

TERMS OF REFERENCE

BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize

ASSESSING THE ECOSYSTEM BENEFITS OF THE CAYE CAULKER WASTEWATER TREATMENT PLANT

1. Background

- 1.1. Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019.
- 1.2. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.
- 1.3. To address these challenges, Belize Water Services Limited (BWS) aims to design a wastewater treatment plant with climate and nature considerations. This aligns with Belize's broader environmental commitments, such as its 2021 blue bond issuance, which supports ocean protection and sustainable development. Strengthening BWS's capacity to design climate-resilient infrastructure is crucial for leveraging green finance and enhancing environmental sustainability.
- 1.4. This consultancy is part of the IDB-supported operation BL-L1051: "IDB CLIMA - Strengthening Marine Ecosystem Resilience by Enhancing Wastewater Infrastructure in Caye Caulker." Its primary goal is to improve marine ecosystem health and sanitary conditions in Caye Caulker through sustainable wastewater management, while also building BWS's capacity for innovative, low-carbon investments.

2. Objective

- 2.1. The objective of this consultancy is to assess the environmental and ecosystem benefits of the proposed wastewater treatment plant in Caye Caulker, with a focus on improved water quality, the health of seagrass, coral reefs, and mangroves, and the enhanced ecosystem services provided by these habitats.

3. Scope of services

- 3.1. The consultancy involves establishing a baseline for water quality parameters around Caye Caulker, focusing on metrics such as nutrient levels, turbidity, dissolved oxygen, salinity, and contaminants.
- 3.2. Additionally, it requires a comprehensive assessment of the health and status of key ecosystems, including seagrass meadows, coral reefs, and mangroves. For seagrass meadows, this includes evaluating their coverage, density, and biodiversity. For coral reefs, the analysis will focus on live coral cover, species diversity, and bleaching incidence. For mangroves, the assessment will examine their extent, biomass, and associated biodiversity.
- 3.3. The consultancy also includes an analysis of ecosystem services provided by these habitats. This involves documenting services such as carbon sequestration, fisheries support, and coastal protection, with an effort to quantify these services where feasible. It will also explore how the wastewater treatment plant contributes to reducing nutrient loading, improving the health of marine ecosystems, and supporting biodiversity.

4. Key activities

- 4.1. **Revision of Expected Climate Change Impacts on Ecosystem Services:** Conduct an initial review of the expected impacts of climate change on ecosystem services in Caye Caulker. This activity will be based on secondary data. It will include:
 - Reviewing existing studies and datasets to assess potential changes in ecosystem services due to climate change.
 - Reviewing existing literature in the Caribbean.
 - Identifying critical vulnerabilities in seagrass meadows, coral reefs, and associated ecosystem services under projected climate scenarios.
 - Presenting findings in a format that can inform subsequent planning and decision-making.
- 4.2. **Baseline Assessment of Water Quality:** Conduct a detailed baseline assessment of water quality parameters in and around Caye Caulker, including salinity, nutrient levels, turbidity, dissolved oxygen, and other contaminants detrimental to coral health like pathogens and heavy metals. This will involve:
 - Employing industry-standard marine water sampling and lab analysis protocols to collect and analyze water samples from multiple strategic locations, including offshore areas near the reef, and nearshore areas and regions close to potential wastewater discharge sites. Comparability with existing regional water quality datasets is of special importance.

4.3. **Ecosystem Health Evaluation:** Assess the current health of critical marine ecosystems, focusing on seagrass meadows and coral reefs, and project the anticipated benefits from improved wastewater management. This includes:

- Evaluating seagrass meadows for coverage, density, and biodiversity, particularly in areas most affected by nutrient loading.
- Assessing coral reefs for live coral cover, species diversity, and resilience to bleaching, with an emphasis on how reduced pollution supports coral recovery.

4.4. **Ecosystem Services Assessment:** Document and quantify the ecosystem services provided by seagrass and coral reefs, using relevant data and literature, including IDB's recent research [Economic-Valuation-of-Ecosystem-Services-Provided-by-Blue-Economy-Ecosystems-in-the-Dominican-Republic.pdf](#) [Economic Valuation of the Ecosystem Services of the Mesoamerican Reef, and the Allocation and Distribution of these Values. Tesoro del Caribe: El valor escondido de los ecosistemas azules de República Dominicana - Sostenibilidad](#) This will involve:

- Identifying key services, including carbon sequestration, fisheries support, and coastal protection.
- Quantifying the economic value of these services where feasible, providing a clear link between environmental conditions improvements and socio-economic benefits.

