismos reembolsables de financiamiento y las relacionadas reformas a la gestión de aguas residuales que pueden establecerse como instrumentos factibles para proveer financiamiento sostenible para la implementación de medidas de gestión de aguas residuales ambientalmente viables y costo-efectivas. El proyecto CReW es consistente con la Estrategia de Áreas Focales de Aguas Internacionales del GEF para fomentar la cooperación internacional, la cooperación multinacional en materias prioritarias concernientes al agua, y para desempeñar un rol catalizador al abordar materias transfronterizas concernientes al agua mediante la provisión de los apoyos técnicos, financieros e institucionales necesarios.

Este informe constituye la culminación de una Evaluación de Medio Término realizada entre octubre y diciembre de 2013 con el objeto de determinar: (i) el progreso en el logro de los objetivos del proyecto establecidos en la matriz de resultados; (ii) aceptación de los procedimientos desarrollados en el proyecto; y (iii) el grado de efectividad del sistema de supervisión y del sistema de monitoreo y supervisión del BID y el PNUMA. La MTE entrega recomendaciones sobre acciones correctivas y/o de mejoramiento y revisión del próximo plan de trabajo, así como sugerencias para preparar un proyecto de continuación.

Resultados Importantes

CReW es una cooperación técnica poco convencional, regional, orientada a las políticas, no-reembolsable, que funde dentro de un sólo proyecto la experimentación con modelos financieros, la ejecución de obras públicas, la reforma de políticas sobre aguas residuales y la alineación con normas internacionales, el fortalecimiento institucional y la divulgación y difusión a la población. La amplia gama de componentes del proyecto es sincrónica, pero no secuencial; los resultados son ligados conceptualmente, pero independiente operacionalmente. La diversidad de los trece países participantes y la dinámica de trabajar con un gran número de partes interesadas autónomas exacerban la complejidad del proyecto. Los resultados del proyecto dependen de los ambientes políticos e institucionales donde opera.

En este hito a mitad de camino, CReW ha demostrado el potencial para alcanzar sus objetivos primarios, aunque la puesta en marcha de todos los componentes ha demorado más de lo previsto inicialmente. Dos de los cuatro países piloto han logrado avances en el establecimiento de mecanismos de financiamiento innovadores y deberían iniciar la construcción de su primera generación de proyectos de aguas residuales a principios de 2014. Los componentes de reforma de políticas, desarrollo de capacidades y comunicaciones están ya en buen camino mediante

^{*} Global Environmental Facility

[†] Por el inglés: Caribbean Regional Fund for Wastewater Management

acuerdos financieros de pequeña escala que entregarán ayuda técnica adaptada a las necesidades individuales de cada país. La calidad potencial de los resultados compensa el moderado ritmo de la implementación del proyecto.

El concepto es relevante y el diseño responde al problema medioambiental más importante que enfrenta la Región Insular y Centroamericana del Caribe. Aunque el proyecto consideró los contextos sociopolíticos, económicos y medioambientales regionales, las condiciones locales específicas y el contexto institucional pudieren haber merecido una mayor atención durante la fase de diseño. La necesidad de comprometer a un segmento significativo de los responsables nacionales de la toma de decisiones en los ámbitos medioambiental, regulatorio y financiero moderó la disposición de los países para poner en práctica los cuatro mecanismos de financiamiento piloto. Los problemas de capacidad obstaculizan el progreso en el logro de las reformas relativas al fortalecimiento de las políticas y el entorno legal y regulatorio para las aguas residuales. No obstante, CReW está generando un alto grado de entusiasmo entre las partes interesadas de los trece países participantes, y en otros, por reducir la descarga de aguas residuales en el Caribe.

Ligado al ritmo de la implementación está el tema de la factibilidad de replicación y la sostenibilidad. Casi todas las partes interesadas entrevistadas durante la evaluación expresaron un alto grado de apropiación y convicción respecto de reducir la contaminación en el ambiente marino y buena voluntad para probar los mecanismos de financiamiento piloto. No obstante, la evaluación no pudo formarse una opinión informada sobre las posibilidades de replicación y la sostenibilidad de los mecanismos de financiamiento piloto. Más concretamente, hasta que los fondos rotatorios no reciban los reembolsos basados en cobros a los usuarios o los gobiernos locales aporten capital adicional, no es posible evaluar sus posibilidades de replicación y sostenibilidad.

El BID y el PNUMA, como las organizaciones de implementación conjunta, han dedicado amplios recursos institucionales para crear un sistema efectivo de supervisión y apoyo para el proyecto CReW. El diseño del proyecto estipula la creación de un Grupo de Coordinación Inter-organizacional (GCI) y un Memorandum de Entendimiento formal, el cual define claramente los roles y funciones individuales. Las distintas culturas institucionales, enfoques de gestión y procedimientos operativos han presentado algunos desafíos de coordinación e integración. Los retrasos en poner en marcha el mecanismo financiero piloto pudieren haber afectado la capacidad de generar interés en el fortalecimiento del ámbito legal y regulatorio, y viceversa. La sinergia entre el mecanismo de financiamiento piloto y los componentes de reformas de políticas aún no se ha materializado; sin embargo, la relación entre estas dos metas sigue siendo relevante y válida y los esfuerzos para conseguir su complementariedad inherente deberían continuar.

Recomendaciones

1. La documentación de las experiencias y las lecciones aprendidas respecto de los mecanismos de financiamiento piloto debería comenzar a la brevedad, antes que la memoria institucional comience a desvanecerse. Los cuatro países piloto han acumulado amplias experiencias que ofrecen análisis e ideas para replicar. La documentación y las discusiones deberían incluir los temas estratégicos que se enfrentaron en la construcción

de la voluntad política para avanzar y mantener la coordinación interinstitucional, así como los factores que contribuyeron a los retrasos y cómo estos se resolvieron.

2. En cuanto el proyecto de tratamiento de aguas residuales de primera generación respectivo esté en marcha, cada Agencia Ejecutora de Piloto deberá preparar un informe financiero sobre el desempeño efectivo y los reembolsos previstos al fondo, el cual debería incluir un plan a mediano plazo de la “amortización” que cubra el monto del capital inicial proporcionado por CReW. El informe de situación financiera también debe incluir cualquier cambio en las políticas de reposición del fondo rotatorio para aguas residuales así como las expectativas de capitalización adicional.
3. La forma que ha presentado Guyana de abordar el tema a través de asociaciones público-privadas (APP) está enfrentando desafíos únicos, dando por resultado tres recomendaciones interrelacionadas: Primera, la Unidad de Manejo de Proyectos (UMP) debe desarrollar una sólida lista de potenciales proyectos en los sectores público y privado para mantenerlos como reserva en el caso que los proyectos actuales no fructifiquen.
4. Segunda, el modelo particular de asociaciones público-privadas de Guyana requiere de aportes técnicos específicos para ayudar a las operaciones estructurales del UMP y realizar la debida diligencia requerida. La UMP debería tener acceso a la orientación conceptual, a capacitación especializada y asesoría técnica para el desarrollo de APPs a través de una fuente reconocidamente experta en esta materia.
5. Tercera, las empresas pequeñas que están interesadas en la presentación de proyectos de tratamiento de aguas residuales carecen de la habilidad y la capacidad para desarrollar diseños técnicos y propuestas de proyecto aceptables. El GCI debería identificar y aprobar un mecanismo adecuado para ayudar a Guyana a prestar la asistencia requerida por estas firmas pequeñas. El BID tiene varios modelos adecuados para prestar asistencia técnica al sector privado.
6. El GCI debería continuar reuniéndose trimestralmente, según lo dispuesto en el Memorándum de Entendimiento, ello le permitirá monitorear el avance de la implementación y proponer medidas correctivas oportunamente. El uso efectivo del formato basado en la red continuará a mantener los costos de transacción en un mínimo. Las reuniones presenciales formales podrían continuar sobre una base anual, según se requiera y corresponda.
7. Tanto el BID como el PNUMA deberían asignar un representante permanente adicional al GCI. Estos individuos deberían ser empleados a tiempo completo del BID y el PNUMA, con sede en la región, y que puedan brindar la suficiente familiaridad en el terreno sobre el CReW para contribuir a la supervisión del manejo y a la toma de decisiones.
8. La EMT recomienda dos acciones para impulsar la capacidad de implementación de la CAR/RCU con el fin de acelerar los componentes de reforma de las políticas,

construcción de capacidades y comunicaciones y, en particular, para acelerar la aprobación e implementación de los Acuerdos Financieros de Pequeña Escala (AFPE). Primera, asignar un porcentaje específico del tiempo del Especialista Financiero/Administrativo para asistir al CAR/RCU en funciones específicas relacionadas con la gestión de los AFPEs. Segunda, transferir los recursos financieros necesarios a la CAR/RCU para proveer un puesto de consultor adicional con el fin de proporcionar la ayuda técnica fundamental para implementar las actividades de nivel regional de los Componentes 2 y 3.

9. La EMT recomienda que la CReW priorice y comience dos actividades cuanto antes. La primera es la evaluación del medio ambiente y los recursos naturales (EMARN) lo cual contribuye a las discusiones de políticas públicas demostrando el impacto económico de la contaminación. La segunda actividad consiste en la formación interna y la preparación de un plan detallado de implementación (recursos, presupuesto y calendario) de un marco regional de monitoreo, evaluación e información (MyE) para el manejo de las aguas residuales.
10. El EMT recomienda restar importancia o descartar dos actividades que complementan los objetivos del CReW. La primera es la incorporación del manejo de las aguas residuales y del saneamiento en planes de estudios de los establecimientos de educación de toda la región. La segunda actividad a descartar es el desarrollo de una estrategia de comunicación para crear conciencia sobre temas de saneamiento en comunidades rurales.
11. CReW deberá hacer todo lo posible para asegurar que los cuatro países centroamericanos participen como plenos beneficiarios por el resto del proyecto. Específicamente, el GCP debería asignar al Especialista Técnico, quien es el único miembro del personal de habla hispana nativo, para ser el enlace de CReW con estos cuatro países. Su papel será asegurar una implementación ágil de los AFPEs, capturar las lecciones únicas y valiosas aprendidas de las experiencias centroamericanas que son aplicables al Región Insular y Centroamericana del Caribe, establecer contacto con las instituciones centroamericanas relevantes con competencia en el sector de las aguas residuales e identificar los potenciales proyectos de primera generación para un posible CReW II.
12. Por el resto del proyecto y con apoyo de asistencia técnica externa, CReW debería considerar un menú más amplio de enfoques de aprendizaje y de capacitación, con el fin de mejorar los potenciales impactos y la replicabilidad de los eventos de capacitación, ampliar las oportunidades a un conjunto mayor de participantes y reducir el costo por participante. Las opciones deberían considerar el aprendizaje formal y no formal, en línea y en sedes presenciales, contenido equivalente tanto en inglés como en español, y libre acceso para profesionales y técnicos que estén trabajando.
13. Considerando la abundancia de información y de experiencia disponible en el Caribe sobre el manejo de las aguas residuales, el CReW debería mejorar el contenido de su comunicación y de sus instrumentos de divulgación. Los temas deberían incluir, para nombrar sólo algunos, la economía de las aguas residuales, el financiamiento de la infraestructura de saneamiento, los debates sobre las políticas sectoriales, los pros y contras de las diferentes opciones tecnológicas, y el rol de una regulación exitosa. Los medios impresos, los boletines electrónicos, el contenido del sitio web y Facebook tienen

un papel importante que desempeñar en la creación de redes y en la difusión de ideas con la finalidad de sentar las bases para una futura réplica. El contenido debería centrarse más en temas de aguas residuales y menos en actividades patrocinadas por CReW y en las personalidades.

14. El GCI, con el apoyo del GCP, debería revisar el desempeño de los puntos focales nacionales durante los primeros dos años de CReW para determinar si los supuestos y las expectativas sobre su rol siguen siendo válidas. La revisión debería calibrar la medida en que los PFNs pueden efectivamente participar en el diálogo sobre el manejo de las aguas residuales (a menudo más allá de sus mandatos oficiales) con los actores esenciales de gobierno, de los medios de comunicación y del sector privado.
15. Para celebrar el avance hacia el cumplimiento del Protocolo LBS[‡] o para discutir los resultados de los análisis técnicos realizados por un AFPE, u otro logro de CReW, el GCP y la UCR/CAR deben llevar a cabo una misión conjunta de alto nivel en por lo menos tres países de CReW. El propósito de las misiones será dialogar con los responsables del país sobre los desafíos de las aguas residuales, celebrar avances importantes, y fomentar la consolidación continua de una coalición nacional informal de aguas residuales. Secundariamente, estas misiones ayudarán a crear una “cara” unificada de CReW ligando públicamente los componentes financieros y de políticas, y pueden ayudar a los países a consolidar un mensaje nacional con respecto a su programa de manejo de las aguas residuales.
16. Considerando los retrasos en implementar el mecanismo de financiamiento piloto y en la obtención de apoyo para las reformas legales, regulatorias y de políticas, el GCI debería solicitar una prórroga de por lo menos un año.
17. Para evitar líneas de mando confusas y la duplicación de los informes requeridos, en aquellos países en donde un préstamo del BID cofinancie el proyecto CReW de primera generación, la responsabilidad de la supervisión y el apoyo durante la fase de construcción de las obras de saneamiento debería traspasarse del GCP al especialista del BID.
18. Antes del cuarto año de ejecución del proyecto, las Agencias Ejecutores de los Proyectos Piloto deberán identificar los recursos financieros y humanos requeridos para internalizar los costos de operación del fondo rotatorio de aguas residuales una vez que el financiamiento del proyecto CReW termine.
19. El BID y el PNUMA, en consulta con el Comité Directivo del Proyecto, debería considerar el desarrollo de un proyecto de continuación para proseguir replicando el MFP en más países, y acercar a todos los países de la Región del Caribe a dar cumplimiento al Protocolo LBS por medio de la reforma de las políticas y el fortalecimiento institucional. Debido al largo período de gestación para conseguir fondos, las actividades de conceptualización y diseño de un proyecto de continuación deberían comenzar cuanto antes.

[‡] Land Base Sources Protocol

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Abbreviations and Acronyms

BA	Barbados
BWRF	Belize Wastewater Revolving Fund
BWSL	Belize Water Services Limited
CAR/RCU	Caribbean Regional Coordinating Unit
CARICOM	Caribbean Community
CAWASA	Caribbean Water and Sewerage Association
CEHI	Caribbean Environmental Health Institute
CEP	Caribbean Environmental Program
CIMAB	Center for Engineering and Environmental Management of Bays and Coasts
CRew	Testing a Prototype Caribbean Regional Fund for Wastewater Management
CWWA	Caribbean Water and Wastewater Association
DDL	Demerara Distillers Limited
DIH	D'Aguilar Industries and Holdings
ENRA	Environment and Natural Resource Assessments
EPA	Environmental Protection Agency
FIR	CRew Final Inception Report of June 15, 2012
GEF	Global Environment Facility
GEF-IWCAM	GEF-funded Integrating Watershed and Coastal Areas Management
GoB	Government of Belize
GoG	Government of Guyana
GoJ	Government of Jamaica
GoTT	Government of Trinidad and Tobago
GPA	Global Program of Action
GWRF	Guyana Wastewater Revolving Fund
IACG	Inter-Agency Coordination Group
IDB	Inter-American Development Bank
IIC	Inter-American Investment Corporation
INE/WSA	Division of Water and Sanitation
IPED	Institute for Private Enterprise Development
IW LEARN	International Waters Learning Exchange and Resource Network
JA	Jamaica
JCEF	Credit Enhancement Facility in Jamaica
JWWRF	Jamaica Wastewater Revolving Fund
KAP	Knowledge Attitudes & Practice
LBS	Land-Based Sources Protocol
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MIF	Multilateral Investment Fund
MoF	Ministry of Finance
MOPSD	Ministry of Planning and Sustainable Development
MOU	Memorandum of Understanding
MTE	Mid-Term Evaluation
NCB	National Commercial Bank
NEPA	National Environmental Protection Agency
NFP	National Focal Points
NSG	Non-Sovereign Guarantee
NWC	National Water Commission
OM	Operation Manuals
PAHO	Pan-American Health Organization
PCG	Project Coordinating Group
PD	Project Document
PDS	Project Development Support
PEA	Project Executing Agency

PEU	Project Execution Unit
PFM	Pilot Financial Mechanisms
PIR	Project Implementation Report
PMU	Project Management Unit
PPP	Public-Private Partnerships
PSC	Project Steering Committee
SEP	Small Enterprise Program
SSFA	Small Scale Financial Agreements
SWOT	Strengths Weaknesses Opportunities and Threats
TC	Technical Cooperation
TT	Trinidad and Tobago
TTWRF	Trinidad and Tobago Wastewater Revolving Fund
UN	United Nations
UNEP	United Nations Environmental Programme
UTECH	University of Technology Jamaica
UWI	University of West Indies
WASA	Water and Sewerage Authority
WB	World Bank
WCR	Wider Caribbean Region
WIDECAST	Wider Caribbean Sea Turtle Conservation Network
WOP	Water Operators Partnership Alliance
WWRF	Wastewater Revolving Funds

I. Introduction to CReW

A. The Broader Context

The Caribbean Sea is a distinct ecological region, and is the second largest sea in the world, covering approximately 3.2 million square kilometers. It is the home of more than 116 million people of 22 independent states. The **Caribbean's complex political structure, high cultural diversity and the lack of a common agenda complicates cooperative management for the sustainable use of natural resources.** The Caribbean is more dependent upon tourism than any other part of the world, relative to its size, and fishing is a significant source of both income and subsistence for much of the population. The beaches, coral reefs, mangroves and sea grass beds all help sustain the ecosystem. Tourism and fishing are directly threatened by environmental deterioration.

The degradation of the Caribbean marine environment, including through the discharge of **untreated wastewater is a serious concern for those countries whose livelihoods depend heavily on their natural marine resources.** As early as 1976, management of wastewater has been on the agenda of the Wider Caribbean Region (WCR), starting with United Nations Environment Programme (UNEP) launch of the Caribbean Environment Programme (CEP) that identified reduction of land-based sources of pollution from municipal, industrial and agricultural sectors as a key priority.

In recognition of the gravity of the situation, in March 1983, most of the countries sharing the common waters of the Caribbean adopted **the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (aka Cartagena Convention).** The Convention entered into force in October 1986 and thus established a comprehensive umbrella agreement providing the legal framework for regional and national cooperation.

The **Protocol Concerning Pollution from Land-Based Sources and Activities (LBS)** was adopted in October 1999, in order to institute appropriate measures to prevent, reduce and control pollution within the Convention area, from land-based sources and activities, including the use of appropriate technology and management approaches in coastal areas. Moreover, the LBS Protocol sets goals to govern domestic sewage discharge into the waters of the Caribbean. The LBS Protocol entered into force in August 2010 and is now moving into full implementation.

Since 2007, the **IDB Water and Sanitation Initiative** has offered a new set of tools and flexible financing to help close the coverage gap in water and sanitation service. IDB also co-sponsored the Global Water Operators Partnership Alliance (WOP) with the UN Settlements Programme (UN-Habitat), which seeks to strengthen public water and sewerage operators' capacity to plan long-range capital investments.

Numerous studies over the past two decades have concluded that **sewage pollution continues to be the most pervasive form of contamination of the coastal environment.** In most Caribbean countries, untreated municipal sewage is often discharged directly into the environment, with serious implications for public health, biodiversity, climate change adaptation, and the fishing and tourism industries. The sustained high rates of untreated and undertreated wastewater

entering the sea varies little throughout the Wider Caribbean among the Small Island Developing States and the countries of Central American.

The market structure for provisioning water and wastewater services is dispersed among entities: centralized and local, public and private. Financing becomes impractical due to the high investment cost of wastewater infrastructure combined with the untested creditworthiness of most service providers. The legal and regulatory framework has traditionally failed to provide sufficient incentive or security for either service providers or potential financiers to invest. Moreover, although many utilities have completed feasibility studies and plans for priority projects, most have relied on opportunistic capital planning on projects that garner national political support and external donor interest.

Degradation of the Caribbean marine environment through the discharge of untreated wastewater is a recognized concern throughout the region. The negative economic impact on those whose livelihoods depend heavily on the natural marine resources is apparent. Yet on a practical level, **politicians, utility managers and the public have collectively considered wastewater treatment a low priority due to its unclear economic cost/ benefit relationship**

Fortunately, this long and rich history of the institutional and policy evolution has led the Caribbean to a point where the majority of countries now recognize the importance of improving wastewater management and addressing the obstacles to complying with the LBS Protocol. **CRew represents an important step in the 35-year trajectory to address the substantial barriers** that constrain progress in effectively managing wastewater throughout the WCR.

B. Intended Objectives and Outcomes

The IDB and UNEP responded **to the growing need for wastewater management** in the Caribbean region, by placing it on the national agendas through the following three-pronged approach:

1. Establish Pilot Financial Mechanisms (PFM) that provide innovative investment financing for cost-effective wastewater management facilities, based on locally defined needs. **The PFMs deliver grant funding for initial investments, which will generate sufficient revenue to create a sustainable revolving wastewater fund.** After testing modest pilots and determining their potential for replication, new PFMs would be created with co-financing from other lenders, investors and donors.
2. Technical assistance will facilitate policy discussions and **reforms to strengthen legislative frameworks** that are consistent with the UNEP Strategic Action Plan on Municipal Wastewater Management.
3. Communication, outreach and information exchange will **share project results with partner agencies and relevant Caribbean stakeholders.** A website to share project information will be developed consistent with the GEF International Waters Learning Exchange.

The implementation of CReW will encourage additional countries of the WCR to ratify and **implement the LBS Protocol**, thereby fulfilling their obligations under the Cartagena Convention with regard to domestic sewage discharges into the waters of the wider Caribbean.

In the end, CReW activities combined with co- financing of wastewater infrastructure by IDB and other donors will **contribute to reducing marine pollution** from wastewater and strengthen sustainable protection of marine ecosystems, near-shore coastal waters and associated watersheds.

C. Institutional Relationships – a study in complexity.

UNEP, as the Secretariat for the Cartagena Convention has co-responsibility for the LBS Protocol, and together with the GEF Secretariat shares concern regarding the slow pace of progress on wastewater management in the Caribbean. **Two critical issues, the lack of financing and the weak enabling environment**, became the core project concept to enable countries to meet obligations under the LBS Protocol. Recognizing its own limitations with regard to project financing, UNEP brought IDB into the project. Jointly they applied for GEF funding, and in November 2010, GEF approved US\$20 million for the CReW project.

During project design phase, a consultative process with water utilities and environmental policy makers led to **the identification of the first generation projects to be financed by the PFMs**. Presentations at two meetings of the Caribbean Water and Wastewater Association (CWWA) in 2010 and 2011 identified eligible wastewater project under development. This bottom-up approach incorporated national priorities and the realities of the local regulatory framework into the project design.

From among multiple candidates, Belize, Guyana, Jamaica and Trinidad and Tobago were selected to participate in the Pilot Financing Mechanism. Their respective projects were high national priorities to improve or prevent further deterioration of coastal water quality. The country was open to assistance to discussing policy reforms and bringing project costs within ratepayers' ability to pay. Each country signed an agreement with the IDB to create a Pilot Executing Agency (PEA), whose responsibilities include establishing the PFM, setting up a project management unit, and approving project financial agreements with borrowers.

Nine other countries endorsed CReW, which are **Antigua and Barbuda, Barbados, Costa Rica, Guatemala, Honduras, Panama, Saint Lucia, Saint Vincent and the Grenadines, and Suriname**. Their participation is limited to capacity building and institutional strengthening for wastewater policy, legal and institutional reform, although many articulated a demand for participating in pilot projects. Subsequent discussions have embraced the possibility of a follow-on CReW II.

CReW has joined a well-established community of institutions dedicated to issues related to the environment, public health, water and wastewater management in the Caribbean. A key partner from the earliest stages of project identification up to the present is the **Caribbean Water and Wastewater Association (CWWA)**, whose sector knowledge and close ties to water and wastewater utilities and policy makers is an irreplaceable asset to CReW.

Another key regional organization is the **Caribbean Water & Sewerage Association** (CAWASA) that is dedicated to serving the growth and development of its membership to become excellent water and wastewater utilities.

The **Pan-American Health Organization** (PAHO) and the **Caribbean Environmental Health Institute** (CEHI), a technical institute of CARICOM, are important allies for their focus on the impact of human activity on the environment and the consequent effects on human health and socio-economic development.

The **Caribbean Development Bank** (CDB) contributes to economic growth and cooperation of the states and territories of the Caribbean region, with programs for potable water, sewerage and environmental protection, among others. During the project identification stage, the CDB was under consideration to be an implementing partner for the Eastern Caribbean States, but in 2010 it declined, due to lack of sufficient resources for an additional pilot. CDB fulfills an important function as a member of the Project Steering Committee (PSC) and is poised to assume a protagonist role in a future CReW II, as a partner, or independently upon achieving GEF implementing agency status.

The IDB and UNEP are responsible for project execution and supervision. They signed a comprehensive **MOU in September 2011** that established a framework of cooperation and understanding to facilitate collaboration for successful implementation of CReW. The MOU set forth an agenda of regular quarterly meetings between UNEP and IDB. It recognized that each party is responsible only for ensuring deliverables under its respective components and its associated costs. The MOU also provides for shared intellectual property rights on products developed under the project.

CReW responds to the strategic objectives of the International Waters Focal Area Strategy of GEF 4 by fostering international, multi-state cooperation on priority water concerns, addressing trans-boundary water concerns and reducing nutrient over-enrichment and oxygen depletion from land-based pollution of coastal waters

D. A Unique Challenge

CReW represents an unconventional and experimental project for the two implementing agencies and the thirteen beneficiary countries. It is a policy-oriented technical cooperation that incorporates elements of wastewater policy, legislation and regulation reform and alignment to international norms, institutional strengthening and sector capacity building, experimentation with the creation of four sustainable and replicable financing mechanisms and the construction of wastewater infrastructure projects. It is an ambitious endeavor surrounded by high expectations.

The **large number and diversity of participating countries** and associated stakeholders contributes to the complexity. Each country brings its own economic and political conditions, its particular needs with regard to wastewater, and its degree of readiness to participate in the project. Moreover, the complex governmental processes required to implement the pilot financing mechanism and to reach the LBS standards involve commitment and agreement from a large and diverse body of national stakeholders unaccustomed to working together.

CReW's success rests on the ability of the four pilot countries to perform effectively. Each pilot country has a commitment to the remaining twelve countries, to share lessons learned from developing its PFM. Creating knowledge, developing a shared vision on a demanding topic requires extensive effort and dedication. As in other South-South cooperation efforts, the ownership, sustainability and replicability of the outcomes depend upon the participating countries more than the project itself.

Finally, **CReW is synchronous and non-sequential**. It is a collage of interventions and outcomes that are conceptually linked, but operationally independent. It is a self-contained project, yet achievement of outcomes is highly dependent on the political and institutional environment in which it operates.

II. Scope and Methodology of the Mid-Term Evaluation

This **Mid-Term Evaluation (MTE)** is a **formative review of the CReW project** undertaken half way through project implementation to analyze whether the project is on track. The MTE assesses performance in three areas: (i) progress in attaining the project activities and outputs stated in the results matrix; (ii) performance in terms of relevance, efficiency and effectiveness and the likelihood of achieving the intended outcomes; and (iii) effectiveness of the joint IDB and UNEP management and administration of the operation.

The MTE focused on the following key questions: (i) What is the status of the pilot financing mechanisms? (ii) How much progress was made on institutional strengthening and capacity building for the long-term management of the wastewater sector? (iii) What progress was made on developing regional policy, legal and regulatory frameworks for addressing wastewater management and reform? (iv) What are the challenges to project implementation, and what remedies can be proposed? (v) Can the project realistically achieve its intended outputs and objectives in the time remaining?

The **MTE employed a participatory approach** involving structured interviews and discussions with water utility representatives, national focal points, project executing unit personnel, private sector developers, utility regulators, wastewater systems vendors, government officials and regional institutions. The evaluation process encompassed five missions to the Caribbean region for direct consultations. In addition to the missions, the evaluator had phone/Skype contact with the four participating Central American countries. The complete list of all individuals contacted and interviewed during the evaluation is found in Annex D.

Mission	Date
Jamaica	Sept. 23 – 27, 2013
Belize	Sept. 30 – Oct 3, 2013
Barbados	Oct. 8 – 11, 2013
Guyana	Oct. 20 – 23, 2013
Trinidad and Tobago	Nov. 11 – 14, 2013

The **MTE included an extensive desk review** of project documentation including the Project Implementation Reviews, relevant correspondence, minutes from the Inter-Agency Coordination Group and the Project Steering Committee, and other materials produced by CReW or its partners, and items published on the project website (www.gefcrew.org). A list of documents reviewed and consulted during the evaluation is found in Annex E.

The remainder of the MTE report is organized into the following sections: Section III – Component Performance provides an in-depth assessment of progress toward implementing the three substantive components. Section IV – Overall Performance discusses achievement using the established GEF criteria. Section V – Lessons Learned and Recommendations provides the evaluator’s broad comments on the way forward. The terms of reference for the MTE are found in Annex F.

III. Component Performance

A. Component 1: Investment and innovative financing for wastewater management

Component 1 aims to establish innovative financing mechanisms for cost-effective and sustainable of wastewater management in the Wider Caribbean Region. Activities include capitalizing four individual Pilot Financing Mechanisms (PFM), providing project development support (PDS) to ensure quality project designs, and strengthening technical capacity of pilot executing agencies.

The following section offers a performance assessment of each of the PFMs and associated infrastructure projects in Belize, Guyana, Jamaica and Trinidad and Tobago. Each country advances at its own pace while managing its unique universe of challenges.

1. Belize – An adaptive approach

The **US\$5 million Belize Wastewater Revolving Fund (BWRF)** was envisioned to provide subsidized interest rate loans for eligible public and private sector wastewater treatment projects. The Financial Secretary of the Ministry of Finance and Economic Development chairs a Board to manage the BWRF, which is responsible for providing policy advice and technical opinion with regard to the use of funds in the PFM. Other Board members include representatives from the Ministry of Natural Resources and Agriculture, Ministry of Local Government, Rural Development, Labour and National Emergency Management Organization, and the Ministry of Works.

The **first-generation project was to have been a regional, inter-municipal wastewater treatment system on the Placencia Peninsula**. A US\$5 million sovereign-guarantee loan (BL-L1015) from the IDB was to supplement the US\$5 BWRF, with technical cooperation resources from IDB. The implementing agency for the entire US\$10 million project would be the Belize Water Services Ltd. (BWSL).

The **Placencia Peninsula** is sixteen miles long and is composed of three main villages (Placencia, Seine Bight and Maya Beach) with a permanent population of 2,700 persons, which swells to 10,000 persons in tourism season. The Caribbean borders the peninsula on the east and is in close proximity to the world's second largest barrier reef, and to the west an environmentally sensitive lagoon, that plays an important role in the life cycle of diverse marine organisms. Wastewater management currently consists of septic systems that have fallen behind the rapid development on the peninsula, resulting in contamination of the both the coast and the lagoon. The increased health risks affect the tourism industry and subsequently the regional economy.

Although Belize proceeded expeditiously to set up the Pilot Executing Agency and to name Belize Water Services, Ltd. as the project-implementing agency, **the project became embroiled in a protracted, politically sensitive conflict with the traditional community water boards** that refused to transfer water and wastewater responsibilities to BWSL. Project planners did not anticipate the ensuing resistance from the water boards, assuming they lacked the financial and technical capacity to be interested in modern wastewater systems. The Ministry of Local Government stepped in, and after several years of negotiation and consultation, dissolved the boards, and transferred the tangible assets to BWSL.

Realizing that the problems in Placencia could jeopardize the PFM, Belize authorities sought alternative projects in advanced stage of readiness to utilize the PFM resources in the short term. With encouragement from IDB and the CReW project, the **Belmopan Sewer System Upgrade and Expansion project came forward as an alternative**, due to its simplicity of design and ease of construction. The US\$2.2 million project consists of consolidating an existing sewerage network and retroactively financing construction of a treatment lagoon in the capital city Belmopan. The financial feasibility study recognized this project would quickly establish wastewater services that, in turn, would generate sustained repayment back into the revolving fund. As of December 2013, IDB disbursed the US\$5 million PFM.

The **CReW project in Belize is on track to attain the desired outcome** of a sustainably functioning wastewater revolving fund that finances wastewater treatment projects. Contextual circumstances resulting in changes to the first-generation and have provided important lessons for the future.

The timely identification of a viable alternative project to deal with the impasse with the Placencia water boards is an excellent example of the **adaptive management approach** espoused by the CReW. The Belmopan alternative is a useful **example of quickly deploying the pilot financing mechanism to a small project that has the potential for quick repayment in order to** make funds available for another project. Repayment to the BWRP from the Belmopan project is expected to start in 2014.

In response to this experience, Belize is developing a list of priority projects for the future implementation, and will consult with communities **at an earlier stage** of project identification. Facilitators are using techniques learned during the Facilitation Workshop to improve communication among stakeholders.

Construction on the wastewater collection network of Placencia project will begin in mid-2014, under the loan component, which is expected to be full disbursed by mid-2016. Construction of the wastewater treatment plant is expected to start in 2016, using the resources from the CReW pilot financing mechanism.

Participation in the **CReW has consolidated BWSL's** operational and financial responsibility for wastewater management. The regulatory system allows BWSL to charge increased tariffs on completed wastewater projects, which generates a strong incentive to provide wastewater services. The BWRP has the potential of providing sustainable up-front financing of wastewater treatment systems. The high visibility of the Belmopan and Placencia projects has generated **high expectations to continue and expand the revolving fund mechanism.**

One lesson learned from this experience is that a single large project like the Placencia project is very costly in relationship to the available amount of investment per country and in terms of low flexibility in the event of delays.

Recommendations

As soon as the first-generation wastewater treatment project is underway, the Pilot Executing Agency should prepare a financial status report on actual performance and expected repayments to the fund, which should include a medium-term “amortization” plan covering the initial capital amount provided by CReW. The financial status report should also include any changes to the policy for replenishing the wastewater revolving fund and expectations for additional capitalization.

2. Guyana – Seeking public-private partnership

The **US\$3 million Guyana Wastewater Revolving Fund (GWRF) supports** improvements in wastewater management through both public and private sector channels. Early in the CReW preparation process, the Government of Guyana identified a first-generation project with Banks-D'Aguilar Industries and Holdings (DIH), one of the country's largest breweries. The project was to have consisted of a wastewater treatment plant to ensure that discharges from beer production into rivers would conform to the Guyana EPA standards. The proposed US\$1 million wastewater treatment plant was to have been the first module of a design that would eventually be expanded to serve surrounding residential and industrial areas. Two other potential first-generation projects included (i) small-scale septage processing facilities, and (ii) the installation of a wastewater treatment plant in conjunction with a US\$10 million IDB loan (GY-L1025) for sewage disposal in unserved areas of capital city of Georgetown.

Upon signing the CReW agreement in July 2011, the Ministry of Housing and Water established GWRF Board including representatives from Guyana Water Incorporated, the Environmental Protection Agency and the Private Sector Commission to manage the fund. **Guyana's approach to wastewater management prioritized the high-volume and high-risk polluters,** who dispose untreated wastewater into the waterways leading to the marine environment.

The first-generation project with DIH was a low-hanging fruit thanks to a strong external motivator and a shared initial enthusiasm with CReW. DIH holds the franchise for Coca

Cola, which since 2006 set a worldwide goal of ensuring that wastewater discharged from its manufacturing processes meets or exceeds local regulations. Unfortunately, the four-year period (2008 – 2012) that the GEF-IDB-GoG took to formalize the CReW was too protracted and the conditions too uncertain to meet DIH's franchise commitment. **Despite initial enthusiasm, DIH withdrew from the program**, and found other financing to comply with the franchise's wastewater discharge standards.

The **Ministry of Housing and Water re-launched CReW at a high profile event in May of 2012**, but no private sector expression of interest was forthcoming. In response, the project management unit initiated a strategy to identify alternative new projects, using a targeted approach of consultations with firms in manufacturing and tourism sectors. This strategy, along with stakeholder consultations and an initial public information campaign, led to the identification of short list of roughly eight potential private sector projects, which currently form the action plan in Guyana.

Principal among the potential projects under consideration is a proposal submitted by **Demerara Distillers Limited (DDL) to construct a US\$2.4 million treatment plant** that would address concerns over the volume and strength of its discharges flowing into tributaries of the Demerara River. The project will address one of the major sources of pollution in Guyana through a sophisticated treatment facility that will reuse water in the distillery, produce methane to generate electricity. The project also may be eligible for carbon credits. Although the DDL application is recommended for financing, prolonged negotiations over eighteen months have not reached agreement on the interest rate and repayment period. At this juncture, the project presents numerous risks: (i) The repayment period of the DDL loan could extend for 10 or 15 years, in which case the PFM would not replenish fast enough to support other projects. (ii) The slow pace and high transaction costs of reaching agreement could discourage DDL from pursuing the project. (iii) Once constructed, the short-term financial and economic returns on investment to DDL may significantly exceed the long-term financial cost of the loan. (iv) This single project will tie up most of the available GWRF resources. **The DDL project would be a short-term win in terms of investing CReW funds to resolve a major source of pollution, albeit sub-optimal in terms of the revolving fund mechanism.**

Public consultation and Guyana EPA recommendations resulted in the **identification of several other potential small-scale, private-sector wastewater projects**. These projects include a new water resort-vacation housing complex, a new hotel in Georgetown (expected to be LEEDS certified), a pharmaceutical company, two septage disposal services, and treatment plants at the international airport and an abattoir. **Collectively, the projects offer great potential, but individually present challenges**, such as: (i) preparation and execution timeframe exceeds the duration of CReW; (ii) the company lacks technical knowledge to develop an acceptable proposal; (iii) smaller companies lack the entrepreneurial capacity to execute the project; (iv) some schemes fall outside the first-generation project selection criteria; (v) the project requires inputs, such as land, to construct the treatment facility; (vi) firms have difficulty providing information required to determine their creditworthiness; and (vii) companies are unwilling or unable to cover up-front costs of project design and preparation without assurances of project approval. Several small projects offer the advantages of risk diversification and a broader demonstration effect, but will require consistently solid technical support.

The **strength and innovativeness of the Guyana model lies in its focus on public-private partnerships (PPP)**, however public sector rules and procedures are not always appropriate for, or compatible with, private sector business practices. CReW Guyana will need to work closely with the private sector to find relevant and mutually acceptable terms of engagement to deliver the expected PFM outputs. Monitoring the performance of small-scale private sector projects to ensure quality outcomes poses additional risks that go beyond the PEU and CReW's immediate purview.

CReW has achieved the objectives of bringing wastewater issues to public and official awareness, motivating champions to assume leadership positions on wastewater, stimulating horizontal collaboration among multiple stakeholders and bridging their respective interests and mandates. Since Guyana has not yet approved a project, it is not possible to evaluate its true capacity to execute. Many challenges lie ahead before the desired outcome of a sustainable wastewater revolving fund can be achieved. Barriers to the intended project outcomes include (i) the absence of internal/national sector drivers, (ii) weak environmental regulations and legal enforcement, (iii) limited wastewater management expertise, and (iv) the absence of comprehensive wastewater discharge standards. Although these topics will begin to be addressed under Component 2 of CReW, the results will likely be manifest in the medium- to long-term.

Guyana's ratification of the Cartagena Convention and the LBS Protocol initiated a process of environmental dialogue and programming. Now CReW has offered an opportunity to take the process a step forward. It would be a travesty to have sensitized the private sector and got them to examine the issues, and then have nothing to offer when they are ready to move forward. The process takes time.

Recommendations

The Project Management Unit should **develop a long list of potential projects** in both the public sector (with Guyana Water Inc.) and the private sector. Building momentum on second-generation project will serve as a backup in the event the DDL project does not materialize, and position the program for an eventual infusion of new capital.

Now that the Public Relations and Marketing consultant is on board, the PMU should reinstitute the targeted campaign to identify projects, build environmental awareness, **disseminate information on the benefits of wastewater treatment**, and seek to engage ministerial level champions. Build synergies between internal and external motivators.

Research whether it would make sense to contract with a local commercial bank to service the private sector loan portfolio, and thereby comply with minimum loan portfolio fiduciary standards. Government generally is not properly equipped to carry out these functions.

The unique characteristic of CReW Guyana focus on **public-private partnership model** implies the need for a flexible yet specific technical assistance strategy. The PMU should access conceptual orientation, general training and technical advice on developing PPPs through a specialized source of this expertise, such as the Institute of Public-Private Partnerships. Of particular interest are topics related to maximizing each party's strategic advantages, and

mechanism for performing due diligence in determining loan viability. Moreover, private sector wastewater initiatives benefit from strong external drivers and regulatory enforcement, especially in a context where there is nascent social-cultural appreciation for wastewater issues.

The private sector firms interested in presenting a wastewater treatment project have demonstrated the need for technical support in conceptualization, technical design and proposal preparation. The **provision of a flexible mechanism for assisting companies will accelerate project eligibility**. The IDB has several models for providing technical assistance to the private sector through the Multilateral Investment Fund (MIF) and the Small Enterprise Program (SEP) that could be approached to provide support. In addition, the Institute for Private enterprise Development (IPED), a Guyanese financial institution, could be approached to counsel and support small project financing and portfolio management. The IPED is a partner organization with the Inter-American Investment Corporation (IIC) regarding trade finance and promotion.

When reviewing private sector loan proposals, it is important to **ensure that the financial and economic returns on investment to the borrower are commensurate to the opportunity cost to the lender**. In other words, beware of possible rent-seeking behavior.

Consultations in Guyana have pointed to the need for extending the CReW project in order to execute the first generation projects and initiate reflows into the GWRP. Next year, 2014, is not too soon to begin looking at different scenarios to cover the operating costs of the program, including the pilot coordinator, technical, administrative, legal and financial services when CReW funding terminates. The exercise should examine the possibility of donor funding, government own funding and drawing from the GWRP.