4.5. **Impact Analysis of the Wastewater Treatment Plant:** Evaluate the anticipated socioeconomic benefits of the wastewater treatment plant on water quality and marine ecosystems, emphasizing:

- Reductions in nutrient loading, turbidity, and pollutant discharge.
- Improvements in habitat quality for key marine species, fostering biodiversity and ecosystem resilience.
- Enhanced conditions for ecosystem services, such as healthier fish stocks and improved natural coastal defenses.

4.6. **Reporting and Documentation:** Prepare comprehensive reports to document methodologies, findings, and recommendations. This will include:

- A baseline water quality and ecosystem health report.
- An impact analysis report detailing the benefits of the wastewater treatment plant.
- A final synthesis report summarizing key outcomes, including technical recommendations.

5. Expected outcomes and deliverables

5.1. **The consultant(s) are expected to deliver the following products:**

- Product 1: A detailed work plan outlining the approach, timeline, and milestones for all activities, including data collection, analysis, and stakeholder engagement.

- Product 2: A comprehensive report documenting the baseline conditions of water quality and the health of seagrass meadows and coral reefs including key parameters such as species, nutrient levels, biodiversity, and habitat extent.
- Product 3: An assessment of the ecosystem services provided by seagrass and coral reefs, including quantified benefits such as carbon sequestration, fisheries support, and coastal protection, where feasible.
- Product 4: A detailed analysis of the environmental benefits of the wastewater treatment plant, highlighting improvements in water quality, ecosystem health, and ecosystem services.
- Product 5: A final report summarizing all findings, comparative analyses of pre- and post-intervention scenarios, and actionable recommendations for enhancing the environmental benefits of the wastewater treatment plant and scaling similar interventions across Belize.

6. Project Schedule and Milestones

6.1. Schedule and Milestones:

| Deliverable | Date | Payments |
|-------------|---------------------------------------|----------|
| Product 1 | 0.5 month after signing the contract | 10% |
| Product 2 | 1.5 months after signing the contract | 30% |
| Product 3 | 1.5 months after signing the contract | 30% |
| Product 4 | 2 months after signing the contract | 20% |
| Product 5 | 2.5 months after signing the contract | 10% |

7. Reporting requirements

- 7.1. The consultant will present the deliverables following the schedule established in section 6 of these terms of reference. The deliverables must include reports in Word, PowerPoint presentation, and other documents used as the basis of the analysis (including other formats such as Excel spreadsheets, etc.) and a folder with the list of bibliographic references used to develop the analysis.
- 7.2. All materials must be delivered in English and submitted to the project team leaders Rodrigo Riquelme and Gerard Alleng.
- 7.3. All reports, studies, plans, drawings, source code, technical data, specifications, and any other material prepared by or worked upon by the consultant exclusively for the IDB under this Agreement are the sole and exclusive property of the IDB and as such the IDB has exclusive title, rights, and interest in all such material including the right of dissemination, reproduction, and publication.

8. Acceptance Criteria

- 8.1. Payments will be authorized once the IDB accepts the products specified by the TOR. The IDB will have up to two weeks to provide written comments/ recommendations on the consultants' reports. Unless previously determined, the IDB will generally accept the deliverables once the consulting firm confirms the following: (i) receipt and additional inclusion of comments/recommendations in a revised version and (ii) provision of date for presentation of the revised versions of the submitted deliverables. The consultants are expected to include these comments two weeks after receipt.
- 8.2. The IDB Official Exchange Rate indicated in the Request for Proposals (RFP) will be applied for necessary conversions of local currency payments.

9. Selection Criteria

- 9.1. The consulting firm should ensure that the proposed team of experts includes personnel with advanced knowledge and practical experience in areas relevant to this assignment. The selection criteria are as follows:

9.2. Education:

- A member of the team with a graduate degree in environmental science, marine biology, natural resource management, or a related field is required.
- A member of the team with a graduate degree in ecology, marine science, environmental engineering, or related disciplines is highly desirable.