The experience of CReW Guyana is full of opportunities and challenges that present lessons at every turn. As part of its commitment as a pilot country, together with the support of the PCG, Guyana should start a systematic process of documenting the program advancement, capturing changes in attitudes and behaviors and preparing to share these lessons with the greater community.

3. Jamaica – Leveraged sustainability

The **Credit Enhancement Facility in Jamaica (JCEF)** is a **US\$3 million** guarantee fund placed in a reserve account and pledged to local commercial banks as collateral for acquiring financing to carry out wastewater projects. The initial proposal foresaw CReW funds leveraging US\$7 million for the National Water Commission (NWC), the national water and wastewater utility in Jamaica, to execute 11 small projects. Since 2008, the Office of Utility Regulation (OUR) has authorized NWC to collect a monthly wastewater utility surcharge called the K-factor, which capitalizes a special account for priority water and wastewater investment projects. Rather than applying K-factor revenue directly to capital investment, the accrued funds will service large commercial loans. **CReW funds, placed in a reserve account, provide secondary assurance to commercial lenders** in the event K-factor revenue is unavailable.

The **concept for the JCEF has remained unchanged since the CReW identification stage**, however the scope of outcomes and potential impact have increased significantly. The project expects a 4:1 leverage of financial resources. A signed commitment letter with the National

Commercial Bank (NCB), the second largest commercial bank in Jamaica, stipulates a **US\$12 million loan** over a 12-year term. IDB has disbursed the US\$3 million CReW contribution into the special NCB guarantee account.

Concurrently, the National Environmental Protection Agency (NEPA) identified 44 existing wastewater treatment plants that need to be rehabilitated or replaced in order to meet new national effluent standards. Of these, NWC will address **13 plants under CReW, to meet national compliance standards**, which are more stringent than the LBS Protocol standards. The projects include building new treatment plants, upgrading and rehabilitating existing plants, and decommissioning obsolete plants. Future projects will explore alternative uses of effluent.

CReW has helped **in consolidating the corporatization process of NWC**. The K-factor together with the reserve guarantee from CReW contributed to the NWC securing its **first commercial loan without a sovereign guarantee**. NWC's growing financial and institutional autonomy contributes to sustaining the long-term impact of the JCEF when project funding ends.

The **achievement of outputs and activities is on track**, notwithstanding some early delays. (i) The PMU got off to a slow start in assigning personnel, and acquiring office space and equipment. These delays were due, in part, to organizational changes at that time within NWC, and the higher priority given to IDB loans for water and institutional building totaling US\$158 million. (ii) Internal procurement processes bogged down. In an attempt to accelerate execution, the PMU tried a design-and-build tendering process, which was rejected by the tender board, causing further delays.

Although Jamaica would have used the K-factor to address wastewater management deficiencies, CReW **helped speed implementation and extend coverage of** national and LBS Protocol standards. Moreover, CReW's focus on operations and maintenance of systems, the certification of operators and discussion of new technology has provided greater depth to NWC efforts to address this challenge.

Recommendations:

It is important to **begin documenting the experiences to date**. Jamaica is an important pilot exercise that will provide many lessons on a sophisticated solution that can be easily replicated elsewhere. An important commitment of being a pilot country is to describe the process and share the outcomes with other partner institutions in the region. Jamaica should reflect upon the broad constellation of institutions that collaborated on signing the Cartagena Convention, developing strong national standards, moving toward ratifying the LBS Protocol, designing the K-factor, selecting the priority projects. Identify the process for accumulating political will and maintaining inter-institutional coordination to keep the process moving forward.

Now that Jamaica's first-generation projects are coming to fruition, it is an opportune moment to **develop variations on the model that will serve future projects**. Rather than use the K-factor to service commercial debt, the K-factor revenue could be accumulated in the guarantee account in order to augment leveraging of private financial resources. The combination of a robust tariff system, the K-factor and the guarantee fund could attract enough for private sector service

providers to enter into BOOT arrangements (build-own-operate-transfer) that leverage additional financing and expand coverage.

Having acquired its first non-sovereign guarantee loan from the private sector, this may be an opportune moment for the Government of Jamaica to being **dialogue with the IDB about including wastewater management in the upcoming country strategy**, and on the possibility of non-sovereign guarantee loans to the NWC.

4. Trinidad and Tobago – A slow start

The **US\$2 million Trinidad and Tobago Revolving Wastewater Fund (TTWRF)** was conceptualized **to improve coverage and performance in the wastewater sector**. Dialogue with the GoTT began in 2010, somewhat later than the other CReW countries. Initially, the GoTT had **two options under consideration** to help reach the stringent national water pollution standards set in 2006. The first was to assist the Water and Sewerage Authority (WASA) to by-pass up to 20 abandoned or malfunctioning residential wastewater treatment plants in Trinidad and connect them to nearby modern treatment facilities. The second was to provide zero-interest loans to private sector hotels and commercial developers for the installation of wastewater treatment facilities, with the condition that participating firms would contribute a portion of the total project cost back to the revolving fund.

In June 2010, elections took place and a new Government came into power. During the following three years, the GoTT and the IDB had a discontinuous dialogue regarding participation in CReW, in the context of several important changes in the institutional framework and wastewater programming. IDB and GoTT prepared and approved the US\$50 million WASA Modernization and Wastewater Infrastructure Rehabilitation loan (TT-L1018) in October 2011. In 2012, the GoTT interlocutor with the IDB changed from the Ministry of Finance to the Ministry of Planning and Sustainable Development. In that same year, GoTT created the Ministry of the Environment and prepared its institutional strategy, which includes the wastewater portfolio. Finally, IDB and GoTT prepared the US\$246.5 million Multiphase Wastewater Rehabilitation Phase I loan (TT-L1026) approved in December 2012. WASA expects to invest US\$550 million in wastewater management in the next 8 to 10 years. In retrospect, it is apparent that **competing sector objectives crowded out substantial engagement on the relatively modest CReW initiative**.

Trinidad and Tobago has initiated a gradual transition to a post-hydrocarbon economic model, which implies the **water and wastewater sector will become more efficient and self-sustaining**. As GoTT rationalizes sector subsidies, the general population will pay for services it receives, and subsidies will target individuals and communities based on need. Trinidad and Tobago has not increased water and sanitation tariffs in over 16 years and approximately 60% of WASA's operating costs are direct transfers from the central government. These policies are politically challenging and will likely come on stream slowly, which directly affects the viability of the TTWRF, if replenishment is solely dependent on user rates.

Despite conflicting expectations and varying degrees of interest within the GoTT, the IDB specialists, CReW staff and the GoTT eventually built a common understanding of the purpose

and functionality of the project, and generated sufficient consensus to move forward. In June 2013, the GoTT became the last of the four demonstration countries to sign an agreement to establish the TTWRF.

The first-generation project in southwestern Tobago will rehabilitate a 15-year old wastewater treatment plant and expand the number of property connections to bring more customers onto the network. Currently, the Scarborough sewerage network and treatment plant are greatly underutilized, serving only 10% of potential users. The remaining 90% are reluctant to connect onto the network citing construction costs and the attendant increase in monthly rates as barriers. The project will reduce public health risks, protect the delicate ecosystem and thereby enhance the tourism industry. Once completed, **the project will bring Scarborough and environs into compliance with the LBS Protocol**, which the GoTT signed in 2003.

The CReW-funded intervention is part of a larger US\$80 million wastewater management initiative covering the entire southwest portion of Tobago. The US\$2 million **CReW adds significant value because it addresses the cause of the extremely low wastewater utilization rate**, by paying the construction costs of individual property connections, which otherwise would be borne by each property owner on an optional, non-mandatory basis. The TTWRF will **eliminate the financial barrier and ensure properties get connected from the outset**. This experiment gives WASA the opportunity to learn strategies for managing customer expectations on compulsory connections in future large projects. The project sets up a framework to analyze systematically the property connection process, apply new technology to improve design, and flag plumbing code, inspection and reporting issues.

The TTWRF management is in the process of fulfilling conditions precedent to disbursing the US\$2 million. WASA has completed the tender for refurbishing the Scarborough wastewater treatment plan, the property connections and data collection. WASA will begin **construction the Scarborough first-generation project in early 2014**.

The financial additionality of the **US\$2 million from CReW is small** in comparison to the other resources channeled into wastewater management in Trinidad and Tobago. Setting up the TTWRF and its Board, assigning a fund manager and establishing a separate fund account represent **high transaction costs relative to the modest amount**.

The lack of a robust tariff system that generates a predictable revenue stream represents a risk to the sustainability of TTWRF. In the short-term, in Trinidad and Tobago, relying on tariff revenue alone to make the TTWRF sustainable is not a viable option. The wastewater revolving fund will require other revenue streams, from government or external donors, to ensure financing for second-generation projects. The MTE notes that IDB is currently executing TT-L026 loan that includes a tariff study and model, which will contribute to the implementation of a new tariff scheme.

Recommendations

Trinidad and Tobago offers an interesting lesson from a public policy perspective regarding the strategic issues faced during the decision-making period. GoTT should begin to

analyze the key lessons garnered from this experience to help other countries. As with the other pilot countries, documenting **lessons learned should begin as soon as possible before the institutional memory begins to fade.**

Defining the policy for replenishing the TTWRF is part of preparing the operations manual, after which, **MOF should prepare an initial forecast on replenishment of the TTWRF**, with CReW support as necessary.

Once the Scarborough project is underway, it would be useful to share this experience with a broad group of national stakeholders in the context of the wastewater investments and sector reforms in Trinidad and Tobago. **The MTE recommends that CReW assist in conducting an in-country workshop on issues of wastewater management, spanning both the regional context and the local perspectives.** The purpose of this type of event will be to maintain momentum on wastewater sector modernization, and facilitate inter-institutional communication to enhance collaboration for managing complex change processes.

5. Project Development Support and Technical Capacity Strengthening for Wastewater Pilots (Subcomponents 1.2 and 1.3)

The Project Development Support subcomponent funds design services to prepare projects. PMUs use these resources to develop effective designs, with the expectation of minimizing procurement issues and construction delays, and ensuring the probability that the final product functions as intended upon completion. This subcomponent supports the pilot-country Project Management Units (PMU) with funding for one technical person for each PMU

This subcomponent also includes technical assistance to support the PMUs during project design, procurement and construction activities, to ensure application of appropriate industry standards and project mandates. IDB has set up the Project Coordination Group (PCG) in Jamaica, which provides the timely technical and material support and guidance to the four pilot countries.

Activities and outputs under these two subcomponents are on track. The rate of progress on rolling out the pilot financing mechanisms has been constrained largely by factors and uncertainties endogenous to each country, beyond the control of the PCG.

B. Component 2: Reforms for wastewater management

The United Nations Caribbean Regional Coordinating Unit (CAR/RCU) launched Component 2 activities in February 2012 at the Project Steering Committee meeting. This component addresses the second key issue to progress on wastewater management, which, after financing, is the enabling environment that includes policy, legislation, regulation, education and training. The component generates actions for improving wastewater management that are consistent with the UNEP Global Programme of Action (GPA) Strategic Action Plan Guidelines on Municipal Wastewater Management. This component has three separate subcomponents that deal with capacity building, legislative reform and awareness building. The outputs and activities are clearly defined for each component, however, in practice, there is significant overlap in their

content, audiences and delivery, and most stakeholders relate to the component as a single set of interrelated actions.

At project midpoint, the CAR/RCU has directly administered and conducted **an extensive program of activities that effectively contribute to achieving and sustaining the regional objectives of the CReW project**. An illustrative list of completed or advanced outputs includes: (i) a baseline assessment of national wastewater management capacity in participating countries; (ii) a report on the compliance with the LBS Protocol completed for English-speaking countries and another underway for Spanish-speaking countries; (iii) guidelines for compliance with the LBS Protocol and ongoing technical support to the National Focal Points for ratification and implementation; (iv) templates and toolkits for developing and updating wastewater policy, legislation, regulations and management plans; (v) workshops on wastewater management with CAWASA and the Water Center; (vi) influential and successful participation in regional events including two CWWA conferences and high level (ministerial) meetings, the annual CAWASA meetings; and (vii) supporting CReW's regional facilitator training workshop geared to improving mid- and senior-level professionals' leadership, participatory and conflict resolution skills.

It is important to recognize that the CAR/RCU performed other relevant activities that contribute to the outputs under this component, which include the provision of consultants, participation in GEF, International Waters and UNEP regional and international seminars on water resources, and the delivery of presentations to build awareness of CReW and wastewater issues to diverse audiences and media. Given the low level of staffing within the CAR/RCU to support CReW, the range and quality of outputs over the past two years is outstanding.

CReW provided financial support to the annual High Level Ministerial Forum, which is a joint initiative of the Global Water Partnership-Caribbean and the Caribbean Water and Wastewater Association, November 2013 in Barbados. The ministers attending the forum signed a declaration recognizing wastewater's important cross-sector linkages and a holistic approach to urban water management that treats wastewater as a resource not a waste. The ministers highlighted the need for programs and investment in wastewater management in urban and other priority areas, while recognizing capital costs are likely to prove a significant impediment for the small economies. Ministers also acknowledged the need to mobilize grassroots support and public awareness as necessary condition for garnering political support.

To further the objectives of this component, CAR/RCU is in the process of preparing thirteen **Small Scale Financial Agreements (SSFA) to support national capacity building for institutional and legal reforms** in all CReW countries. This instrument enhances efficiency and effectiveness through a three-fold rationale: (i) to tailor the national capacity-building activities to each individual country's specific circumstances and level of readiness; (ii) to increase the impact of activities in each country by building ownership of the process; and (iii) to address capacity constraints within CAR/RCU to administer discrete technical inputs simultaneously in thirteen countries. Setting up the SSFA's has been time consuming. To date, four SSFAs are signed and the remaining nine are in different stages of preparation and approval. The value of the SSFAs ranges from US\$30,000 to US\$60,000 with preference given to the non-pilot countries. The Spanish-speaking countries' SSFAs will reflect the findings of the LBS Protocol

compliance report prepared by the Center for Engineering and Environmental Management of Bays and Coasts (CIMAB) and a follow-on workshop. The SSFAs provide balance between CReW's goal to impact regional policy, and country specific interventions that recognize each country's individual needs in policy, legal and institutional areas.

CAR/RCU signed SSFAs to enlist expert support of several partner institutions, as follows:

(i) CWWA, to strengthen wastewater management and networking in the wider Caribbean region; (ii) CIMAB, to assess the challenges experienced in ratifying and implementing the LBS Protocol in the Spanish-speaking CReW countries; (iii) the Wider Caribbean Sea Turtle Conservation Network (WIDECAST), to produce ten short GEF-CReW video documentaries on the concept of innovative financing for sustainable wastewater management; and (iv) CAWASA, to support seven beneficiary countries in establishing a baseline assessment on LBS Protocol, conducting operational assessments of utilities and inter-country technical exchanges.

The policy reform, capacity building and communications activities have taken a longer time to get underway than initially planned due, in part, to the dynamics of working with an extensive number of autonomous stakeholders. Two areas show little progress to date, which could result in important gaps in CReW performance on policy reform and capacity building. The first important cluster of activities relates to the **environment and natural resource assessments** (ENRA), which are site-specific, scientific studies of the environment that determine the economic impact of pollution, thereby helping to inform policy decisions. Although initial discussions on implementation have begun with the World Resource Institute at UWI and the National Oceanic and Atmospheric Administration, work will begin in 2014. The ENRAs are time consuming, complex and expensive. The slow uptake of this activity reflects sensitivity to government's needs, but it means the ability to disseminate the methodology and to stimulate replication among other countries, and thereby support implementation of the LBS Protocol, will likely be constrained at the end of the project. Trinidad and Tobago and Panama are potential pilot countries to test the ENRA methodology. ENRA activities should begin as soon as governments confirm their interest.

A second area that requires additional attention is conceptualizing a regional monitoring, evaluation and reporting (M&E) framework for wastewater management. The initial results matrix calls for increasing awareness of wastewater management through training and the preparation of a detailed implementation plan (resources, budget and timetable) for an M&E system. The accompanying indicators for this outcome reflect on the number of countries committed to participating in the M&E, and the number of donors / partners endorsing the M&E approach. To date, this cluster of activities is mentioned in the context of some country SSFAs, and several countries have independently initiated domestic M&E schemes.

Considering the centrality of initiating environment and natural resource assessments, wastewater monitoring, evaluation and reporting to implementation of the LBS Protocol and replicating pilot financing mechanisms, the **delayed progress on these activities represents a potential lost opportunity to the overall CReW program.** These areas should receive priority attention for the remainder of the CReW project.

Another important cluster of activities that registers slow progress is the **identification of best practices for financing and managing wastewater utilities**, including cost recovery models. Discussions with partner agencies indicates a wealth of information already exists on this topic, both within and outside the region. Therefore, extensive background research on international and regional best practices is not necessary. CAR/RCU made the decision not to duplicate existing studies and materials, which should simplify and accelerate the preparation of workshops tentatively scheduled for 2014. MTE further notes that IDB has extensive untapped knowledge and experience in financing and managing utilities.

Another cluster of activities where little progress has been registered is **the incorporation of wastewater management and sanitation into education curricula and the rural sanitation education campaign**. Initial discussions with the Caribbean Examinations Council and several education ministries have elucidated a lengthy process to formally changing academic course content, and have expressed a preference to treat the topic in the broader context of environmental conservation and natural resource management. The rural sanitation awareness campaign has not begun. Although important in their own right, these activities are ancillary to the achievement of CReW's principal objectives. They are unlikely to achieve desired impact if they are not linked to a higher level of government commitment or supported by resources to implement desired changes. The MTE recommends, therefore, **to de-emphasized these two activities for the remainder of the project**.

Progress on Component 2 is measured by delivery of products and events, and the forging of relationships with strategic partners. Progress at the level of the thirteen participating countries is more difficult to gauge, as it reflect higher order changes in policy, legislation, regulation, institutional structures, budget decisions and action plans. **It will be difficult to isolate the contributions of Component 2 to specific changes in national wastewater policy, legal or regulatory frameworks**. Moreover, Component 2 activities are part of UNEP's Caribbean-wide support for implementing the Rio Conference on Sustainable Development, the Cartagena Convention, the LBS Protocol and actions under the International Waters portfolio, all of which pre-date CReW

The CAR/RCU program of activities under Component 2 is relevant to the project's objectives and the participating country priorities. Interviews with stakeholders indicate interventions are likely to achieve the desired outcomes, by offering many opportunities for countries to influence government policy, learn new concepts and skills, and disseminate project results.

C. Component 3: Communications, Outreach and Information Exchange

CAR/RCU also manages **Component 3, which focuses on communications, outreach and exchange of information with counterpart agencies, implementing partners**. The component has two areas, one of which supports information sharing and dissemination to set the groundwork for future replication, and the other the creation of an integrated information system that will be a clearinghouse for information on wastewater management to countries in the wider Caribbean. The communications specialist hired under this component manages the preparation and dissemination of documentation, stakeholder consultations and the development of a strategy for future replication of the PFMs

Activities under this component have successfully presented CReW through multiple media including: (i) publication of the quarterly newsletters titled “CReW Lines,” which was also translated into Spanish and uploaded to the CReW website; (ii) exhibits at two national exhibits in Jamaica for the World Wetlands Day and for the combined World Water day and World Meteorological Day; (iii) preparation of the first experience notes; (iv) preparation of terms of reference for a consultant to craft case studies; and (v) development, updating and refinement of the CReW website, which is the core of the regional information management system.

The CReW communications strategy considers both the internal and external communications challenges of the project. The **internal communication strategy addresses challenges related to the size and geographic scope, technical complexity and the vast number of stakeholders involved in CReW.** It covers all thirteen countries, and helps them understand and participate in the project, focusing on sector financing issues and the PFMs through electronic bulletins and newsletters, training, consensus building. The internal communication strategy also provides guidance on communication between UNEP and IDB. The MTE notes that UNEP and IDB’s standards for publishing, web sites, videos, document content, etc., are different, and that both parties are currently in the process of defining common standards and procedures.

The **external communications strategy focuses on public relations and outreach to the community, national and regional audiences,** and helps people visualize the issues and gain interactive access to information. A key focus is **building interest and concern of national policy and decision makers** by improving their understanding of the economic impact of improper wastewater disposal. Additional actions include media relations, assisting the NFPs to develop national messages, and incentivizing high-profile spokespersons / champions. Specific activities include branding, press articles, fact-sheets for policymakers, print and electronic brochures, radio announcements and video documentaries.

Documenting and communicating lessons learned and best practices will begin to gear up during the second half of the project. This is, of course, a critical element of the pilot nature of CReW. The biggest challenge for advancing on this activity has been the slow pace of the pilot financing mechanisms. Only when the first generation projects are underway, can lessons and insights be distilled and documented. In 2014, a consultant is scheduled come on board to develop case studies, to document on-the-ground context and experience.

CReW has effectively put wastewater in the spotlight where traditionally it has been a neglected issue. The CReW Facebook page has information and links to general topics of wastewater, and caters to a less formal and younger audience. It is an open venue that goes beyond CReW to embrace outside information and creative experiences, such as integrated technology solutions from other lower- and middle- income countries elsewhere. Likewise, open and unscripted relationships with academics and partner institutions throughout the region provide important opportunities for creative thinking and cross-fertilization of ideas.