9.3. Experience:

- A minimum of 10 years of relevant work experience in environmental impact assessment, ecosystem health analysis, water quality monitoring, or related areas, with a focus on coastal or marine ecosystems.
- At least 5 years of demonstrated experience in analyzing ecosystem services, including carbon sequestration, fisheries support, and coastal protection. Knowledge of seagrass, coral reefs, and mangroves is essential.
- Prior work experience in the Latin American and Caribbean region, particularly in Belize, or other Small Island Developing States (SIDS), is considered a strong asset.
- Proven experience in designing and implementing projects that evaluate environmental impacts of infrastructure development, with specific expertise in wastewater management and its implications for marine ecosystems.

9.4. Core and Technical Competencies:

- Excellent analytical skills, including the ability to synthesize large datasets and deliver clear, actionable recommendations.
- Exceptional communication skills, including technical report writing and public presentation abilities.

- Proven leadership and project management skills, with experience managing multidisciplinary teams and delivering complex projects on time and within budget.
- A demonstrated ability to work collaboratively with senior government officials and other stakeholders in high-level discussions and decision-making processes.
- Creative and practical problem-solving skills, with the capacity to address challenges in resource-constrained settings.
- Proficiency in the use of tools and software for spatial analysis, ecosystem modeling, or statistical analysis is an asset.

9.5. Language:

- Excellent command of oral and written English is required.

TERMS OF REFERENCE

BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize

CONSULTANCY TO DEVELOP A SLUDGE MANAGEMENT PLAN

Post of Duty: Belize

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position:

We are looking for a consultant with experience in the development of a sludge management plan for a wastewater treatment system, with a proven track record working in projects involving small island states and climate-vulnerable countries.

Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.

To address these challenges, Belize Water Services Limited (BWS) aims to design a wastewater treatment plant with climate and nature considerations. This aligns with Belize's broader environmental commitments, such as its 2021 blue bond issuance, which supports ocean protection and sustainable development. Strengthening BWS's capacity to design climate-resilient infrastructure is crucial for leveraging green finance and enhancing environmental sustainability.

This consultancy is part of the IDB-supported operation BL-L1051: "IDB CLIMA - Strengthening Marine Ecosystem Resilience by Enhancing Wastewater Infrastructure in Caye Caulker." Its primary goal is to improve marine ecosystem health and sanitary conditions in Caye Caulker through sustainable wastewater management, while also building BWS's capacity for innovative, low-carbon investments.

What you'll do:

- **Assessment of Sludge Characteristics:**
 - Conduct a comprehensive analysis of the sludge generated by the wastewater treatment plant, including quantity and quality (characteristics), and potential contaminants.
 - Evaluate the current sludge management practices and identify areas for improvement.
- **Evaluation of Treatment and Disposal Options:**
 - Assess the existing WWTP design and propose optimization, or complementary sludge treatment technologies (e.g., anaerobic digestion, composting) and their feasibility for implementation in Caye Caulker.
 - Evaluate final disposal options, including land application, landfill and/or circular use, considering environmental impact and regulatory compliance.
- **Reuse and Resource Recovery:**
 - Review and assess the national guidelines for reuse of sludge and in the case that there are no guidelines, propose a draft.
 - Explore opportunities for sludge reuse and resource recovery, such as biogas production, nutrient recovery, and use as soil conditioner.
 - Provide a detailed analysis of the benefits, costs, and potential markets for recovered resources.
- **Cost Analysis:**
 - Provide a detailed cost analysis for each sludge management option, including initial investment, operation and maintenance costs, and potential savings.
 - Compare the costs of different sludge management strategies.
- **Risk Assessment:**
 - Identify potential risks associated with the sludge management option chosen, including technical, financial, and environmental and social risks.
 - Propose mitigation strategies for identified risks.
- **Implementation Plan:**
 - Develop and operation and maintenance manual for the existing treatment and the complementary proposal
 - Develop a comprehensive implementation plan for the selected sludge management strategy, detailing the steps required, timelines, and necessary resources.
 - Include recommendations for installation, and integration of sludge management systems.