On-site, face-to-face training is very expensive in the Caribbean and there appears to be a significant degree of attrition among participants. **More thought needs to be given to improving efficiency of training through providing more opportunities to learn and share**

through web-based events and extended-term, on-line learning programs that can be repeated over time. The methodology used in successful pilot courses on water treatment management with the University of Monterrey Water Center should be studied for replication in other topics, which could be elaborated in the context of the 2008 MOU signed between IDB and the University. Organizers of face-to-face events should be more forthright in establishing selection criteria and governments should be encouraged to nominate persons with credentials and commitment to apply the knowledge and skills acquired. Despite the unique situation in each of the thirteen CReW countries, there is room to seek commonality and capitalize on the potential for horizontal learning. There is also ample room to build extended communities of practice with partner organizations such as CWWA and CAWASA.

Recommendations

Future CReW publications should expand the content on technical, economic and financial issues related to wastewater management and reduce the emphasis on CReW activities and personalities. The goal of CReW is to build awareness of wastewater issues and reduce land-based sources of pollution.

The MTE recommends that the second half of CReW consider a broader menu of learning approaches, in both formal and informal settings, both on-line and face-to-face, with particular attention to enhancing potential impact, expanding opportunities to a larger pool of participants, with due consideration to reducing the cost per participant.

IV. Overall Performance and Impact

The project document (PD), Request for CEO Endorsement/Approval of November 2010, sets out the background and context of the CReW project, fully describes project results and indicators, the institutional framework, the implementation of components and a budget. This document is the definitive template for subsequent IDB and UNEP approval documents and internal iterations such as the Project Inception Report. The PD recognizes the multi-dimensional nature of wastewater management, the historical trajectory of the issue in the Caribbean, the challenges of joint implementation by IDB and UNEP, and the foreseeable risks.

A. Assessment of Assumptions, Objectives and Design

The CReW project addresses three barriers to improving wastewater management and reducing the obstacles to implementing the obligations of the LBS Protocol. These include the lack of affordable financing available for investments in wastewater management; inadequate national policies, laws and regulations, and limited enforcement; insufficient communication and collaboration among various actors.

CReW is a supply-side project, driven by UNEP's knowledge of the Cartagena Convention and the LBS Protocol and IDB's project financing and management expertise. The design set forth

high expectations for achievements in the short, four-year timeframe, with limited human and financial resources.

An explicit government policy regarding compliance with the LBS Protocol was not a prerequisite for participating in CReW. Disbursements are independent of progress on policy-based goals. In retrospect, this approach seems to have been reasonable for the context at the design stage, however future CReW-like initiatives should ensure that participating countries have made fundamental commitments to ratifying and implementing the LBS Protocol, as a precondition for investment financing.

An important design feature was to begin all activities simultaneously, based on an assessment, at the time, of ability of all relevant parties to engage quickly. Nevertheless, the need to engage a significant segment of national environment, regulatory and financial decision makers tempered country readiness and ability to pursue the pilot financing schemes. The response time to incorporate a critical mass of stakeholders dictated progress on setting up the PFMs. Likewise, Components 2 and 3, present a challenge for the finite implementation capacity of the CAR/RCU and the finite coordination capacity of the National Focal Points. Operationally speaking, these components represent a modest contribution to the enormously unfulfilled demand for strengthening the enabling environment for wastewater management. Although some stakeholders have argued that a narrower menu of interventions would have accelerated performance, **there is little evidence to suggest that a significantly more focused array of outputs would have proven more effective to achieving either sustained wastewater financing or policy reform.**

The synergy between the pilot financing mechanism and the policy reform components has yet to materialize, although it is still relevant and potential. The delays in getting the pilot project underway may have affected the ability to generate interest in strengthening the enabling environment, and vice versa. The relationship between the two remains valid and **every effort should continue to pursue their inherent complementarity.**

The MTE found that the concept and design of the CReW project takes into account the environmental, economic and socio-political contexts at the regional level. The original rationale for the design of the project remains valid. On the other hand, **specific national conditions and complex institutional relationships might have deserved closer attention during the design stage,** which could have resulted in faster implementation.

B. Performance GEF Evaluation Parameters

1. Attainment of Objectives and Planned Results

CReW successfully built a solid foundation for the launch of the four pilots financing mechanism, and initiated substantive work on strengthening the enabling environment for regional wastewater management. Project results in terms of outcomes are not yet in place as the project is only half way completed and overall implementation has been slower than expected. **Numerous factors beyond the immediate control of the project have influenced progress on achieving outcomes.** Principal among these are the (i) autonomy and external

accountability of all the stakeholders, (ii) the slow pace of administrative and legislative procedures in many countries, and (iii) the reality that wastewater and marine environmental issues are not always accorded high priority by decision makers.

Under Component 1, **two pilot countries have made significant progress towards establishing their respective pilot financing mechanisms.** Belize and Jamaica have disbursed resources into the PFM and are ready to begin execution of the first-generation wastewater infrastructure projects in early 2014. Trinidad and Tobago only recently reconfirmed its interest in pursuing the PFM and is completing conditions for disbursement; the first-generation project in Tobago is in an advanced stage of readiness. Guyana continues to pursue the most challenging program based on public-private partnerships, and has yet to confirm a first-generation project. Although the specific details of first-generation projects have evolved over time, the fundamental objective of achieving effective and appropriate wastewater solutions has remained constant.

Under Components 2 & 3, efforts to **strengthen the enabling environment of wastewater management through reforms, capacity building and information are gaining momentum.** Although difficult for the MTE to objectively verify progress, informants and stakeholders uniformly confirmed that awareness of acceptable wastewater management standards is increasing, and countries are moving to ratify and implement the LBS Protocol by revising national laws, regulations and policies on wastewater management.

CRew is consistent with the GEF IV strategic objective for International Waters, to play a catalytic role in addressing trans boundary water concerns by assisting countries to utilize the full range of technical assistance, economic, financial, regulatory and institutional reforms that are needed. CRew also contributes to the achievement of the MDG targets for water sanitation. Finally, **CRew is highly relevant and aligned to the national policy frameworks of countries of the Wider Caribbean Region,** where damage by untreated wastewater to marine and coastal environments has severe consequences for the tourism-based economy.

To a large degree, this is an appreciation of the **potential for delivering results at the outcome level,** based on discussions with IDB, UNEP, the PCG and multiple stakeholders. Project achievements at the midterm suggests that the CRew is on its way to meeting its primary objectives and that expected outcomes should be realized, although doubts remain concerning the rate of execution and the extent of diffusion particularly to the Spanish-speaking countries. **Annex A, Outcomes Matrix** presents an annotated summary of outcomes, based on the Project Implementation Review as of June 2013.

The mid-term evaluation assesses the attainment of objectives and planned results, in terms of effectiveness and relevance with a **rating of marginally satisfactory.**

2. Assessment of Sustainability of project outcomes

Sustainability issues are complex, as CRew is working on a number of fronts simultaneously. **The probability of continuity of benefits of the project outcomes and impacts into the long term depends on the quality of the initial intervention as well as contextual circumstances**

that are beyond the sphere of influence of the project. This section comments on the four aspects of sustainability, which are the financial, the socio-political, the institutional and the environmental dimensions of CReW.

Financial sustainability goes hand in hand with replicability of the pilot wastewater revolving funds (WWRF), and depends on two factors: (i) the terms of repayment from the first-generation projects into the WWRF; and (ii) eventual capitalization from government or donors to increase the size of the WWRF to jump start additional wastewater projects. Close monitoring of the cash flow back into the WWRF and capitalization is critical to gauging sustainability. Creation of new WWRFs in the future will depend largely on the success of the four current pilots.

Socio-political sustainability depends on two factors: (i) clarifying the relationship between individual benefits of domestic sanitation services, and collective benefits of a healthy environment to society and the economy, and (ii) determining how the cost of providing these benefits will be allocated. Natural resource accounting will help decision-makers identify financially viable wastewater interventions that have social and economic benefits at a national and regional level. Each country will determine how its investment and maintenance costs are to be distributed among households, business and the government, based in the national context.

Several institutional factors will drive sustained investments in wastewater management.

If governments are successful in strengthening the enabling framework, and regulators have the wherefore all to monitor and enforce proper effluent standards, and if wastewater utilities have a better understanding of the different technologies and a well trained and certified workforce, the possibility of sustaining improvements in wastewater management will be considerable. The best guarantee for regional sustainability and impact is, of course, universal ratification and implementation of the LBS Protocol.

Another important institutional factor is the continued **development and maintenance of strong supportive partnerships with regional institutions**. These institutions are involved in public administration and water and wastewater management that are vital to continued learning, technical competency and alignment with the Cartagena Convention and the LBS Protocol.

Sustained donor interest is vital to maintaining momentum. From the design phase of CReW, discussions have included the possibility that the results and lessons learned from CReW be incorporated into a follow-on GEF project. The IDB, CDB and other multilateral and bilateral donors are pending the outcomes of CReW to illuminate the way forward. Financing of wastewater infrastructure (be it co-financing, parallel financing; related to CReW, or not) is critical to expanding wastewater treatment in the region and is a key indicator of the strength of commitment and sustainability.

Environmental sustainability refers to the conservation of the marine and coastal ecosystems that are seriously threatened by wastewater pollution. There is now a **growing awareness that damage to biodiversity does not respect national or geographical boundaries, and that conservation and pollution management efforts need to embrace a regional scale**. Although material support to environmental monitoring is not part of CReW, efforts to review the status of

monitoring and initiate the design of a regional recording system are. Each wastewater treatment system financed under CReW will monitor discharges to ensure they conform to national and/or international standards. Most CReW countries are motivated, and several have initiated national monitoring systems with varying degrees of sophistication.

The mid-term evaluation currently assesses the sustainability of project outcomes with a **moderately likely**. However, the MTE is highly optimistic that this rating will improve considerably once there are more objectively verifiable indications of having achieved project outcomes and major outputs.

3. Achievement of Outputs and Activities

CReW has helped the pilot countries take significant strides in **developing the pilot financing mechanisms** and starting the first-generation projects. CReW has made commendable effort to **strengthen wastewater management** and initiate policy and legal reforms through the delivery of educational events, technical assistance, production of guidance materials, seminars and workshops, and by forging relationships with strategic partners. However, based on a review of the Project Implementation Reports and other subsidiary reports, as well as interviews with staff, participants and stakeholders, the MTE's overall impression is that **progress is slower than expected**.

At the half-way point, it would be prudent to (i) **consider extending CReW timeframe** to allow the opportunity for the first-generation project to initiate repayment to the WWRFs and the countries to strengthen their enabling environments, and (ii) to **identify and eliminate low priority activities** from the work plan for the second half of the project.

The mid-term evaluation currently assesses the **achievement of outputs and activities with a rating of satisfactory**. However, the MTE is highly optimistic that significant acceleration in the achievement outputs will occur during the second half of CReW, as the project matures and the adaptive management process seeks to reassign human and financial resources to the implementation of highest priority activities.

4. Catalytic Role and Replication

The **replication of lessons and experiences coming out of the CReW experience is an important consideration for the project since its inception**. The PD states that CReW will create incentives on a stand-alone basis or as part of larger water/wastewater capital improvement plans. CReW will act as a facility for stakeholders concerned with improving water quality in the region, and will work with regional actors to mobilize government, the private sector and public support for sanitation projects.

CReW has the potential for replication through **capturing and demonstrating the experiences of the pilot financing mechanisms, and by linking activities closely to the expectations and needs of national stakeholders**. The CAR/RCU is beginning technical support for the preparation of experience notes and case studies. National project executing units will be

encouraged to present lessons learned, as their first-generation pilot projects get underway which, in turn, will stimulate inquiry and replication among countries. In addition to regular reporting instruments, PEU should be encouraged to document both successful and not-so-successful experiences. Descriptions of the pilot financing mechanism, including repayment and capitalization forecasts, will be documented. UNEP compiles these materials and registers them in the GEF Learn system, to serve as a catalyst in support of future replication efforts. Finally, the next Project Steering Committee meeting, scheduled for January 2014, will contribute to developing the key concepts of a replication strategy and a project concept document for a possible CReW II.

Based on efforts so far, it is likely that CReW and other initiatives will attract resources, based on the demonstration effect by the end of the project. As more countries subscribe to the LBS Protocol, there will be greater demand for technical and financial support for meeting wastewater treatment standards and monitoring compliance. CReW maintains detailed information on the sources of co-financing and parallel financing of wastewater operations in countries that endorsed it, which were estimated initially at over US\$250 million at the time of GEF approval.

The MTE found that demand for replication of the pilot financing mechanism is growing throughout the region. Costa Rica has expressed interest in developing its own model. Several other countries informally indicated their readiness to begin discussions on wastewater financing strategies, often in the context of critical, ongoing wastewater discharge situation. Still, much work is required prior to replicating PFMs. It is now clear that the policy, legal and regulatory reforms need to be advanced in order to achieve the goals of capacity building and training that will precede future investment financing.

The mid-term evaluation currently assesses the **catalytic role and replication effect with a rating of satisfactory**. Again, the MTE is highly optimistic that significant acceleration in the achievement outputs will occur, which will allow pilot countries to document their experiences and lessons, and will contribute significantly to future replication and scaling up of wastewater treatment in the wider Caribbean.

5. Assessment of Monitoring and Evaluation System

The monitoring, reporting and evaluation system sanctioned in the project document sets forth a **robust system to control for performance and achievements of the project and subprojects** to enable timely identification of deviations, implementation of corresponding modifications and the continuous improvement of strategies and activities. The M&E plan is aligned to the standard procedures of GEF, IDB and UNEP, as well as the GEF-IW Strategic Program No. 3 and for recording in the GEF 4 Tracking System. It is composed of two elements: (i) monitoring of progress; and (ii) evaluation of performance and achievements. Both elements are to use comparable sets of indicators.

The **Project Coordination Group is responsible for monitoring progress against agreed benchmarks** and assessing the continued viability of the project. M&E process includes the following nine reports: (i) inception report; (ii) quarterly progress reports; (iii) quarterly and annual financial reports; (iv) annual progress reports; (v) financial audit annual and at project

completion; (vi) annual co-financing reports; (vii) mid-term evaluation; (viii) project completion report; and (ix) terminal evaluation.

The **PCG is also responsible for developing a system for gathering and maintaining the data related to the performance and achievement of the following outcomes:** (i) improved access to financing for wastewater management; (ii) successful development of projects; (iii) improvements in technical capacity for project management; (iv) reduced land-based pollution to watersheds and coastal waters in the pilot locations; (v) improved local and national capacity in support of wastewater management and subsequent reduction in land-based pollution to adjacent watersheds and coastal waters; (vi) improved stakeholder awareness about acceptable, sustainable and cost effective wastewater management solutions; (vii) increased interest and demand for PFMs in the WCR; (viii) increased knowledge, dissemination of information and use of participatory methods and practices by government agencies, private sector and civil society on wastewater management in the WCR; (ix) effective project monitoring and oversight; and (x) effective project coordination. The PCG determines the methodology and gathers the data for baseline data on the indicators. The outcome matrix consolidates all of the performance indicators which are, to the extent possible, SMART (specific, measurable, attributable, relevant and time bound), as well as end-of-project targets.

The following summarizes the **main finding regarding the design and performance of the M&E system:**

(i) Based on the nine reporting instruments identified above, **the M&E system is scheduled to produce approximately 270 discrete reports** over the 4 year implementation period. This does not include the specific internal reports required by IDB and UNEP.

(ii) **Currently there are at least six active or relevant results matrices**, each with a slightly different perspective and purpose. There are two matrices in the GEF project document. One is the “project framework” that links outcomes and outputs, and the other is the “project results framework” that includes baseline data, means of verification, and risks and assumptions. Another results framework found in the IDB approval document adds annual benchmarks, which is subsequently replicated in the inception report, with some modification. Lastly, both IDB and UNEP have their respective internal reporting instruments with distinct matrices. All the matrices have essentially the same information. The initial GEF project framework has the advantage of showing the relationship between outcomes and the outputs. All the other matrices split outcomes and outputs into separate tables, which generates data redundancy and hampers correlation.

(iii) The outcome matrix found in the June 2013 PIR includes **13 outcomes and 21 attendant indicators**, of which 18 are accompanied by end-of-project targets. The MTE provides an alternative progress rating assessment for each indicator based on additional criteria of (i) rating not applicable at this time when compared to target dates (N/A); and (ii) there is insufficient data to make an assessment (I/D).

(iv) **The MTE tested the “SMART-ness” of the outcome indicators**, based on the information provided in the outcome matrix of the June 2013 PIR, by giving each element (specific,

measurable, attributable, relevant and time bound) a value of one (1), the resulting score is 66% SMART-ness. An annotated results matrix is found in Annex A.

(v) Similarly, the output matrix found in the June 2013 PIR includes **21 outputs and 41 attendant activities**. Output implementation is reported as a percentage, without indication of numerators or denominators. The MTE notes that 32% of the activities are reported to be greater than 50% completed. The current outcome matrix is found in Annex B.

Discussion on the **M&E system generated rich commentary and feedback during the course of the mid-term review**. Some of the points derived from dialogue with executing agencies, government authorities, IDB and UNEP include the following: (i) CReW M&E system imposes a high transaction costs and is burdensome compared to other larger and equally complex donor-funded investment projects. (ii) Emphasis on the paper trail detracts from efforts to focus on project quality and implementation. (iii) The reports that emphasize results matrices are highly sanitized and do not provide a complete or nuanced narrative. (iv) The M&E system is a summation of the IDB, UNEP and GEF reporting requirements, requiring an inordinate amount of time redoing information to suit unique reporting formats of UNEP, IDB and GEF. (v) The quarterly and semiannual reports contribute little to management decision making at country level, PCG or the two implementing agencies. (vi) Belize is facing the probability of having to present separate financial, procurement and progress reports on loan and CReW financing, for a single project (Placencia).

Effectively, **the PCG flagged the lack of timeliness and analysis of implementation issues as a significant concern**. Only 33% of reports were presented within the stipulated timeframe. Because of lack of timeliness and completeness of reports, **CReW developed additional internal tools to monitor and control project execution wholly outside the formal M&E system**, which consists of the following elements: (i) monthly videoconferences with each of the executing agencies; (ii) a database to keep track of agreed and remind PEA/PMU of required actions and timeframes on a day-to-day basis; (iii) templates and technical support. Whereas these tools helped the PCG develop a stronger managerial perspective over the project, they also created another layer of administrative burden and transactional costs for the executing agencies. The overall lack of appreciation for the value of the reports and enthusiasm for preparing them remains a challenge. More importantly, the reports contribute very little to CReW management decision making and program quality.

The PCG was able to streamline the reporting process by consolidating several report formats. Some outcome indicators have been clarified for easier measurement, others that measure results outside the scope of the project were modified or eliminated. Indicators for behavioral, institutional and attitudinal outcomes will continue to be self-reported and estimated on a percentage basis without means of objective verification.

At the project mid-term, it is unlikely that dedicating significantly more time and resources to modifying the M&E system would improve project implementation. At most, it might be advisable to review the results matrix to select a reduced number of SMART indicators. Moreover, without altering commitments made to GEF and without jeopardizing fiduciary responsibilities, ample opportunity exists to create a more agile reporting function by simplifying

reporting formats and focusing on essential, new information. It makes sense to ease the reporting burden, once the pilot projects are approved and underway, as executing agencies gear up to prepare experience notes and case studies.

What could have been done differently? **The counterfactual can be found in the answers to the following hypothetical question:** Where would the project be today if, say, 33% of time and effort spent on M&E outputs had been spent on developing the national and regional system(s) for monitoring land-based pollution to watersheds and coastal waters in the pilot locations? This question reflects on two specific outcomes for which CReW should maintain performance and achievement data, which are: [from the GEF project document] (iv) reduced land-based pollution to watersheds and coastal waters in the pilot locations; and (v) improved local and national capacity in support of wastewater management and subsequent reduction in land-based pollution to adjacent watersheds and coastal waters. This focus on environmental monitoring systems is wholly consistent with CReW's broader mandate to document improved implementation of the LBS Protocol.

The mid-term evaluation assesses the **design and implementing of the monitoring and evaluation function as moderately satisfactory**. During the second half of CReW, efforts should be geared to reducing M&E efforts on low-level activities and outputs and, instead, focus on fewer indicators that demonstrate higher order effects of the project.

6. Preparation and Readiness

The CReW project was designed by the IDB and UNEP, with ample support and involvement from the Caribbean Water and Wastewater Association through a consultative process with water utilities, services provider, key policy makers in the region. Every effort was made to ensure first-generation pilot projects were ready for execution at the time of GEF approval. All the projects identified for inclusion in CReW had the following characteristics: (i) high priority to the service providers; (ii) high impact in terms of improvements to quality of coastal waters; (iii) potential for stimulating policy reforms, (iv) include feasibility and cost/benefit analyses; and (v) required innovative financial and advisory assistance to bring project financing within ratepayers' ability to pay.