Deliverables and Payments Timeline:

| Deliverable | Date | Payments |
|---|--------------------------------------|-----------------|
| Product 1: A detailed work plan outlining the approach, timeline, and milestones for all activities. | 0.5 month after signing the contract | 10% |
| Product 2: Comprehensive report on treatment, disposal, and reuse options, including cost analysis and risk assessment. | 1 month after signing the contract | 30% |
| Product 3: Implementation plan for the selected sludge management strategy, including detailed steps, timelines, and resource requirements. | 3 months after signing the contract | 50% |
| Product 4: Final report summarizing all findings, recommendations, and a roadmap for future sludge management improvements. | 4 months after signing the contract | 20% |

What you'll need

Education: A graduate degree in environmental science, wastewater management, or a related field is required.

Experience: A minimum of 10 years of relevant work experience in sludge management for wastewater treatment systems. Proven experience in cost analysis, risk assessment, and implementation planning for sludge management projects. Prior work experience in the Latin American and Caribbean region, particularly in Belize, is considered a strong asset.

Languages: Proficiency in English, both oral and written is required.

Key Skills

- Strong knowledge of sludge treatment technologies and disposal methods.
- Ability to conduct detailed cost analysis, risk assessment, and feasibility studies.
- Proven experience in delivering complex projects on time and within budget.
- Exceptional report writing and public presentation abilities.
- Creative and practical problem-solving skills, with the capacity to address challenges in resource-constrained settings.

Requirements:

- **Citizenship:** You are a citizen of one of our 48-member countries with residency or legal permit to work in Belize.
- **Consanguinity:** You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

Type of contract and duration:

- **Type of contract:** Products and External Services Consultant (PEC), Lump Sum.
- **Length of contract:** 4 months.
- **Work Location:** Remote with at least one visit to Belize.

What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A **competitive compensation** package.
- A flexible way of working. You will be evaluated by deliverable.

Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions. Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at diversity@iadb.org to request reasonable accommodation to complete this application.

Our Human Resources Team reviews carefully every application.

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BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize

CONSULTANCY TO EXPLORE RENEWABLE ENERGY ALTERNATIVES FOR A WASTEWATER TREATMENT PLANT IN CAYE CAULKER

Post of Duty: Belize

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position:

We are looking for a consultant with experience in the development of renewable energy solutions for infrastructure systems, with a proven track record working in projects involving small island states and climate-vulnerable countries. As a consultant, you will lead the exploration of renewable energy alternatives for a wastewater treatment plant in Caye Caulker, in coordination with the government and relevant actors.

Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.

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This consultancy is part of the IDB-supported operation BL-L1051: "IDB CLIMA - Strengthening Marine Ecosystem Resilience by Enhancing Wastewater Infrastructure in Caye Caulker." Its primary goal is to improve marine ecosystem health and sanitary conditions in Caye Caulker through sustainable wastewater management, while also building BWS's capacity for innovative, low-carbon investments.

What you'll do:

- **Assessment of Renewable Energy Alternatives:**
 - Conduct a comprehensive analysis of various renewable energy sources for powering the wastewater treatment plant.
 - Evaluate the feasibility of fully renewable-powered operation, partial renewable-powered operation, and renewable energy as a backup power source.
- **Energy Storage Solutions:**
 - Assess the feasibility and benefits of integrating energy storage solutions, such as batteries, to enhance energy reliability and stability.
 - Provide a detailed analysis of the capacity, costs, and maintenance requirements of different energy storage options.
 - Assess any environmental and social risks associated with energy storage.
- **Cost-Benefit Analysis:**
 - Conduct a comprehensive cost-benefit analysis for each renewable energy alternative and energy storage solution. Providing a detailed analysis of costs, including initial investment, operation and maintenance expenses, and potential long-term savings.
 - Evaluating the materialized benefits, encompassing both economic benefits (e.g., energy cost savings, reduced fossil fuel dependency) and social benefits (e.g., improved public health, reduced greenhouse gas emissions, enhanced energy security).
 - Comparing the overall costs and benefits of renewable energy alternatives with those of conventional energy sources to highlight potential advantages and trade-offs.
- **Risk Assessment:**
 - Identify potential risks associated with each renewable energy alternative and energy storage solution, including technical, financial, and environmental and social risks. Also, include risks associated to the exposure to natural disasters.
 - Propose mitigation strategies for identified risks.
- **Detailed design**
 - Based on the assessment, develop alternatives study (at least two) for the optimal solution for the Caye Caulker project.
 - Engage the relevant stakeholder to choose options to go forward.
 - Detailed design of the selected option, including technical documents, drawings, technical specifications, operations and maintenance manuals.
- **Implementation Plan:**
 - Develop a comprehensive implementation plan for each alternative, detailing the steps required, timelines, and necessary resources.
 - Include recommendations for procurement, installation, and integration of renewable energy systems and energy storage solutions.
 - Highlight training and capacity building needs, measures, timelines and costs related to infrastructure operation for each alternative. Taking into consideration the long-term