Preparedness, however, proved to be an elusive concept. As detailed in Chapter III, all the pilot projects suffered from delays. Guyana's best prospect for a public private partnership was obliged to withdraw from CReW, because the approval of funding was too slow for the private sector timeline. Since then, due to the weak regulatory environment, it has been difficult to get additional private sector actors involved. In Belize, the first-generation CReW project, along with the accompanying IDB loan, faced delays due to unforeseen community-level resistance, which resulted in the identification of an alternative first-generation project. Trinidad and Tobago inadvertently lost sight of CReW in the midst of rapidly evolving ministerial roles and functions, and during the preparation of a major wastewater investment program that dwarfed the PFM resources. Senior technical people were on board, but it was difficult to get senior government official on the same page.

It is nearly impossible to predict the length of time required for a government to approve and implement new policies and programs. The institutional strengthening and capacity building components were, to a large degree, a continuation of UNEP's ongoing work on ratification and implementation of the LBS Protocol. The political and legislative challenges for wastewater policy and regulatory reform are unique to each country, and require not only political buy-in, but also skills in drafting legislation. It has taken two years to get to where the project was expected to be in six months. CReW now has a clearer understanding of reality on the ground and the time it takes to implement new legal and financial instruments.

The mid-term evaluation assesses the preparation and readiness as satisfactory. In light of the region's long historical timeline for addressing wastewater (Caribbean Environmental Program in 1976; Cartagena Convention in 1983; adoption of the LBS Protocol in 1999) **CReW appears to be moving along quite nicely.**

7. Country Ownership

The CReW project was designed to address the degradation of the Caribbean marine and coastal environment caused by the discharge of untreated wastewater. **All countries now recognize the negative economic impact on those whose livelihoods depend heavily on the natural marine resources.** Environmentalists and utility managers now recognize the need for wastewater treatment. As understanding of the economic cost/benefit relationship of a healthy environment grows, policy makers and the general public can build consensus to embark on the high investment costs of wastewater infrastructure.

Governments and a wide group of stakeholders have been closely involved in the design and development of the project, and have demonstrated their support by honoring their commitments and carrying their costs of project execution. During field visits, the **MTE perceived a universal expression of the importance and value of the PFM, the support for policy reform,** and stakeholder commitment to pursue and expand their specific roles.

National water resource management is a multisectoral issue that requires inputs from a multitude of stakeholders, each of whom contributes with its unique role and perspective. Key actors include the environment ministry, water and wastewater utility, ministries of planning and finance, ministries of health and education, utility regulators, housing developers, local government, tourism associations, manufacturing and agricultural industries. The quality of the relationships among these actors varies considerably among the thirteen countries. CReW could help countries to **build and strengthen national wastewater coalitions, through existing National Inter-Ministerial / Agency Coordination Mechanisms,** by developing broad awareness of wastewater management efforts in the country, and addressing issues in a holistic manner and building a common agenda for the future. This is consistent with the decision of the November 2012 Project Steering Committee that more dialogue is needed with local communities and decision makers.

The MTE gives the country ownership an overall rating of highly satisfactory.

8. Stakeholder participation / public awareness

CReW has placed significant emphasis on stakeholder participation and increasing awareness on the issues addressed by the project largely through the role of the National Focal Points in each country. The project makes a considerable effort to build capacity through training a broad group of participants, and to advance public awareness through outreach and communications.

The NFPs are highly qualified, senior technical managers in environment ministries who often have long-standing relationships with UNEP on a broad environmental agenda. Experience shows that NFPs perform commendably inside their normal technical and institutional contexts, where they afford communication, coordination and visibility. **However, the role and performance of NFPs have come into question during CReW execution**, where they have been expected to engage with outside public, private and donor organizations on topics beyond their areas of expertise, in activities that extend well beyond their official mandates. The issues are compounded by a moderately high level of attrition among the NFPs, and cases where the CReW-related work is distributed among several persons in the environment ministry. This has led to instances of sub-optimal results where governments have not had effective spokespersons or champions for the CReW in its entirety, which, in turn, has adversely affected project performance. **The MTE recommends a review of the key assumptions around the role of the NFPs as they relate to the CReW, and to fine tune expectations accordingly.**

The Project Steering Committee provides strategic and programmatic guidance to CReW. **The PSC has met on two occasions, during which discussions focused on project planning and implementation, and participants offered guidance and feedback on CReW initiatives.** A review of the meeting minutes prepared by the PCG demonstrates a high level of participation by the NFPs, pilot project coordinators, representatives from other countries that endorse CReW and the regional partner organizations. During the MTE, stakeholders raised the question whether the PSC could be given the opportunity to provide guidance to the CReW at a more strategic level.

CReW's communication and outreach strategy focuses on dissemination to set the groundwork for future replication and the creation of an information clearinghouse on wastewater management. In this sense the communication tools primarily target specific audiences involved in the sector. Nevertheless, press releases, bulletins, web site and Facebook page are distributed and available for public consumption. Considering the wealth of information and program ideas available on the topic of wastewater management and the PFM, **the MTE recommends that during the second half, CReW ramp up its communication and outreach activities by transferring additional human, technical and financial resources to these efforts.** .

The project overall rating for stakeholder involvement and public awareness is satisfactory. Interviews conducted during the course of the MTE found a high degree of willingness among stakeholders to continue and expand their positive engagement with the project.

9. Financial Planning and Management

The **CRew project has a demonstrated capacity for strong financial planning and management.** IDB and UNEP are independently responsible for the managing disbursements, financial reporting and audit for activities under their respective components. National Project Executing Agencies are directly responsible for expenditures in activities authorized under sub-agreements with either IDB or UNEP. This delegated control and oversight of pilot projects and the institutional strengthening activities strengthens national ownership and accountability.

The PCG is responsible for coordination of day-to-day execution through the efforts of a Financial/Administrative Specialist who assists with the contractual and financial aspects of the project, and consolidates and prepares the necessary periodic financial reports. The PCG does not have disbursement authority, but it does provide oversight by reviewing outputs and products of Component 1 prior to submitting payment vouchers. The PCG is also responsible for project record maintenance and internal communications.

The following table summarizes proposed expenditures by component line items as distributed by source of financing.

Activities	IDB Component	UNEP Component	Total GEF Financing	Counterpart Financing	Total
Component 1 - Investment and Innovative Financing for Wastewater Management	15,073,000		15,073,000	11,000,000	26,073,000
Component 2 - Reforms for Wastewater Management		2,500,000	2,500,000	50,000	2,550,000
Component 3 - Communications, Outreach and Information Exchange		710,000	710,000	50,000	760,000
Project Management	922,000	35,000	957,000	2,255,200	3,212,200
Monitoring & Evaluation	670,000	90,000	760,000	840,000	1,600,000
Total (US\$)	16,665,000	3,335,000	20,000,000	14,823,200	34,195,200

Rosugly half the approved project budget of US\$20 million, or US\$10.2 million, has been disbursed as of December 31st 2013. A complete budget performance analysis is found in Annex C – Financial Table. Project budget management and resource utilization presented no noteworthy issues during this review.

The PCG is also charged with maintaining an annual tabulation of counterpart contributions and of the co-financing related to the PFM and activities that support the main goal of reducing pollution caused by discharges of untreated water. The co-financing table indicates the availability of resources to finance wastewater treatment activities, as well as the strength of country and donor commitments in the WCR. Financial data is reported annually in the Project Implementation Report, however PCG reports some difficulty in the timeliness and completeness of the financial reports received.

During the first 120 days of each year, for the duration of the project, each PEA for Component 1 is required to present audited financial statements to the IDB. Due to **the small volume of disbursement and financial transactions in 2012, all executing agencies received a waiver for presentation of audited financial statements.**

Several of the Project Executing Agencies stated that managing financial controls and reporting are a challenge, particularly when multiple donors contribute to an interrelated suite of activities, and each agency has its own accounting processes, timelines and report formats. If harmonization of specific requirements is not feasible, at a minimum, the donors should provide technical assistance to set up the required accounting software and orientation on its use.

The overall rating for financial planning and management is highly satisfactory.

10. Implementation Approach

CReW is composed of three interlinking components with execution responsibilities divided between two implementing agencies. IDB and UNEP are responsible for overall project supervision, ensuring consistency with GEF, IDB and UNEP policies and procedures, and provide guidance on linkages with other projects and activities. The division of project implementation between IDB and UNEP responds to each agency's institutional and programmatic strengths.

As originally designed in the project document, the following **seven coordination, supervisory and advisory bodies** were created and/or identified to execute the CReW project:

Inter-Agency Coordination Group (IACG) is formed by IDB and UNEP to support activities, provide technical and administrative oversight, monitor implementation progress and propose corrective measures. The IACG is accountable to the GEF for delivery of benefits, reporting and financial oversight. Initial arrangements, later confirmed in a Memorandum of Understanding between IDB and UNEP, proposed that the IACG would meet quarterly, and has met nine times since project inception. The MTE recommends that both IDB and UNEP permanently assign one additional representative to the IACG. These two additional persons should be full-time regional staff of IDB and UNEP respectively, who have sufficient familiarity with the CReW project to contribute to management oversight and decision-making.

The Project Steering Committee (PSC) is formed by country National Focal Points, by the four pilot coordinators, selected regional entities (CWWA, CEHI, IWA, CAWASA, CDB) who represent a broad cross section of the environmental and sanitation sectors in the region. The PSC provides technical advice on CReW initiatives and endorses annual operating plans. The PSC meets annually in fulfillment of its mandate. Several stakeholders propose that the PSC have a substantive role in guiding CReW project strategy in the future.

The Project Coordination Group (PCG) coordinates execution and provides management support to all aspects of the project. Based inside the IDB office in Jamaica, the PCG is comprised of a Project Coordinator, Technical Specialist, and a Financial/Administrative Specialist. The Communications Specialist is part of the PCG, but is physically located in the CAR/RCU office. The PCG has become an effective and efficient foundation for project administration and coordination, however in the eyes of most stakeholders, it is primarily associated with the four pilot countries and has significantly less presence in the non-pilot countries on Components 2 and 3.

Each of the four countries participating in Component 1 has formed a **Pilot Executing Agency** (PEA), which has signed a grant agreement with the IDB and is responsible for administering the funds and ensuring successful implementation of the pilot financing mechanism. Likewise, the four countries have formed their respective **Pilot Management Unit** (PMU) that is responsible for implementing the projects funded under the PFM. The final configuration of the PEA and PMU in each case is slightly different, and reflects the national circumstances and priorities. In structuring future operations, it will be important to consider other operational modalities that do not entail creating separate, project-specific execution units, as recommended in the Paris Declaration on Aid Effectiveness.

The **CAR/RCU** is a preexisting project coordinating unit under UNEP that is directly responsible for managing and implementing activities under Components 2 and 3, with all thirteen countries. It also contracts and coordinates with the various partner agencies. In practice, the CAR/RCU has developed stronger relationships with the nine non-pilot countries and with the partner agencies, than with the four pilot countries. CAR/RCU manages its responsibilities directly in-house. The cost of carrying out Component 2 and 3 activities has outpaced initial expectations and budgetary allocations, resulting in CAR/RCU finding itself short staffed, contributing to slower implementation than expected. The MTE recommends the following two administrative actions that could alleviate this situation in CAR/RCU and expedite activities under Components 2 and 3: (i) Assign the PCG Financial/Administrative Specialist to work in the CAR/RCU to carry out support functions related to processing consultants and contracts under Components 2 and 3, for a specific percentage of time over an agreed period; and/or (ii) Transfer resources to provide for an additional, two-year consultant position in CAR/RCU who will support implementation of Components 2 and 3.

Where present, CReW works with existing **Inter-Ministerial or Inter-Agency Coordination Mechanisms** to promote national level involvement among relevant stakeholders in wastewater management. Effective role of the coordination mechanisms was observed in several countries, but they do not appear to play a visible role in the majority. The MTE recommends that CReW, through a joint effort of the PCG and CAR/RCU, revisit its strategy to assist the NFPs (i) to achieve involvement of national stakeholders and consolidation of a national wastewater coalition, (ii) to dialogue with high level country decision-makers on wastewater challenges; and (iii) to consolidate their national message and agenda with respect to CReW. These actions could complement and coincide nicely with the roll out of the SSFAs.

CReW's laudable attempt to incorporate four Central American countries into the project respects the ecological designation of the Wider Caribbean Region and recognizes the importance these countries have in reducing wastewater discharge into the Caribbean. In practice, however, CReW caters primarily to the English-speaking countries. The MTE found that the four Spanish-speaking **countries exhibited lower levels of identification with the project and cited fewer opportunities to participate in CReW than their English-speaking counterparts**. The issues are multiple and run the gamut from differences related to political systems, the structure of the wastewater management sector, higher priority on aquatic pollution, as well as technological, geographic and linguistic barriers.

The MTE recommends for the remainder of the project that every effort be made to ensure that the four Central American countries participate as full beneficiaries of the project. Specifically, the PCG Technical Specialist, who is the only native Spanish-speaking staff member on the CReW implementation team, should be assigned as the project liaison to the four countries to ensure agile implementation of the SSFAs, to capture unique and valuable lessons learned from their experiences that are applicable to the WCR, and assist in the preliminary identification of first-generation projects for a potential CReW II.

The project overall rating for implementation approach is satisfactory.

11. IDB / UNEP Supervision and Backstopping.

The **two implementing agencies, IDB and UNEP, who had no previous ongoing relationship**, bring significantly different institutional cultures, spheres of connections and operating systems to support a single program vision. From the project preparation phase, each agency demonstrated its distinct role and value-added. UNEP's contributions rest on its authorship of the Cartagena Convention and LBS Protocol, its in-depth knowledge of wastewater issues in the Caribbean, and its extensive experience garnered from international public-policy dialogue on complex topics, with relatively open-ended outcomes. In contrast, IDB contributions rest on its expertise in setting up high value investment operations with precise legal, financial and operational parameters, leading to previously agreed outputs and outcomes within an established timeframe.

The MTE found that it has taken considerable time and effort to bridge and manage some of the differences, yet over the two years of execution, UNEP and IDB have nicely consolidated a trusting and effective relationship.

One comment stakeholders repeatedly offered during the MTE is that CReW components are highly identified with their respective executing agency. Rather than being seen as a single project, the general appreciation that UNEP manages its components and IDB manages its component, practically as separate and distinct projects. This, of course, begs the question of why have a single unified operation. More to the point is the question of whether the high transaction costs of joint implementation will be vindicated with the creation of truly innovative and sustainable break-through in wastewater financing and sector reform. The MTE is a good time for the parties to review their *modus operandi* and make adjustments. The IACG is the formal space where the two agencies should begin to strengthen the consolidated presence of CReW.

At this mid-term juncture, it is too early to document results, but the MTE does corroborate that a significant amount of work has been accomplished to set the stage for achieving the desired impact. It is only through the hard work of dedicated professionals, with the backstopping from their respective organizations, that the project has achieved all that it has.

The MTE gives the IDB / UNEP supervision and backstopping an overall rating of satisfactory.

C. Summary GEF Evaluation Parameters Table

Criterion	Rating
A. Attainment of project objectives and results	MS
1. Effectiveness	MS
2. Relevance	HS
3. Efficiency	MS
B. Sustainability of project outcomes	ML
1. Financial	ML
2. Socio-political	ML
3. Institutional framework	ML
4. Environmental	ML
C. Catalytic role	S
D. Stakeholders involvement	S
E. Country ownership / driven-ness	HS
F. Achievement of outputs and activities	S
G. Preparation and readiness	S
H. Implementation approach	S
I. Financial planning and management	HS
J. Monitoring and Evaluation	MS
1. M&E Design	MU
2. M&E Plan Implementation	MS
3. Budgeting and funding for M&E activities	S
K. UNEP and IDB Supervision and backstopping	S
1. UNEP	S
2. IDB	S

Rating Explanation

Sustainability elements are evaluated against a four-point assessment system:

- Likely (L): There are no risks affecting this dimension of sustainability.
- Moderately Likely (ML): There are moderate risks that affect this dimension of sustainability.
- Moderately Unlikely (MU): There are significant risks that affect this dimension of sustainability
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All other criteria are rated against a six-point assessment system:

- Highly Satisfactory (HS): The project had no shortcomings.
- Satisfactory (S): The project had minor shortcomings in the achievement.
- Moderately Satisfactory (MS): The project had moderate shortcomings.
- Moderately Unsatisfactory (MU): The project had significant shortcomings.
- Unsatisfactory (U): The project had major shortcomings in the achievement.
- Highly Unsatisfactory (HU): The project had severe shortcomings in the achievement.

V. Lessons and Recommendations

A. Lessons Learned

1. Socio-political sustainability of wastewater financing depends on two factors: (i) clarifying the relationship between individual benefits of domestic sanitation services, and collective benefits of a healthy environment to society and the economy, and (ii) determining how the cost of providing these benefits will be allocated.
2. As a condition for endorsing a project like CReW, governments should have an explicit government agenda for moving toward compliance with the LBS Protocol. Non-reimbursable funding for sanitation infrastructure investments should be conditioned on verifiable progress on strengthening the policy, legal and regulatory framework.
3. An important lesson from the Jamaica experience is how setting up a guarantee account with the revolving fund mechanism, together with the K Factor, led to the National Water Corporation acquiring its first private sector loan, without a sovereign guarantee, that quadrupled the pool of investment resources.
4. The Belize experience teaches the importance of involving the local stakeholders early on in the process, to avoid being delayed by local concerns.
5. Belize also offers a useful lesson in adaptive management, by finding a short-term alternative, without compromising the eventual completion of the principal project.
6. The Guyana case emphasized the importance of identifying champions early on and focusing on public outreach to build awareness to build demand from the private sector. In the absence of a strong enabling environment, one can only go so far on moral suasion.
7. Readiness is an elusive concept. Four years ago, Guyana had a high profile, private sector project that was ready to implement, but the international and national bureaucratic machinery did not move quickly enough to meet its needs.
8. Public-private partnerships is a unique sub-set of local development financing that requires skills and tools that are not usually available in the public sector. Executing agencies require specifically adapted technical assistance and operating policies. Private sector wastewater initiatives require strong external drivers and regulatory enforcement.
9. The robustness of a monitoring and evaluation system depends less on the number of outcomes, outputs and their respective indicators, but more on building consensus on a limited number of truly “SMART” indicators drive performance.
10. When multiple donor agencies collaborate on a project, it is important to follow the precepts of the Paris Declaration for Aid Effectiveness and the Accra Agenda for Action, which serve as a mechanism for donor coordination. Too much complexity and redundant centralized controls are a greater threat to success than too much simplicity.

B. Recommendations

1. Documenting the experiences and lessons learned surrounding the pilot financing mechanisms should begin as soon as possible before institutional memory begins to fade. All four pilot countries have garnered ample experiences that offer analysis and ideas for replication. Documentation and discussions should include strategic issues faced in building the political will to move forward and in maintaining inter-institutional coordination, as well as the factors that contributed to delays and how were they resolved.
2. As soon as the respective first-generation wastewater treatment project(s) is underway, each Pilot Executing Agency should prepare a financial status report on actual performance and expected repayments to the fund, which should include a medium-term “amortization” plan covering the initial capital amount provided by CReW. The financial status report should also include any changes to the policy for replenishing the wastewater revolving fund and expectations for additional capitalization.
3. The Guyana approach through public-private partnerships is facing unique challenges, resulting in three interrelated recommendations: First, the Project Management Unit should develop a robust list of potential projects in both the public and private sectors, to serve as a backup in the event the current project(s) does not come to fruition.
4. Second, Guyana’s unique public-private partnership model requires specific technical inputs to help the PCG structure operations and perform requisite due diligence. The PMU should access conceptual orientation, specialized training and technical advice on developing PPPs through a recognized source of this expertise.
5. Third, small-scale enterprises that are interested in presenting wastewater treatment projects do not have the skill and capacity to develop technical designs and acceptable project proposals. The IACG should identify and approve an appropriate mechanism to assist Guyana in providing requisite assistance to these small firms. The IDB has several appropriate models for providing technical assistance to the private sector.
6. Fourth, to assist the GoG’s efforts in building a strong enabling environment to motivate the private sector wastewater pilots, the SSFA should support the Guyana Environmental Protection Authority’s efforts in strengthening the framework for enforcing environmental regulations.
7. The IACG should meet regularly on a quarterly basis, as set forth in the Memorandum of Understanding, which will allow it to monitor implementation progress and propose timely corrective measures. Using a web-based format will serve to keep transaction costs to a minimum. Formal face-to-face meetings could continue on an annual basis, as needed and appropriate.
8. Both IDB and UNEP should each assign an additional permanent representative to the IACG. These individuals should be full-time staff of IDB and UNEP, based in the region, who can

bring sufficient on-the-ground familiarity of CReW to contribute to management oversight and decision-making.