nature of institutional capacity building in SIDS, evaluate the potential role of BWS and other local anchor institutions (e.g. universities) in the suggested training program(s).

Deliverables and Payments Timeline:

| Deliverable | Date | Payments |
|--|--------------------------------------|-----------------|
| Product 1: A detailed work plan outlining the approach, timeline, and milestones for all activities. | 0.5 month after signing the contract | 10% |
| Product 2: A comprehensive report on the feasibility of each renewable energy alternative and energy storage solution, including cost analysis and risk assessment. | 1 month after signing the contract | 30% |
| Product 3: Alternative analysis and detailed design of the chosen option. | 3 months after signing the contract | 50% |
| Product 4: A final report summarizing all findings, comparative analyses, and actionable recommendations for implementing the most viable renewable energy alternative and energy storage solution. An implementation plan for each alternative, with detailed steps, timelines, and resource requirements | 4 months after signing the contract | 20% |

What you'll need

Education: A graduate degree in renewable energy, environmental science, or a related field is required.

Experience: minimum of 10 years of relevant work experience in renewable energy projects, with a focus on solar, wind, or biomass energy. Proven experience in cost analysis, risk assessment, and implementation planning for renewable energy projects. Prior work experience in the Latin American and Caribbean region, particularly in Belize, is considered a strong asset.

Languages: Proficiency in English, both oral and written is required.

Key Skills

- Strong knowledge of renewable energy technologies and energy storage solutions.
- Ability to conduct detailed cost analysis, risk assessment, and feasibility studies.
- Proven experience in delivering complex projects on time and within budget.
- Exceptional report writing and public presentation abilities.

Requirements:

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Type of contract and duration:

- **Type of contract:** Products and External Services Consultant (PEC), Lump Sum.
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BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize CONSULTANCY TO VALIDATE SEA LEVEL RISE RISKS FOR CAYE CAULKER'S WASTEWATER COLLECTION AND TREATMENT INFRASTRUCTURE

Post of Duty: Belize

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position:

We are looking for a consultant with experience in the development of climate risk assessments for infrastructure systems, with a proven track record working in projects involving small island states and climate-vulnerable countries. As a consultant, you will have to lead the development of a risk assessment validation exercise, in coordination with the government and relevant actors. The objective of this analysis is to inform Belize Water Services' (BWS) strategic planning for climate adaptation by leveraging existing literature and modelling exercises to assess the risk of coastal flooding, erosion, and other threats posed by sea level rise to Caye Caulker's water collection and treatment infrastructure.

Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.

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This consultancy is framed in the Technical Cooperation (TC) supporting the IDB operation BL-L1051: "IDB CLIMA - Strengthening Marine Ecosystem Resilience by Enhancing Wastewater Infrastructure in Caye Caulker." Its primary goal is to improve marine ecosystem health and

sanitary conditions in Caye Caulker through sustainable wastewater management, while also building BWS's capacity for innovative, low-carbon investments.

What you'll do:

- Conduct a **comprehensive analysis of secondary data** on the impacts of sea-level rise in Belize, with particular focus on risk assessments, sea level rise and flood hazard projection and mapping exercises, and other literature on hazards relevant to the country's Cayes and Islands along the eastern Barrier Reef.
- Develop a **qualitative assessment of vulnerability and exposure** for Caye Caulker's wastewater infrastructure¹. This assessment should present an analysis of the infrastructure's vulnerability and exposure to hazards related to (or compounded by) sea level rise, including coastal flooding and erosion. Including an assessment of exposure under different climate scenarios is of special interest, including evidence on coastal flooding, rising water tables, and erosion hazards that could impact planned infrastructure investments, and include assessment for different return periods. In addition to hazard exposure, the consultant will need to evaluate the physical vulnerability of current and planned wastewater infrastructure in Caye Caulker, aiming to assess the risk of overflow, breakage, or corrosion of the planned sewer system, as well as inundation or fluctuation of treatment performance for the treatment plant. The assessment should follow the IDB disaster and climate change risk [methodology](#). This task might involve using risk matrices, an indicator-based risk approach, and/or other appropriate qualitative methods depending on the availability of data. The final assessment should include the Disaster Risk Narrative.
- **Review the risk mitigation measures currently identified by BWS** for the Caye Caulker wastewater system, a prioritization of measures, evaluating their efficacy and appropriateness considering the infrastructure's planned lifespan, future revitalization efforts, and BWS' resilience objectives for the project. The consultant will need to assess the identified measures in context of the previously developed assessment of vulnerability and exposure.
- **Develop recommendations for BWS to further safeguard its services in Caye Caulker** against climate impacts. These will need to include additional suggested measures and approximated costs, as well as considerations for an Emergency Response Plan to protect wastewater investments funded by the IDB as part of loan operation BL-L1051 against the identified hazards related to sea level rise. The identified measures should present options for modular, phased implementation and the adaptive management of changing climate hazards.

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Deliverables and Payments Timeline:

| Deliverable | Date | Payments |
|---|---------------------------------------|-----------------|
| Product 1: A detailed work plan outlining the approach, timeline, and milestones for all activities, including data collection, analysis, and engagement with BWS and other relevant actors. | 0.5 month after signing the contract | 10% |
| Product 2: Presentation to BWS on preliminary findings of the evidence synthesis | 1.5 month after signing the contract | 30% |
| Product 3: Report on the hazard exposure and physical vulnerability of Caye Caulker's Wastewater Infrastructure, including recommendations for BWS to adapt planned infrastructure and conduct similar assessments for other projects in their portfolio. | 2.5 months after signing the contract | 60% |

What you'll need

Education: A graduate degree in environmental science, marine biology, natural resource management, or a related field is required.

Experience: A minimum of 10 years of relevant work experience in climate impact assessments or environmental risk assessment, infrastructure vulnerability to climate hazards, climate adaptation planning in SIDS, or related areas, with a focus on infrastructure systems in developing nations.

Languages: Proficiency in Spanish and English, both oral and written is required. Knowledge of the Bank's other official languages (French, Portuguese) is preferred.

Key Skills

- Learn continuously.
- Collaborate and share knowledge.
- Focus on clients.
- Communicate and influence.
- Innovate and try new things.
- Proficiency in the use of tools and software for spatial analysis, hazard mapping, and global circulation modelling is an asset.

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MATERIALITY ASSESSMENT, CLIMATE RISK AND VULNERABILITY ASSESSMENT (CRVA) AND GHG BASELINE FOR BELIZE WATER SERVICES LIMITED (BWSL)

1. Background

- 1.1. Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019.
- 1.2. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.
- 1.3. To address these challenges, Belize Water Services Limited (BWS) aims to design a wastewater treatment plant with climate and nature considerations. This aligns with Belize's broader environmental commitments, such as its 2021 blue bond issuance, which supports ocean protection and sustainable development. Strengthening BWS's capacity to design climate-resilient infrastructure is crucial for leveraging green finance and enhancing environmental sustainability.
- 1.4. This consultancy is part of the IDB-supported operation BL-L1051: "IDB CLIMA - Strengthening Marine Ecosystem Resilience by Enhancing Wastewater Infrastructure in Caye Caulker." Its primary goal is to improve marine ecosystem health and sanitary conditions in Caye Caulker through sustainable wastewater management, while also building BWS's capacity for innovative, low-carbon investments.

2. Objective

- 2.1. The objective of this consultancy is to develop a knowledge baseline for BWS on climate related and nature issues that determine current and future climate hazards on the entity's infrastructure and project portfolio. To do this, a portfolio-wide Climate Risk and Vulnerability Assessment (CRVA) will be performed based on a materiality assessment, and a Greenhouse Gas (GHG) baseline will be established. The results will support BWS's future Climate and Biodiversity Strategy.

3. Scope of services

- 3.1. The consultancy involves conducting a materiality assessment to identify and prioritize relevant climate-related and nature issues for BWS.
- 3.2. Additionally, it requires performing a BWS portfolio-wide Climate Risk and Vulnerability Assessment (CRVA) to determine future climate hazards and their impacts on projects.
- 3.3. The consultancy also includes establishing a Greenhouse Gas (GHG) estimation baseline following the GHG Protocol ²to understand current emissions.
- 3.4. These assessments will form the foundation for setting measurable climate mitigation and adaptation targets for BWS, aligning with national and international standards.

4. Key activities

- 4.1 **Materiality assessment:** Conduct a detailed materiality assessment in line with globally accepted standards (Global Reporting Initiative (GRI), Corporate Sustainability Reporting Directive (CSRD), etc...) aimed at identifying and prioritizing the climate and nature issues most critical to an organization and its stakeholders.
 - Define the stakeholders to engage, including internal (management, employees) and external (government, international partners, NGOs, communities).
 - Review national plans like the NDCs, climate policies, or strategic goals to identify a list of potential material issues (e.g., resilience to climate change, environmental risks).
 - Analyze each issue's impact on the organization and stakeholders using criteria such as urgency, influence, and potential financial or reputational impact.
 - Conduct workshops with stakeholders to validate findings and agree on priorities.
- 4.2 **Climate Risk and Vulnerability Assessment (CRVA):** Develop a comprehensive assessment framework of vulnerability linked to climate risks, in order to identify the most vulnerable type of projects to climate change effects and ensure that strategic and effective investments and interventions will be made by BWS. This includes:
 - Analysis of exposure to climate-related acute and chronic risks and hazards.
 - Evaluation of infrastructure vulnerability to changes in temperature and precipitation and identification of the likelihood of future climate hazards.
 - Assessment of adaptive capacity of the proposed wastewater treatment system and the institutional capacity of BWS to adjust to climate change.
- 4.3 **GHG baseline:**
 - Develop a GHG emissions inventory for BWS, in line with the GHG Protocol's Corporate Standard.

² <https://ghgprotocol.org/>

- Set a list of potential achievable mitigation targets and goals in line with the national climate related commitments.

5. Expected outcomes and deliverables

5.1. The consultant firm is expected to deliver the following products:

- Product 1: A detailed work plan outlining the approach, timeline, and milestones for all activities.
- Product 2: Three reports with preliminary findings (one for each activity), including:
 - List of climate and nature material issues for BWS.
 - review of BWS records of climate-related damage in its infrastructure and evaluation of BWS infrastructure vulnerability, based on stakeholders' interviews and data analysis;
 - BWS GHG emissions profile based on current infrastructure and activities (based on scope 1 analysis of GHG Protocol).
- Product 3: A final report summarizing all findings, CRVA and GHG baseline, and mitigation recommendations to be aligned with Belize's national climate commitments.

6. Project Schedule and Milestones

6.1. Schedule and Milestones:

| Deliverable | Date | Payments |
|---|---------------------------------------|----------|
| Product 1: Workplan | 0.5 month after signing the contract | 10% |
| Product 2: Three preliminary findings reports | 2.5 months after signing the contract | 45% |
| Product 3: Final report | 5 months after signing the contract | 45% |

7. Reporting requirements

- 7.1. The consultancy firm will present the deliverables following the schedule established in section 6 of these TOR. The deliverables must include reports in Word, PowerPoint presentation, and other documents used as the basis of the analysis (including other formats such as Excel spreadsheets, etc.) and a folder with the list of bibliographic references used to develop the analysis.
- 7.2. All materials must be delivered in English and submitted to the project team leaders Rodrigo Riquelme and Gerard Alleng.
- 7.3. All reports, studies, plans, drawings, source code, technical data, specifications, and any other material prepared by or worked upon by the consultant(s) exclusively for the IDB under this Agreement are the sole and exclusive property of the IDB and as such the IDB has exclusive

title, rights, and interest in all such material including the right of dissemination, reproduction, and publication.

8. Acceptance Criteria

- 8.1. Payments will be authorized once the IDB accepts the products specified by the TOR. The IDB will have up to two weeks to provide written comments/recommendations on the consultant firm reports. Unless previously determined, the IDB will generally accept the deliverables once the consulting firm confirms the following: (i) receipt and additional inclusion of comments/recommendations in a revised version and (ii) provision of date for presentation of the revised versions of the submitted deliverables. The consultant firm is expected to include these comments two weeks after receipt.
- 8.2. The IDB Official Exchange Rate indicated in the Request for Proposals (RFP) will be applied for necessary conversions of local currency payments.