9. The MTE recommends two actions to bolster CAR/RCU's implementation capacity in order to accelerate the policy reform, capacity building and communications components and, in particular, to expedite the approval and implementation of the SSFAs. First, allocate a specific percentage of the Financial/Administrative Specialist's time to assist the CAR/RCU in specific functions related to administering the SSFAs. Second, transfer necessary financial resources to CAR/RCU to provide for an additional consultant position to provide substantive technical support for implementing the regional level activities under Components 2 and 3.
10. The MTE recommends that CReW prioritize and commence two activities as soon as possible. The first is the environmental and natural resource assessments (ENRA) that contribute to public policy discussions by demonstrating the economic impact of pollution. The second activity is training in, and preparation of, a detailed implementation plan (resources, budget and timetable) for a regional monitoring, evaluation and reporting (M&E) framework for wastewater management.
11. The MTE recommends de-emphasizing or dropping two activities that are ancillary to the objectives of CReW. The first is the incorporation of wastewater management and sanitation into education curricula throughout the region. The second activity to drop is the development of a communication strategy to build awareness on sanitation issues in rural communities.
12. CReW should make every effort to ensure that the four Central American countries participate as full beneficiaries for the remainder of the project. Specifically, the PCG should assign the Technical Specialist, who is the only native Spanish-speaking staff member, to be the CReW liaison to these four countries. His role will be to ensure agile implementation of the SSFAs, to capture unique and valuable lessons learned from Central American experiences that are applicable to the WCR, establish contact with relevant Central American institutions working in the wastewater sector and identify potential first-generation projects for a possible CReW II.
13. Over the remainder of the project, and with the support of outside technical assistance, CReW should consider a broader menu of learning and training approaches, in order to enhance potential impact and replicability of training events, expand opportunities to a larger pool of participants and reduce the cost per participant. Options should consider formal and non-formal learning, on-line and face-to-face venues, equivalent content in both English and Spanish, and open access by working professionals and technicians.
14. Considering the wealth of information and experience that is available in the Caribbean on wastewater management, the CReW should enhance the content of its communication and outreach instruments. Topics should include the economics of wastewater, sanitation infrastructure financing, sector policy debates, pros and cons of various technological options, and the role of successful regulation, just to name a few. Print media, electronic bulletins, website content and Facebook have an important role to play in networking and

dissemination of ideas to set the groundwork for future replication. Content should focus more on wastewater issues and less on CReW-sponsored activities and personalities.

15. The IACG with support of the PCG should review the performance of the national focal points during the first two years of CReW to assess whether assumptions and expectations about their role are still valid. The review should gauge the extent to which NFPs are able to engage effectively in dialogue on wastewater management (often beyond their official mandates) with essential government, media and private sector actors.
16. To celebrate moving toward compliance with the LBS Protocol or discuss results of technical analysis performed under an SSFA, or other CReW-related achievement, the PCG and CAR/RCU should conduct a joint high-level mission to at least three CReW countries. The purpose of the missions will be to dialogue with country decision-makers on wastewater challenges, celebrate important progress, and encourage the continued consolidation of an informal national wastewater coalition. Secondly, these missions will help to create a unified “face” of CReW by publicly linking the financial and policy components, and can help countries consolidate a national message with respect to their wastewater management agenda.
17. Given the delays in implementing the pilot financing mechanism and rolling out the support for policy, legal and regulatory reforms, the IACG should request at least a one-year extension.
18. To avoid unclear lines of authority and duplicative reporting requirements, in those countries where IDB loan co-finances the first-generation CReW project, responsibility for oversight and support during the construction phase of sanitation works should be passed from the PCG to the IDB specialist.
19. Prior to year four of project execution, the Pilot Executing Agencies should identify the financial and human resources required to internalize the operating costs of the wastewater revolving fund once CReW project financing ends.
20. IDB and UNEP, in consultation with the Project Steering Committee, should consider developing a follow-on project to pursue replicating the PFM in additional countries, and to move all countries of the Wider Caribbean Region closer to compliance under the LBS Protocol through policy reform and institutional strengthening. Due to the long gestation period for acquiring funding, activities to conceptualize and design a follow-on project should begin as soon as possible.

VI. Annexes

- A. Annotated Results Matrix
- B. Output Matrix
- C. Financial Table
- D. Persons Interviewed
- E. Documents Reviewed
- F. MTE Terms of Reference
- G. Consultant's Bio
- H. IDB and UNEP Management Response

A. Annotated Results Matrix

The following annotated results matrix shows data on CRw progress and achievements reported in the most recent Project Implementation Report of June 30, 2013 (blue column headers). Additionally, this table shows (i) the analysis of each outcome-indicator dataset and the degree to which they fulfill the criteria of a SMART⁴ indicator; and (ii) an alternative MTE assessment of progress to date compared to the FIR⁵ using two additional ratings: I/D – *Insufficient Data*, and N/A – *Not applicable at this time*, in addition to the required GEF criteria⁶ (under orange column headers).

Results Matrix of June 30, 2013

Project objective and Outcomes	Description of indicator	Baseline level	S	M	A	R	T	End-of-project target	Level at 30 June 2013	FIR Progress rating	MTE Assessment
Objective In the context of the Cartagena Convention and its LBS Protocol, to pilot revolving 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.	Pilot Financial Mechanisms Tested (PFM)	0 PFM	0	1	1	1	0	4 PFM	0 PFM	MS	I/D Need to be more specific on definition of tested N/A Results not due until 2015.
	National legal, institutional and policy reforms adopted and implemented.	0 Countries (Limited wastewater management reforms)	0	0	1	1	0	5 Countries adopt wastewater management reforms.	0 Countries	MS	I/D Need to be more specific on how institutional and policy reforms will be defined, adopted and implemented in each country. N/A Results not due until 2015.
Outcome 1: Improved access to financing for wastewater management	Number of Pilot Financing Mechanisms created	0 PFMs	1	1	1	1	0	4 PFMs Belize Jamaica Guyana Trinidad and Tobago	3 PFMs Belize Guyana Jamaica	S	MS –FIR indicates 4 PFMs created by end 2013. Only Belize and Jamaica PFMs are capitalized.

⁴ SMART is Specific, Measurable, Achievable, Relevant, Time-bound.

⁵ FIR is the CRw Final Inception Report of June 15, 2012.

⁶ The rating system uses the standard GEF classification as follows: HS = Highly Satisfactory; S = Satisfactory; MS = Moderately Satisfactory; MU = Moderately Unsatisfactory; U = Unsatisfactory; and HU = Highly Unsatisfactory, plus two additional classifications, which are: N/A – Rating not applicable at this time because no outcome is expected at this stage, and I/D – Insufficient Data in the outcome, indicator, baseline and/or target to make a rating.

Project objective and Outcomes	Description of indicator	Baseline level	S	M	A	R	T	End-of-project target	Level at 30 June 2013	FIR Progress rating	MTE Assessment
	Projects generate repayments into the Pilot Financing Mechanisms	0 PFMs generating repayments	1	1	1	1	0	3 PFMs generating repayments	0	MS	N/A Repayment not expected yet
Outcome 2: Successful development of first generation projects.	Increase in populations with access to improved wastewater treatment facilities (Final baseline and target to be determined in the first year)	0 Households	1	0	1	1	0	Population with improved access to wastewater treatment: Belize – TBD Jamaica - TBD T&T - TBD Guyana – TBD	0 - on-going plants identified in 3 PEAs. Data available after socioeconomic studies are completed.	S	I/D Baseline and target are needed to better measure indicator N/A Measurement expected in 2015.
Outcome 3: Improvements in technical capacity for project implementation.	PEAs develop and apply Operation Manuals(OM)	0 OM	0	1	1	1	0	4 OMs	3 OMs Belize Guyana Jamaica	S	S Agreed. Also progress on the 4 th PEA is advanced.
Outcome 4: Reduced land based pollution to terrestrial and coastal waters from untreated wastewater	Volume: total annual volume (m3) of wastewater treated (compliance with national discharge standards)	Belize - 0 m3 Jamaica – 0m3 T&T 0m3 Guyana – 0m3	1	1	1	1	0	Belize - TBD Jamaica – TDB T&T - TBD Guyana– TBD	0 – while in Jamaica, T&T and Belize plants have been identified the socio-economic studies are not completed so accurate figures not currently available.	MS	I/D Baseline not established yet, although tentative data was in GEF project document and FIR. N/A Measurement expected in 2015.
	Number of countries that have developed reforms to support implementation of the LBS Protocol.	0 countries	0	1	1	1	0	8 countries.	0 – on-going baseline study commenced	S	MS and/or I/D FIR indicates 3 countries would have implemented reforms by 2013.

Project objective and Outcomes	Description of indicator	Baseline level	S	M	A	R	T	End-of-project target	Level at 30 June 2013	FIR Progress rating	MTE Assessment
	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	1	1	1	1	0	15 plants National standards and where absent LBS protocol used for domestic wastewater effluent limits for the appropriate class of water, where appropriate. Class 1 Waters: BOD5 – 30 mg/L TSS – 30 mg/L pH – 5-10 Faecal Coliforms – 200 mpn/100 ml Class 2 Waters: BOD5 – 150 mg/L TSS – 150 mg/L pH – 5-10 Faecal Coliforms – n/a	0	MS	N/A Per FIR, indicator not to be met until 2015.
Outcome 5: Improved local and national capacity for wastewater management.	Number of institutions participating in capacity building activities for wastewater management ⁷	0 Institutions	1	1	1	1	0	7 institutions	4	S	HS The FIR target as of end 2013 is 2 institutions.
Outcome 6: Improved stakeholder awareness about acceptable, sustainable and cost-effective wastewater management solutions	Number of participating organizations in awareness building activities ⁸	0 organizations	1	1	1	1	0	40 organizations.	0	MS	HS Performance has surpassed FIR 2013 target of 12 institutions by 330%
Outcome 7: Increased demands for piloting FMs in the WCR.	Requests for establishment for FMs in WCR.	0 Requests	1	1	1	1	0	3 Requests	1 (from Costa Rica)	S	MS Two requests were expected by 2013 in FIR.

⁷ MTE notes that the original outcome was states as “Improved local and national capacity for wastewater management resulting in reduced land-based pollution of terrestrial and coastal waters in the WCR”; and the indicator was “Number of countries that have ratified the LBS Protocol and implementing it accordingly. The target was “3 additional countries ratified and 3 countries have plans to implement the Protocol”. The new indicator reflects an output not an outcome.

⁸ The initial indicator was Increased awareness about wastewater management by (i) policy makers, (ii) wastewater managers, (iii) national and regional institutions, (iv) wastewater professionals, (v) selected communities, and (vi) general public. The sources of verification was a survey.

Project objective and Outcomes	Description of indicator	Baseline level	S	M	A	R	T	End-of-project target	Level at 30 June 2013	FIR Progress rating	MTE Assessment
Outcome 8: Increased use and management of information on wastewater management in the WCR. ⁹	Percentage of workshops participants that perceive that their knowledge has increased.	0 %	1	0	1	1	0	75%	84%	HS	HS
	Establishment of new information sharing mechanism.	No mechanism.	1	1	1	1	0	1 mechanism	0 mechanism	MS	N/A This is a target for 2014.
	Number of hits on the web site.	0 hits/year	1	1	1	??	0	800 hits/year	3720 hits	HS	HS FIR target is 500 hits per year.
Outcome 9: Effective project monitoring and oversight	Timely submission of M&E reports by the EAs	N/A	1	1	1	1	0	75% submitted on time	33.3 %	MS	U Fewer than half the reports are submitted on time.
	Members of the Steering committee participating in the meetings. ¹⁰	0 %	1	1	0	1	0	75%	93 %	HS	HS Good turn out reflect high country ownership. I/D PSC participation in a meeting does not indicate effective M&E.
Outcome 10: Effective project management and coordination	Grade obtained at medium and terminal evaluation.	0	1	1	1	1	0	Positive at medium and terminal	N/A	N/A	S Overall, CReW is progressing quite well.
Outcome 11: ¹¹ Improved policy, legal and institutional frameworks	Number of countries with improved policy, legal and/or institutional frameworks	0	1	0	0	1	0	5 countries	0	S	I/D The concept of “improved” needs to be defined and measured.
Outcome 12: Strengthened Capacity for wastewater management in the WCR	Numbers of persons trained on selected wastewater management issues	0	1	0	1	1	0	500	157	S	MS Achieved less than half by mid-term.
Outcome 13: Outcome 8 [sic] : Increased awareness of wastewater and sanitation issues by selected target groups	Awareness of wastewater issues.	TBD (2013)	0	0	0	1	0	TBD	0	S	I/D The concept of “increased awareness” needs to be defined and measured

⁹ The original Outcome 8 was stated as “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.”

¹⁰ Original indicator was “Implementation of suggested modifications to the project based on M&E reporting to address the changing needs of the executing agencies.”

¹¹ Outcomes 11, 12 and 13 were not in the original GEF project document or the FIR.

Outcome & Indicator Dashboard

	Number	As a % of
Outcomes	13	
Indicators	21	
Indicators with a baseline data other than zero	0	0%
Indicators with a specified end-of-project target in PIR	18	86%
Indicators with MTE rating of HS, S or MS	11	52%
Indicators with MTE ratings of N/A or I/D	10	49%
Degree of SMART-ness of indicators		66%
Overall rating of project progress towards meeting project objectives	Satisfactory	

B. Output Matrix

This table replicates the progress on CReW outputs as reported in the June 30, 2013 Project Implementation Report.

Outputs	Implementation status as of 30 June 2012 (%)	Expected completion date	Implementation status as of 30 June 2013 (%)	Comments if variance. Describe any problems in delivering outputs	Progress rating
Output 1: (SC I.1) Financing mechanisms established					S
Activity 1: Financing mechanisms established.	50%	31 December 2013	75%		S
Output 2: (SC I.2.1) First generation projects designed					MS
Activity 2: First generation projects designed	25%	31 December 2014	25%	Design completion delayed.	MS
Output 3: (SC I.3.1) Technical capacity provided					HS
Activity 3: Technical specialists hired	100%	31 December 2011	100%		HS
Output 4: (SC II.1.1) Documented policy & legal reforms & institutional strengthening for wastewater management at national and local levels					S
Activity 4: Policy templates and tools kit developed.	20%	31 December 2013	50 %	Consultant contracted and work commenced.	S
Activity 5: Template for Wastewater management plan developed.	5%	31 December 2013	50 %		S
Activity 6: National capacity development plans implemented.	0%	31 December 2014	20%	Bilateral discussions with participating countries proceeding but significantly hampered by relatively tardy responses from the countries.	S
Activity 7: Regional evaluation workshop held	0%	20 June 2015	0%		N/A
Output 5: (SC II.1.2) Country reports demonstrate improved implementation of the LBS Protocol, and in particular its Annex III on domestic wastewater					S
Activity 8: Report on compliance of LBS protocol prepared.	20%	31 December 2013	55 %	Report on English Speaking countries completed; Spanish Speaking in progress.	S
Activity 9: Guidelines for compliance with LBS protocol developed.	15%	20 June 2015	25%		S
Activity 10: Regional workshop on wastewater treatment technology held	50%	31 December 2014	100 %	Completed in November 2012 a year ahead of schedule.	HS
Output 6: (SC II.1.3) Valuation for selected coastal resources in					MS

Outputs	Implementation status as of 30 June 2012 (%)	Expected completion date	Implementation status as of 30 June 2013 (%)	Comments if variance. Describe any problems in delivering outputs	Progress rating
two pilot countries developed					
Activity 11: Resource valuation reports	0%	31 December 2014	0%	Some countries have indicated an interest but experts to conduct study not finalised.	MS
Activity 12: Regional training workshops on resource valuation held	0%	31 March 2015	0%	Date changed (pushed back) given current status.	N/A
Output 7: (SC II.1.4) Documented improvements in financial capacity of wastewater management utilities and service providers					S
Activity 13: Survey on best practices for funding wastewater utilities completed	10%	31 December 2013	50 %	Consultant contracted.	S
Activity 14: Cost recovery models tested	0%	31 December 2014	0%	Some consideration should be given to reviewing this activity during MTE as it will be costly and requires the selection and agreement of suitable utilities.	N/A
Activity 15: Regional workshops on cost recovery models held	0%	31 December 2013	0%		N/A
Output 8: (SC II.1.5) Guidelines and best practice modalities for civil society involvement in wastewater management					S
Activity 16: Workshop for training of facilitators.	30%	31 December 2013	100%	Completed in May 2013.	HS
Activity 17: Stakeholder consultation workshop held.	16%	1 June 2015	0%	Date change objectives need to be revisited after MTE.	S
Output 9: (SC II.1.6) Detailed implementation plan (resources, budget & timetable) for a Monitoring, Evaluation and Reporting (ME&R) system					N/A
Activity 18: Wastewater Management M&E database developed.	0%	31 December 2014	0%		N/A
Activity 19: National systems demonstrated.	0%	31 December 2014	0%		N/A
Output 10: (SC II.1.7) Training programmes for wastewater professionals					S
Activity 20: Number of regional and National workshops on different aspects of wastewater management held.	10%	20 June 2015	20 %	Four workshops held to date.	S
Activity 21: Number of partnerships for delivery of training.	25%	31 December 2014	50 %	UWI slow in responding. Moving ahead with partnerships with UTECH and Water Center. Other regional institutions to be	S

Outputs	Implementation status as of 30 June 2012 (%)	Expected completion date	Implementation status as of 30 June 2013 (%)	Comments if variance. Describe any problems in delivering outputs	Progress rating
				approached.	
Activity 22: Number of courses outline adapted.	15%	31 December 2014	25 %	Activities to be refined after MTE a number of professional courses have been identified	S
Output 11: (SC II.2.1) Regional toolkit of templates for wastewater management drafting instructions					S
Activity 23: Drafting instructions template developed.	0%	31 December 2013	20%		S
Activity 24: Wastewater regulations enacted.	0%	15 June 2015	0%	Given complexity of passing legislation in the region and the slow response of countries to date this activity should be reviewed during MTE.	N/A
Output 12: (SC II.2.2) Training workshops for enforcement personnel					S
Activity 25: No. of training workshops provided for enforcement personnel	0%	20 June 2015	20%		S
Output 13: (SC II.2.3) Regional training on enforcement of wastewater management legislation					S
Activity 26: Design and Conduct 2 regional training seminars for legal officers, drafters and policy makers (1 in English and 1 in Spanish).	5%	31 December 2014	5 %		S
Output 14: (SC II.3.1) Increased focus on wastewater management issues by national leadership from improved awareness of wastewater issues.					S
Activity 27: KAP Regional surveys performed.	0%	31 December 2014	0%		N/A
Activity 28: Communication products developed.	25%	20 June 2015	50 %	4 newsletters published, draft communication strategy developed, communication guidelines distributed.	S
Output 15: (SC II.3.2) Increased coverage of wastewater and sanitation issues in the media from improved awareness of wastewater issues					S
Activity 29: Number of stories in the media published.	11%	20 June 2015	25%	Publication in a number of regional newspapers in Suriname, St Lucia, Guyana and Jamaica	S
Output 16: (SC II.3.3) Increased awareness of wastewater and sanitation issues in selected communities					N/A
Activity 30: Communication strategy for rural	0%	31 March	0%	Date changed	N/A

Outputs	Implementation status as of 30 June 2012 (%)	Expected completion date	Implementation status as of 30 June 2013 (%)	Comments if variance. Describe any problems in delivering outputs	Progress rating
communities developed.		2014			
Activity 31: Rural communication campaign on sanitation implemented.	0%	31 December 2014	0%	Date changed	N/A
Output 17: (SC II.3.4) Guidelines for enhancing incorporation of wastewater management issues into curricula.	5%		5 %		S
Activity 32: Inventory of wastewater education in selected countries conducted.	0%	31 March 2014	0%	Discussions with key partners commenced.	S
Activity 33: Guidelines for enhancing incorporation of wastewater management issues into curricula developed.	5%	31 December 2014	5 %	Design process started.	S
Activity 34: Teaching learning toolkit developed and tested.	0%	31 December 2014	0%		N/A
Output 18: (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					S
Activity 35: Templates used to document the pilots, demos and overall project	0%	31 December 2013	100%		S
Activity 36: Workshops on how to use templates and selections of lessons learned	0%	31 December 2013	0%	This activity to be revisited during MTE.	N/A
Output 19: (SC III.1.2) Replication strategy developed					S
Activity 37: Replication strategy developed	10%	20 June 2015	25 %	A number of studies underway which will inform the development of the strategy.	S
Output 20: (SC III.1.3) Increased dialogue among regional wastewater stakeholders through a series of stakeholder consultations.					S
Activity 38: Annual regional meetings with stakeholders (CWWA).	33%	31 December 2014	75%		S
Activity 39: Presentations on the implementation of the CReW at regional and international conferences	35%	20 June 2015	50 %	Presentation and active participation at several meetings/conferences.	S
Activity 40: Professional exchanges conducted.	5%	20 June 2015	10%	Potential exchange identified.	S
Output 21: (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					S
Activity 41: IT based regional information management system developed	20%	20 June 2015	20%		S

Output and Activity Progress Dashboard

	Number	As a % of
Outputs	21	
Activities	41	
Activities at 0% Completion	15	37%
Activities between 1% - 49% completed	13	32%
Activities 50% or more completed	9	22%
Activities at 100% Completion	4	10%
Outputs with a specified end-of-project target in PIR	0	0%
Progress ratings of HS, S or MS	48	77%
Progress ratings of N/A or I/D	14	23%
Overall rating of implementation progress	Satisfactory	

C. Financial Table

Activities	IDB Component US\$	UNEP Component US\$	Total GEF Financing	Disbursed as of Dec 31, 2013	% Disbursed
Component I - Investment & Innovation Financing for Waste Water Management	15,052,830		15,052,830	8,510,124	56.5
1.1 Pilot Financing Mechanism (PFM)	13,000,000		13,000,000	8,000,000	61.5
Jamaica	3,000,000		3,000,000	3,000,000	100.0
Belize	5,000,000		5,000,000	5,000,000	100.0
Guyana	3,000,000		3,000,000	-	0.0
Trinidad & Tobago	2,000,000		2,000,000	-	0.0
1.2 Project Development Support	1,125,000		1,125,000	174,792	15.5
1.3 Capacity Building for Pilot Implementation	927,830		927,830	335,332	36.1
PMU Support	375,000		375,000	64,127	17.1
Technical Specialist	552,830		552,830	271,204	49.1
Component II - Reforms for Waste Water Management		2,500,000	2,500,000	807,337	32.3
Capacity Building - Policy & Institutional Strengthening		1,540,000	1,540,000	684,313	44.4
Legislative Reform		660,000	660,000	11,577	1.8
Awareness Raising		300,000	300,000	111,446	37.1
Component III - Communications, Outreach and Information Exchange		710,000	710,000	245,025	34.5
Project Document Development and Training		135,000	135,000	144,146	106.8
Integrated Information System		575,000	575,000	100,879	17.5
Component IV - M&E	690,170	90,000	780,170	34,693	4.4
Component V - Project Management	922,000	35,000	957,000	566,319	59.2
Total	16,665,000	3,335,000	20,000,000	10,163,501	50.8

D. Persons Interviewed

First Name	Last Name	Title	Institution
Martin	Alegria	Chief Environmental Officer	Department of Environment
Nelson	Andrade Colmenares	Representative	UNEP CAR/RCU
Harold	Arzu	Chief Operations Officer	IDB
Martin	Baker	Consultant	
Taslim	Baksh	Finance Director	Ministry of Housing & Water
Larry	Bardouille	Chairman, Board of Directors	Dominica Water & Sewerage Company Ltd.
Leonie	Barnaby	GEF Operational Focal Point	Ministry of Water, Land, Environment & Climate Change
Garfield B.	Barnwell	Director, Sustainable Development	Caribbean Community Secretariat
Anthony	Bartholomew	Senior Consultant	IDB
Marcello	Basani	WSA Specialist	IDB
Julian	Belgrave	Chief of Operations	IDB
Tiffoni	Buckle	Environmental Engineer	CREW
Kieran	Cadogan	Project Coordinator	CREW (PC)
Jacqueline	Cameron	Corporate Planning Manager	NWC
Adrian	Cashman	Lecturer	Centew for Resource Mgmt & Environmental Studies
Beverly	Castillo	CEO - Natural Resources	Ministry of Natural Resources & Agriculture
Evan	Cayetano	Water & Sanitation Specialist	IDB
Jane	Chow	Operations - Senior Associate	IDB
Angella	Clarke	Financial Specialist	NWC
Alfredo	Coello Vasquez	Technical Specialist	CREW
Maria	Cooper	Project Coordinator	Ministry of Finance & Economic Development
Christopher	Corbin	Program Officer	UNEP CAR/RCU
Victor Javier	Cuevas	Director	Ministry of Environment
Judy	Daniel	President	Environment Advisors Inc.
Judy	Daniel	Chair	Global Water Partnership
Marlon	Daniels	Project Coordinator	MoHW
Don	Degen	Senior Technical Advisor	World Water & Wastewater Solutions
Denisse	Del Valle	Technical Director	ANAM
Mario	Diaz Anzueto	Director	Ministry of Environment & Natural Resources
Leslie Ann	Edwards	Operations Specialist	IDB
Luisa	Fernandez	Coordinator	Ministry of Environment & Natural Resources

First Name	Last Name	Title	Institution
Denise	Forest	Project Coordinator	CREW (PCG)
Lucio Javier	Garcia	Specialist	IDB
Javier Alfredo	Garcia	Financial Specialist	IDB
David	Geddes	Programme Director (K-Factor)	National Water Commission
Cyprian A.	Gibson	Engineering, Planning & Project Mgmt	Water & Sewerage Corporation
Vivian	Gonzalez	Officer	Water Department
Nadine	Gordan	Administrative Assistant	NWC
Albert	Gordon	President, NWC	National Water Commission
Dominic	Grell	Consultant	Ministry of Planning & Sustainable Development
Gillian	Grutherie	Senior Director	Ministry of Land Environment & Climate Change
Keith	Hardwick	Technical Services Manager	BWSL
Alvan	Haynes	Chief Executive Officer	BWSL
Anthony	Headley	Deputy Director	Environmental Protection Dept. (EPD)
Christopher	Husbands	General Manager	National Water and Sewerage Authority
Naveen	Jainauth-Umrao	Financial Management Specialist	IDB
Dale	James		IDB
Xavi	Javier	Water & Sanitation Specialist	IDB
Valerie	Jenkinson	CEO	World Water & Wastewater Solutions
Lennox	John	Managing Director	Ashmins Group of Companies
Jason	Johnson	Senior Program Manager	Pure Technologies
Elvin	Jordan	Engineer	Barbados Water Authority
Sharmeela	Joseph	Project Coordinator	WASA
Rensforde	Joseph	Engineer	Ministry of Housing & Water
Roger	Karim	Environmental Manager	WASA
Sanjay	Keshwani	Financial Officer	BWSL
Beverly	Khan	Director, IDB Unit MoP	IDB
Paulette	Kolbusch	Senior Manager	National Environment & Planning Agency
Lewis	Lakeman	Vice President, Planning	NWC Corporate Office
William	Lamb	Project Manager	BWSL
Denise	Lee Sing	Project Coordinator	WASA
L. O'Reilly	Lewis	Operations Officer - Economic Infrastructure Division	Caribbean Dev. Bank
Paula	Louis-Grant	Chief Operations Officer	IDB
Anthony	Mai	Technical Specialist	Department of Environment

First Name	Last Name	Title	Institution
Sophie	Makonnen	Representative	CCB/CGY
Emil	McGarrel	Permanent Secretary	MoHW
Yvon	Mellinger	Water & Sanitation Specialist	IDB
Candelaria	Morter-Saldivar	Chief Executive Officer	Ministry of Labor, Rural Development & NEMO
John	Mwansa	General Manager (ag)	Barbados Water Authority
Maria del Rosario	Navia	Water & Sanitation Specialist	IDB/IACG
Hopeton	Peterson	Manager, Sustainable Development	Planning Institute of Jamaica
Victor	Poyotte	Executive Director	Caribbean Water & Sewerage Association Inc
Andre	Quesnel	Director	Ecohesion Inc.
Veetal	Rajkumar	Head of Policy Planning and Coordination	Environmental Protection Agency
Indarjit	Ramdass	Executive Director	Environmental Protection Agency
Leticia	Ramjag	Operations Specialist	IDB
Marle	Reyes	Operations Specialist	IDB
Rushell-Kay	Ricketts	Project Engineer	NWC
Rodrigo	Riquelme	CREW Project Team Leader	IDB
Jose Antonio	Silva	Director	Ministry of Planning
Alex	Simalabwi	Global Coordinator Water & Climate Program	Global Water Partnership
Geeta	Singh	Director, Environmental Mgmt.	Environmental Protection Agency
Donna Sue	Spencer	Communications Specialist	UNEP
Nick	St-Georges	Principal, Director of Infrastructure Business Development	Morrison Hershfield
Suzette	Taylor-Lee Chee	Assistant Director, Economic Mgmt. Division	Ministry of Finance
Winsome	Townsend	Senior Advisor	NWC
Therese	Turner Jones	Country Representative	IDB
Kalanithy	Vairavamoorthy	Professor & Dean	University of South Florida, Patel College of Global Sustainability
Isabelle	Vandabeck	Task Manager, International Waters - LAC (Division of GEF Coordination)	UNEP
Rickardo	Ward	Operational GEF Focal Point	GEF
Magnus B.	Williams	Chief Engineer	Dominica Water & Sewerage Company Ltd.
Wayne	Williams	President	T&T Housing Development Corporation

E. Documents Reviewed

References

Assessment of Wastewater Management in the Wider Caribbean. Resource Mobilization Advisors

Belize - Integrated Water and Sanitation Program for the Placencia Peninsula (2486/OC-BL); Detailed Design of Wastewater Collection and Treatment System in Placencia (ATN/OC-12456-BL); Testing a Prototype Caribbean Regional Fund for Wastewater – CreW (GRT/FM-12724-RG) Special Mission Aide Memoire (Oct 31- Nov 4 2011)

Caribbean Water and Sewerage Association Inc. (2012). Assessment Report for Select Countries in Respect of the Protocol Concerning Pollution from Land-Based Sources and Activities (LBS Protocol); Dr. Patricia Prudent-Phillip

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CRew Annual Work Plan 2012

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¹² GWRF – Guyana Wastewater Revolving Fund

¹³ UNEP – United Nations Environment Programme

Inter- American Development Bank. Results Framework, Matrix Indicators (Annex II) RG-X1011.

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Inter-American Development Bank (2013). Progress Monitoring Report. RG-X1011 CReW

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Inter-American Development Bank. Countries of the Wider Caribbean CReW (RG-X1011) ESMR15. June 29, 2010

Inter-American Development Bank. CReW (RG-X1011) Monitoring and Evaluation Plan.

Inter-American Development Bank. Progress Monitoring Report (PMR) Concept Document SPD/SMO

Inter-American Development Bank. RG-X1011 CReW Grant Proposal

Memorandum of Understanding Between UNEP and the IDB for Implementing the Project CReW Financed by GEF.

Ministry of Finance and Development of Belize (2013). CReW16 Annual Progress Report: January – December 2012

Ministry of Finance and Development of Belize (2013). CReW Quarterly Progress Report: April – June 2013

Ministry of Housing & Wastewater / Central Housing & Planning Authority. CReW GWRF, Operations Manual for the Guyana Wastewater Revolving Fund.

Ministry of Housing & Water / Central Housing & Planning Authority (2013). CReW GWRF, First Quarterly Report: January – March 2013

UNEP and Inter-American Development Bank. GEF PIR Report: Fiscal Year 2012

United Nations (1999). Protocol Concerning Pollution from Land-Based Sources and Activities to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region.

¹⁴ GEF – Global Environment Facility

¹⁵ ESMR – Environmental and Social Management Report

¹⁶ CReW – Testing a Prototype Caribbean Regional Fund for Wastewater Management

F. MTE Terms of Reference

Mid-term Evaluation of the Project “Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)”

PROJECT GENERAL INFORMATION

Project Title:	Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)		
Executing Agency:	UNEP CAR/RCU, Government agencies, waste water utilities in participating countries		
Project partners:	Caribbean Environment Health Institute (CEHI) and Caribbean Development Bank (CDB); Caribbean Water and Wastewater Association (CWWA)		
Geographical Scope:	Countries of the Wider Caribbean Region (WCR)		
Participating 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		
GEF project ID:	3766	IMIS number:	GFL-2324-4A58-2732
Focal Area(s):	International Waters	GEF OP #:	N/A
GEF Strategic Priority/Objective:	IW SO1 & 2 – SP2	GEF approval date*:	02 December 2010
IDB and UNEP approval date:	UNEP: 12 January 2012 (delays due to dismantling of UNEP Division of GEF and change of internal procedures thereof) IADB: 11 May 2011	Date of first disbursement:	UNEP: 2 February 2012 IDB: 29 July 2011
Actual start date:	20 June 2011	Planned duration:	48 months
Intended completion date:	20 June 2015 (operational closure) [for UNEP, the administrative closure is scheduled for December 2015 as reflected in the signed ICA with CAR/RCU]	Actual or Expected completion date:	20 June 2015
Project Type:	FSP	GEF Allocation:	\$ 20,000,000
PPG GEF cost:	\$380,000	PPG co-financing:	\$ 724,500
Expected MSP/FSP Co-financing:	\$251,702,403	Total Cost:	\$271,702,403
Mid-term review/eval. (planned date):	31 April 2013	Terminal Evaluation (planned date):	31 April, 2015
Mid-term review/eval. (actual date):	N/A	No. of revisions:	One for UNEP under finalisation to enact the inception workshop and PSC1 recommendations

Objective and Scope of the Evaluation

The Mid-term Evaluation (MTE) of the Project “Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)” is undertaken half way through project implementation to analyze whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions are required. The MTE is to assess operational aspects, such as project management and implementation of activities and the level of progress towards the objectives. The evaluation will assess project performance to date (in terms of relevance, effectiveness and efficiency), and determine the likelihood of the project achieving its intended outcomes and impacts, and the implementation of planned project activities and planned outputs against actual results. ***It will focus on identifying corrective actions needed for the project to achieve maximum impact. Evaluation findings will feed back into project management processes through specific recommendations and ‘lessons learned’ to date.***

The MTE has two primary purposes: (i) to provide evidence of results to date and of the likelihood of outcomes and impact in the future, to meet accountability requirements, and (ii) to identify the challenges and risks to achievement of the project objectives and to derive corrective actions needed for the project to achieve maximum impact and sustainability. In addition, the MTE is expected to promote learning, feedback, and knowledge sharing through results and lessons learned among IDB, UNEP, the GEF and their partners. It will focus on the following sets of **key questions**, based on the project’s results framework and current implementation issues, which may be expanded by the consultants as deemed appropriate:

What is the status of the pilot financial mechanisms? What can realistically be achieved in each pilot country in the time remaining to the project?

In how far has the project built capacity and how much progress was made on institutional strengthening for the long-term management of the Waste Water Sector? More specifically: To what extent has national and regional capacity (at individual, organisational and enabling environment level) been built for sustainable the Sector.

What progress was made on the development of regional policy, legal and regulatory frameworks for addressing wastewater management and creating regionally wastewater management reforms for the long-term management of the Waste Water Sector? Where do we stand on the implementation of the LBS Protocol? Has there been the development of national and regional policy and legal frameworks to enable the development of the Sector?

What are the key challenges to project implementation and what remedies can be proposed? Is technical backstopping to the national and regional PMUs effective? Are PMUs working efficiently and effectively? Are AOPs and PEP being successfully implemented? How well are these partnerships functioning?

Can the project realistically achieve its intended outputs and objectives within the time remaining? If not, what would be a more realistic time frame or what activities should be prioritized so that the main outputs and objectives can still be achieved in a timely manner?

Overall Approach and Methods

The MTE of the Project “Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)” will be conducted by independent consultant(s) under the overall responsibility and management of IDB INE/WSA Office (Washington), in consultation with the UNEP Task Manager.

The MTE will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

The findings of the evaluation will be based on the following:

A desk review of project documents including, but not limited to:

The project documents, outputs, monitoring reports (such as the baseline reports, progress and financial reports to IDB, UNEP, and GEF annual Project Implementation Review reports) and relevant correspondence. Notes from the Project Steering Committee meetings. Notes from PEA/PMU and UNEP CAR/RCU meetings. Notes from IACG Meetings. Other CReW related reports and material produced by consultants, the project staff or partners. Relevant publications and material published on the project web-site: www.gefcrew.org.

Interviews with project management and technical support including the current PCG based in Jamaica and key actors with the PEAs and PMUs demonstrating the pilot financial mechanisms. Where it is considered necessary, the Consultant shall determine whether to seek additional information and opinions from using interviews and telephone interviews with other stakeholders involved with this project, including NFPs and other organisations. As appropriate, these interviews could be combined with an email questionnaire. Interviews with the IDB Team Leader and UNEP Project Task Manager and other relevant staff in IDB and UNEP as necessary. The Consultant shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.

The Consultant will visit demonstration sites in Belize, Guyana, Jamaica, and Trinidad and Tobago. The consultant will also visit Washington to meet with the IDB and UNEP Task Manager. The Consultant will attend a Project Steering Committee Meeting in late 2013 to present the Mid Term Evaluation findings and help advise on necessary corrective actions.

Key Evaluation Principles

In attempting to evaluate any outcomes and impacts that the project may have achieved, evaluators should remember that the project's performance should be assessed by considering the difference between the answers to two simple questions "*what happened?*" and "*what would have happened anyway?*". These questions imply that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. In addition, it implies that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project.

Sometimes, adequate information on baseline conditions and trends is lacking. In such cases, this should be clearly highlighted by the evaluator, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance. At Mid-Term, impacts are unlikely; however, every effort should be made to assess the project's progress towards the intended outcomes.

Scope of the evaluation

Assessment of project assumptions, objectives and design

The evaluation will examine the following:

Project theory. Assessment of the assumptions and of the theory of change (causal pathways) underpinning the project idea and design, including its coherence, internal and external validity.

Project objectives and Logical Framework. Analysis of the project Results Framework and variations over time if any, including: the links and causal relationships between inputs, activities, outputs, outcomes and impact (specific and development objectives); relevance and appropriateness of indicators; validity of assumptions and risks existence of formal approvals to any modifications of the results framework

Project design. Analysis of the project strategy and structure including: approach and methodology; time frame and resources; institutional set-up; management arrangements; stakeholders and beneficiaries identification.

Project Performance with respect to GEF Evaluation Parameters

Attainment of objectives and planned results (progress to date):

The assessment of project results seeks to determine the extent to which the project objectives have been, or are expected to be achieved, and assess whether the project has led to any other positive or negative consequences. While assessing a project's progress towards the intended outcomes / objectives as stated in the project document (PD), the evaluation will also indicate if there were any changes to the outputs and performance indicators in the PD and whether those changes were approved. If the project did not establish a baseline (initial conditions), the evaluator should seek to estimate the baseline condition so that achievements and results can be properly established (or simplifying assumptions used). Outcomes are the likely or achieved short-term and medium-term effects of an intervention's outputs. Examples of outcomes could include but are not restricted to stronger institutional capacities, higher public awareness (when leading to changes of behaviour), and transformed policy frameworks.

Effectiveness: Evaluate how, and to what extent, the stated project objectives will be met, taking into account the "achievement indicators" specified in the project document and logical framework.

Relevance: Are the project's actual or intended outcomes consistent with the focal areas/operational program strategies and country priorities? Ascertain the nature and significance of the contribution of the project outcomes to the wider GEF International Waters portfolio.

Efficiency: Includes an assessment of *outcomes* achieved to date in relation to inputs, costs, and implementation times based on the following questions: Is the project cost-effective? How does the cost-time vs. outcomes compare to other similar projects? Has the project implementation been delayed? Is it on track?

Assessment of Sustainability of project outcomes:

Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts after the GEF project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits after the project ends. ***At mid-term, identification of any likely barriers to sustaining the intended outcomes of the project is especially important.*** Some of these factors might be outcomes of the project, e.g. stronger institutional capacities or better informed decision-making, legal frameworks, socio-economics incentives or public awareness.

Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes. The evaluation should ascertain to what extent follow-up work has been initiated and how project outcomes will be sustained and enhanced over time. In this case, sustainability will be linked to the likelihood of continued use and influence of best practices promoted by the project to plan and manage aquatic resources and ecosystems on a sustainable basis.

Four aspects of sustainability should be addressed: financial, socio-political, institutional frameworks and governance, and environmental. The following questions provide guidance on the assessment of these aspects:

Financial resources. To what extent are the outcomes of the project dependent on continued financial support? What is the likelihood that any required financial resources will be available to sustain the project outcomes/benefits once the GEF assistance ends (resources can be from multiple sources, such as the public and private sectors, income generating activities, and market trends that support the project's objectives)?

Socio-political: To what extent are the outcomes of the project dependent on socio-political factors? What is the likelihood that the level of stakeholder ownership will allow for the project outcomes/benefits to be sustained? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project?

Institutional framework and governance. To what extent are the outcomes of the project dependent on issues relating to institutional frameworks and governance? What is the likelihood that institutional and technical achievements, legal frameworks, policies and governance structures and

processes will allow for, the project outcomes/benefits to be sustained? While responding to these questions consider if the required systems for accountability and transparency and the required technical know-how are in place.

Environmental. Are there any environmental risks that can undermine the future flow of project environmental benefits?

Achievement of outputs and activities:

Delivered outputs: Assessment of the project's success in producing each of the programmed outputs to date, both in quantity and quality as well as usefulness and timeliness. Assess the soundness and effectiveness of the methodologies used for developing the technical documents and related management options in the participating countries. Assess to what extent the designed demonstrations have the weight of scientific authority/credibility, necessary to influence policy and decision-makers, particularly at the national level and suggest any possible improvements.

Catalytic Role and Replication

The mid-term evaluation will also describe any catalytic or replication effect of the project. Replication approach, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated or scaled up in the design and implementation of other projects. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out or possible strategies for this purpose.

Assessment of Monitoring and Evaluation Systems:

M&E design. Does the project have a sound M&E plan to monitor results and track progress towards achieving project objectives? The Mid-term Evaluation will assess whether the project met the minimum requirements for project design of M&E and the application of the Project M&E plan (Minimum requirements are specified in **Annex 2**). The evaluation shall include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The time frame for various M&E activities and standards for outputs should have been specified based on results based management principles.

M&E plan implementation. Is an M&E system in place and does it facilitate tracking of results and progress towards projects objectives throughout the project implementation period. Are Annual project reports complete, accurate and with well justified ratings? Is the information provided by the M&E system used to improve project performance and to adapt to changing needs? Does the project have an M&E system in place with proper training for parties responsible for M&E activities to ensure data will continue to be collected and used after project closure?

Budgeting and Funding for M&E activities. Were adequate budget provisions for M&E made and are such resources made available in a timely fashion during implementation?

Long-term Monitoring. Is long-term monitoring envisaged as an outcome of the project? If so, comment specifically on the relevance of such monitoring systems to sustaining project outcomes and how the monitoring effort will be sustained.

Preparation and Readiness

Are the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing institution and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place?

Country ownership / drivenness:

This is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements. Examples of possible evaluative questions include: Was the project design in-line with the national sectoral and development priorities and plans? Are project outcomes contributing to national development priorities and plans? Were the relevant country representatives, from government and civil society, involved in the project? Did the recipient government maintain its financial commitment to the project?

Stakeholder participation / public awareness:

Does the project involve the relevant stakeholders through information sharing, consultation and by seeking their participation in project's design, implementation, and monitoring and evaluation? For example, does the project implement appropriate outreach and public awareness campaigns? Does the project consult and make use of the skills, experience and knowledge of the appropriate government entities, community groups, private sector, local governments and academic institutions in the design, implementation and evaluation of project activities? Are perspectives of those that would be affected by decisions, those that could affect the outcomes and those that could contribute information or other resources to the process taken into account while taking decisions? Specifically the evaluation will:

Assess the mechanisms put in place by the project for identification and engagement of stakeholders in each participating country and establish, in consultation with the stakeholders, whether this mechanism was successful, and identify its strengths and weaknesses.

Assess the degree and effectiveness of collaboration/interactions between the various project partners and institutions during the course of implementation of the project. Assess the degree and effectiveness of any various public awareness activities that have been undertaken during the course of implementation of the project thus far.

Financial Planning

Does the project have the appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allow for timely flow of funds. Specifically, the evaluation should:

Assess the strength and utility of financial controls, including reporting, and planning to allow the project management to make informed decisions regarding the budget and allow for a proper and timely flow of funds for the payment of satisfactory project deliverables throughout the

project's lifetime. Present the major findings from the financial audit if one has been conducted. Did promised co-financing materialize thus far? Identify and verify the sources of co-financing as well as leveraged and associated financing (in co-operation with the IA and EAs). Assess whether the project has applied appropriate standards of due diligence in the management of funds and financial audits. The evaluation should also include a breakdown of actual expenditures of GEF and co-financing for the project to date prepared in consultation with the IACG.

Implementation approach:

This includes an analysis of the project's management framework, adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, and overall project management. The evaluation will: Ascertain to what extent the project implementation mechanisms outlined in the project document have been closely followed. In particular, assess the role of the various committees established and whether the project document was clear and realistic to enable effective and efficient implementation, whether the project was executed according to the plan and how well the management was able to adapt to changes during the life of the project to enable the implementation of the project. Evaluate the effectiveness and efficiency and adaptability of project management and the supervision of project activities / project execution arrangements at all levels. Assess whether the logical framework was used during implementation as a management tool and whether feedback from M&E activities more broadly was used for adaptive management.

IDB/UNEP Supervision and Backstopping

Assess the effectiveness of supervision and administrative and financial support provided by IDB and UNEP. Did they identify problems in a timely fashion and accurately estimate the seriousness? Did they provide quality support and advice to the project, approve modifications in time and restructure the project when needed? Did they provide the right staffing levels, continuity, skill mix, frequency Identify administrative, operational and/or technical problems and constraints that influenced the effective implementation of the project.

The **ratings will be presented in the form of a table**. Each of the eleven categories should be rated separately with **brief justifications** based on the findings of the main analysis. An overall rating for the project should also be given. The following rating system is to be applied:

HS	= Highly Satisfactory
S	= Satisfactory
MS	= Moderately Satisfactory
MU	= Moderately Unsatisfactory
U	= Unsatisfactory
HU	= Highly Unsatisfactory

Wherever possible, the consultant will provide recommendations for improvement of project performance in each of the eleven categories above, so that the project could incorporate them into the implementation of the remaining duration of the project

In addition, the evaluator should prepare a draft 'performance table' for the project. This table should specify, for each of the main objectives and outcomes in the project logical framework, levels of performance (and their means of assessment) using the six performance categories above (HS to HU). This performance table will be discussed and finalised during the next Project Steering Committee Meeting and will be used as a rubric for assessing project performance in the Terminal Evaluation of the project. An example is shown in **Annex 3**.

Evaluation report format and review procedures

The report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate clear managerial responses.

The evaluation will rate the overall implementation success of the project and provide individual ratings of the eleven implementation aspects as described above (A-K). The ratings will be presented in the format of a table with brief justifications based on the findings of the main analysis.

Evidence, findings, conclusions and recommendations should be presented in a complete and balanced manner. Any dissident views in response to evaluation findings will be appended in an annex. The evaluation report shall be written in English, be of no more than 50 pages (excluding annexes), use numbered paragraphs and include:

An **executive summary** (no more than 3 pages) providing a brief overview of the main conclusions and recommendations of the evaluation;

Introduction and background giving a brief overview of the evaluated project, for example, the objective and status of activities, its relevance and project theory / intervention logic;

Scope, objective and methods presenting the evaluation's purpose, the evaluation criteria used and questions to be addressed;

Project Performance and Impact providing factual evidence relevant to the questions asked by the evaluator and interpretations of such evidence. This is the main substantive section of the report and should provide a commentary on all evaluation aspects (A – K above).

Conclusions and rating of project implementation success giving the evaluator's concluding assessments and ratings of the project against given evaluation criteria and standards of performance. The conclusions should provide answers to questions about whether the project is considered good or bad, and whether the results are considered positive or negative;

Lessons learned presenting general conclusions from the standpoint of the design and implementation of the project, based on good practices and successes or problems and mistakes. Lessons should have the potential for wider application and use. All lessons should 'stand alone' and should: Specify the context from which they are derived

State or imply some prescriptive action;

Specify the contexts in which they may be applied (if possible who when and where)

Recommendations. High quality recommendations should be *actionable* proposals that are:

Implementable within the timeframe and resources available

Commensurate with the available capacities of project team and partners

Specific in terms of who would do what and when

Contain results-based language (i.e. a measurable performance target)

Include a tradeoff analysis, when its implementation may require utilizing significant resources that would have otherwise been used for other project purposes.

Annexes include Terms of Reference, list of interviewees, documents reviewed, brief summary of the expertise of the evaluator / evaluation team, a summary of co-finance information etc. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Review of the Draft Mid-Term Evaluation Report

The Draft report shall be submitted to the Team Leader IDB, UNEP Task Manager. The report will be reviewed by the PCG and all national and the regional executing agencies. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The IDB Team Leader will collate the review comments and provide them to the evaluator for consideration in preparing the final version of the report.

Submission of Final Terminal Evaluation Reports.

The final report shall be written in English and submitted in electronic form in MS Word format and should be sent directly to:

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NE0508A
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G. Evaluator's Résumé

David L. Rogers
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International-development practitioner with extensive experience managing economic and social development programs in Latin America and Caribbean, providing performance-focused consulting applicable to multilateral, bilateral and NGO environments.

Professional Experience

International Development Management Independent Consultant	2011 – Present
Inter-American Development Bank Regional Operations Advisor Operations and Sector Specialist	2001 - 2011 1996 – 2001
CARE, Inc. Regional Manager for Latin America	1993 – 1996
Save the Children Federation, Inc. Country Director	1978 – 1992
U.S. Agency for International Development Guatemala Reconstruction Program Manager (Personal Services Contract)	1976 – 1978
Peace Corps Volunteer – Guatemala Extension Agent for the Flor Chimalteca regional agricultural cooperative	1971 – 1974

Academic Background

Master in Public Administration Harvard University, Kennedy School of Government, Cambridge, MA	1993
Bachelor of Arts in Political Science and International Affairs The Pennsylvania State University, State Park, PA	1971

Professional Development

Expanding Impact: Organization Legitimacy, Advocacy and Partnerships Harvard Kennedy School, Executive Education Program	2012
Project Management Inter-American Development Bank Instituto Centroamericano de Administración de Empresas (INCAE)	2010 1988
Public-Private Partnerships Strategies and Methods Institute of Public Private Partnerships, Washington, D.C.	2005

Macroeconomics
Inter-American Development Bank
George Washington University, Washington, D.C

2005
2004

Publications

Sanchez, E., Rogers, D., and Howard-Grabman, L. "Researching women's health problems using epidemiological and participatory methods to plan the Inquisisi MotherCare project." Paper for the National Council for International Health Conference, Washington D.C. July, 1991

Rogers, David L. "Issues Faced in Programming Guatemala Disaster Rehabilitation Assistance: Views and Impressions of an Agency Programmer." Elsevier's *Mass Emergencies*. March, 1978

Manual Operativo: Políticas y procedimientos administrativos, financieros, programáticos y de personal. Save the Children, El Salvador. March, 1985

Associations

- Human Services Advisory Council, *pro bono* appointment by the City Council of Falls Church, VA., to advise on social policy and programs. 2002 to present.
- Associate, Inter-American Dialogue. Latin America public policy think tank. Washington, D.C. 2011 to present.
- International School of Port of Spain, Trinidad & Tobago –Parent representative to Board of Directors. 1999 – 2000.
- Board member of the following institutions in Bolivia, 1989-1992:
 - USAID-sponsored PL-480 Monetization Committee,
 - Programa de Coordinación para la Supervivencia Infantil (PROCOSI). Treasurer.
 - Fundación Cultural Santa Barbara – Laikacota Children's Museum;
- Founding member of CIPHEs (Consejo Interinstitucional de Promoción Humana de El Salvador) 1985; Treasurer in 1986 and Vice President in 1988.

Core Competencies

- Ability to work in multicultural contexts
- Functional knowledge of international standards on public sector procurement
- Strategic planning and annual programming
- Professionally written and spoken Spanish
- Experience in disaster relief programming; knowledgeable in risk management issues
- Interpersonal, teamwork, supervisory and mentoring skills
- Capable public speaker, trainer and event planner
- Computer literate: Word, Excel, PowerPoint, Outlook, Project and Apple equivalents
- Expired security clearance

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H. IDB and UNEP Management Response

Comments by Christopher Corbin, Program Manager, UNEP:

1. Documenting the experiences and lessons learned surrounding the pilot financing mechanisms should begin as soon as possible before institutional memory begins to fade. All four pilot countries have garnered ample experiences that offer analysis and ideas for replication. Documentation and discussions should include strategic issues faced in building the political will to move forward and in maintaining inter-institutional coordination, as well as the factors that contributed to delays and how were they resolved.

Agreed. This will also require improved reporting by the PEAs/PCG to UNEP CAR RCU and the CS on their activities, experiences etc. so that these can be documented. Also to be captured in case studies and videos. Experience note themes, originally outlined by the PCG in October 2012, should be revisited. Given the innovative nature of the pilots, capturing both process and outcome is important. Case studies or stories of the pilots should also reflect the different country and project realities and the unique challenges faced.

2. As soon as the respective first-generation wastewater treatment project(s) is underway, each Pilot Executing Agency should prepare a financial status report on actual performance and expected repayments to the fund, which should include a medium-term “amortization” plan covering the initial capital amount provided by CREW. The financial status report should also include any changes to the policy for replenishing the wastewater revolving fund and expectations for additional capitalization.

Agree in principle. No further comment.

3. The Guyana approach through public-private partnerships is facing unique challenges, resulting in three interrelated recommendations: First, the Project Management Unit should develop a robust list of potential projects in both the public and private sectors, to serve as a backup in the event the current project(s) does not come to fruition.

Agree in principle. No further comment.

4. Second, Guyana’s unique public-private partnership model requires specific technical inputs to help the PCG structure operations and perform requisite due diligence. The PMU should access conceptual orientation, specialized training and technical advice on developing PPPs through a recognized source of this expertise.

Agree in principle. Does Component 1 have these funds available? No further comment.

5. Third, small-scale enterprises that are interested in presenting wastewater treatment projects do not have the skill and capacity to develop technical designs and acceptable project proposals. The IACG should identify and approve an appropriate mechanism to assist

Guyana in providing requisite assistance to these small firms. The IDB has several appropriate models for providing technical assistance to the private sector.

No comment but seems reasonable. Outside of scope of UNEP.

6. The IACG should meet regularly on a quarterly basis, as set forth in the Memorandum of Understanding, which will allow it to monitor implementation progress and propose timely corrective measures. Using a web-based format will serve to keep transaction costs to a minimum. Formal face-to-face meetings could continue on an annual basis, as needed and appropriate.

Agreed. Perhaps Telecons or Skype calls could also be considered as alternatives to Videocons, especially if persons are not in an IDB office.

7. Both IDB and UNEP should each assign an additional permanent representative to the IACG. These individuals should be full-time staff of IDB and UNEP, based in the region, who can bring sufficient on-the-ground familiarity of CReW to contribute to management oversight and decision-making.

Seems reasonable but in the case of UNEP, is the proposal then to have someone from UNEP ROLAC or will CAR RCU be formally included as a member of the IACG? This is not clear. Isabelle to advise. This should be done in such a way that it does not lead to more bureaucracy.

8. The MTE recommends two actions to bolster CAR/RCU's implementation capacity in order to accelerate the policy reform, capacity building and communications components and, in particular, to expedite the approval and implementation of the SSFAs. First, allocate a specific percentage of the Financial/Administrative Specialist's time to assist the CAR/RCU in specific functions related to administering the SSFAs. Second, transfer necessary financial resources to CAR/RCU to provide for an additional consultant position to provide substantive technical support for implementing the regional level activities under Components 2 and 3.

Agree in principle. There are some tasks that only a UNEP SM can do e.g. in IMIS but as far as preparation, monitoring and feedback – the assistance of the CReW PCG Financial Administrative Assistant is welcomed. It is unclear where the additional financial resources will be coming from to CAR RCU for the additional consultant position. However we agree in principle to this and have already made partial provision for that type of support. The recruitment mechanism may have implications for how long that person can be employed and approval may have to be obtained from Headquarters. Some funds are available and can be allocated to provide this additional support in 2014 and 2015 while working on the budget revision.

9. The MTE recommends that CReW prioritize and commence two activities as soon as possible. The first is the environmental and natural resource assessments (ENRA) that contribute to public policy discussions by demonstrating the economic impact of pollution. The second activity is training in, and preparation of, a detailed implementation plan

(resources, budget and timetable) for a regional monitoring, evaluation and reporting (M&E) framework for wastewater management.

Agreed – The first has already started and it is expected to be full started by April 2014. It is proposed that a technical advisory committee be established at the next PSC meeting and discussions on this be held during the 1st LBS STAC workshop in June.

10. The MTE recommends de-emphasizing or dropping two activities that are ancillary to the objectives of CReW. The first is the incorporation of wastewater management and sanitation into education curricula throughout the region. The second activity to drop is the development of a communication strategy to build awareness on sanitation issues in rural communities.

We are not in agreement with the recommendation to drop the activities completely but agree they could be scaled back and more realistic outputs defined. This is already reflected in the revised results matrix. Some of the justification is provided below:

CXC Curriculum Activity

Root Problems identified in Project Development Phase

- *Lack of awareness on wastewater issues across multiple audiences*
- *Need to promote understanding of wastewater especially young persons;*
- *Opportunity to enhance the focus on wastewater as part of curriculum development especially on School Based Assessments.*
- *Can support Sustainability.*

Justification

- *Only activity targeting secondary school children.*
- *Monies allocated to this activity are quite small.*
- *Based on discussions with the PCG and Communication Specialist, as well as feedback from discussions with CXC, we have already adjusted activities and identified targets that are more realistic and achievable.*
- *Further to those initial discussions with CXC, they have confirmed their interest and identified possible modalities for partnering. We can also draw from the experience of other projects including the OECS Biodiversity Project and Climate Change.*

Rural Sanitation Activity

Root Problems identified in Project Development Phase

- *Lack of awareness on negative impact of wastewater at the local community level.*
- *Importance of the MDGs and Post 2015 Development Agenda relating to water, wastewater, water quality and sanitation.*

- *While the project is not a sanitation project, the text in the project document does speak to the need to improve awareness relating to sanitation.*

Justification

- *In many countries, the immediate priority for wastewater management is linked to issues of sanitation and public health. This was highlighted by PAHO at the recent media workshop, the last Meeting of Ministers of Wastewater.*
- *Supports UNEP Strategic focus on gender - impacts on water.*
- *Only activity that targets concrete action at the local community level where measurable stress reduction impacts are possible. This allows higher visibility and project buy in than other softer policy and legal interventions.*
- *We have recognized that simply doing a rural sanitation campaign is inadequate and during our joint review with the PSG, this has been adjusted so that we are including an element of development and implementation of decentralized technologies that address both wastewater and sanitation.*
- *UNEP is developing a very similar integrated water, wastewater and sanitation project for a rural community in Jamaica involving FAO, UNDP, PAHO and the GEF SGP. This will also allow twinning and exchange of lessons learned.*

Both projects involve support and raising the profile in non pilot countries.

11. CReW should make every effort to ensure that the four Central American countries participate as full beneficiaries for the remainder of the project. Specifically, the PCG should assign the Technical Specialist, who is the only native Spanish-speaking staff member, to be the CReW liaison to these four countries. His role will be to ensure agile implementation of the SSFAs, to capture unique and valuable lessons learned from Central American experiences that are applicable to the WCR, establish contact with relevant Central American institutions working in the wastewater sector and identify potential first-generation projects for a possible CReW II.

Agreed. More active engagement is also expected following the Regional Workshop in Cuba. Panama is one of the countries where the resource valuation will be done and Honduras is under consideration for the rural sanitation strategy as one of two pilots.

12. Over the remainder of the project, and with the support of outside technical assistance, CReW should consider a broader menu of learning and training approaches, in order to enhance potential impact and replicability of training events, expand opportunities to a larger pool of participants and reduce the cost per participant. Options should consider formal and non-formal learning, on-line and face-to-face venues, equivalent content in both English and Spanish, and open access by working professionals and technicians.

Agreed – proposed that this be done through Water Center, CAWASA, CWWA, CDB, GWP C and UWI and is reflected in the 2014/2014 Work Plan. This is also a consideration as the GEF CReW Project website is being upgraded in the course of 2014. The PCG and CAR RCU have agreed in the past that training materials from courses so far organized should be made

available via the website, and be promoted as being available. This is to be done, in both English and Spanish, once materials are edited.

13. Considering the wealth of information and experience that is available in the Caribbean on wastewater management, the CReW should enhance the content of its communication and outreach instruments. Topics should include the economics of wastewater, sanitation infrastructure financing, sector policy debates, pros and cons of various technological options, and the role of successful regulation, just to name a few. Print media, electronic bulletins, website content and Facebook have an important role to play in networking and dissemination of ideas to set the groundwork for future replication. Content should focus more on wastewater issues and less on CReW-sponsored activities and personalities.

Agreed – We will incorporate into Work Plan. One of the aims of the quarterly newsletter, in particular, is to chronicle project activities but technical articles as well as articles telling of experiences elsewhere can be added. Use of social and electronic media can be expanded and accelerated.

14. The IACG with support of the PCG should review the performance of the national focal points during the first two years of CReW to assess whether assumptions and expectations about their role are still valid. The review should gauge the extent to which NFPs are able to engage effectively in dialogue on wastewater management (often beyond their official mandates) with essential government, media and private sector actors.

Agreed – This is complex as there still seems to be lack of clarity among some persons of their role as focal points in both pilot and non-pilot countries. In reviewing performance of focal points – roles must be clearly identified and understood as well as expectations.

15. To celebrate moving toward compliance with the LBS Protocol or discuss results of technical analysis performed under an SSFA, or other CReW-related achievement, the PCG and CAR/RCU should conduct a joint high-level mission to at least three CReW countries. The purpose of the missions will be to dialogue with country decision-makers on wastewater challenges, celebrate important progress, and encourage the continued consolidation of an informal national wastewater coalition. Secondly, these missions will help to create a unified “face” of CReW by publicly linking the financial and policy components, and can help countries consolidate a national message with respect to their wastewater management agenda.

Agreed – This could also take place on the fringes of already planned meetings and workshops in selected countries.

16. Given the delays in implementing the pilot financing mechanism and rolling out the support for policy, legal and regulatory reforms, the IACG should request a one-year extension.

Agreed.

17. To avoid unclear lines of authority and duplicative reporting requirements, in those countries where IDB loan co-finances the first-generation CReW project, responsibility for oversight and support during the construction phase of sanitation works should be passed from the PCG to the IDB specialist.

No comment.

18. Prior to year four of project execution, the Pilot Executing Agencies should identify the financial and human resources required to internalize the operating costs of the wastewater revolving fund once CReW project financing ends.

Agreed.

19. IDB and UNEP, in consultation with the Project Steering Committee, should consider developing a follow-on project to pursue replicating the PFM in additional countries, and to move all countries of the Wider Caribbean Region closer to compliance under the LBS Protocol through policy reform and institutional strengthening. Due to the long gestation period for acquiring funding, activities to conceptualize and design a follow-on project should begin as soon as possible.

Agreed.