9. Selection Criteria

- 9.1 The consulting firm should ensure that the proposed team of experts includes personnel with advanced knowledge and practical experience in areas relevant to this assignment. Also, the proposed team of experts should include a Belize's national consultant within the working group. The selection criteria are as follows:

Education:

- A member of the team with a graduate degree in environmental science, natural resource management, or a related field is required.
- A member of the team with a graduate degree in industrial, environmental engineering, or related disciplines is required.

Experience:

- A minimum of 10 years of relevant work experience in environmental impact analysis, GHG emissions estimation (GHG Protocol) and mitigation measures.
- At least 5 years of demonstrated experience in analyzing climate related vulnerabilities and in working with risks assessments.
- Prior work experience in the Latin American and Caribbean region, particularly in Belize, or other Small Island Developing States (SIDS), is considered a strong asset.
- Proven experience in designing and implementing projects that evaluate environmental impacts of infrastructure development, with specific expertise in water and sanitation projects.

Core and Technical Competencies:

- Excellent analytical skills, including the ability to synthesize large datasets and deliver clear, actionable recommendations.
- Exceptional communication skills, including technical report writing and public presentation abilities.

- Proven leadership and project management skills, with experience managing multidisciplinary teams and delivering complex projects on time and within budget.
- A demonstrated ability to work collaboratively with senior government officials and other stakeholders in high-level discussions and decision-making processes.
- Creative and practical problem-solving skills, with the capacity to address challenges in resource-constrained settings.

Language:

- Excellent command of oral and written English is required.

TERMS OF REFERENCE

BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize

NATIONAL CLIMATE CHANGE FINANCING STRATEGY UPDATE

1. Background

- 1.1 Belize, a country with diverse ecosystems and a significant portion of its economy reliant on natural resources, is committed to addressing climate change through its Nationally Determined Contributions (NDCs). The updating of Belize's national climate change strategy is crucial to align with NDC 3.0 and other national targets, ensuring sustainable development and resilience against climate impacts.
- 1.2 Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019.
- 1.3 Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.
- 1.4 To address these challenges, Belize Water Services Limited (BWS) aims to design a wastewater treatment plant with climate and nature considerations. This aligns with Belize's broader environmental commitments, such as its 2021 blue bond issuance, which supports ocean protection and sustainable development. Strengthening BWS's capacity to design climate-resilient infrastructure is crucial for leveraging green finance and enhancing environmental sustainability.
- 1.5 This consultancy is part of the IDB-supported operation BL-L1051: "IDB CLIMA - Strengthening Marine Ecosystem Resilience by Enhancing Wastewater Infrastructure in Caye Caulker." Its primary goal is to improve marine ecosystem health and sanitary conditions in Caye Caulker through sustainable wastewater management, while also building BWS's capacity for innovative, low-carbon investments.

2. Objective

- 2.1 The objective of this consultancy is to update Belize's national climate change strategy in line with NDC 3.0 and other national targets, strengthening the capacity of BWS and the

Government of Belize to secure climate finance, including green and thematic debt issuance.

3. Scope of services

3.1 The consultancy involves:

3.2 **Climate Finance Needs Quantification:** Assess and quantify the financial requirements necessary to implement Belize's updated climate change strategy. This includes identifying the specific funding needs for various climate initiatives and projects.

3.3 **Updated Climate Finance Strategy:** Develop a comprehensive climate finance strategy that aligns with NDC 3.0 and other national targets. This strategy should outline the best financial instruments to tap into, such as blended finance, thematic bonds, grants, and other mechanisms, and provide guidance on how to effectively utilize them.

3.4 **Capacity Building Plan:** Design and implement a capacity-building plan for the relevant government agencies, namely the Climate Finance Unit, National Climate Change Office and Ministry of Finance. This plan should focus on enhancing their ability to secure and manage climate finance, including training on climate finance mechanisms and the implementation of the updated strategy.

4. Key activities

- **Review of Existing Climate Change Strategy:** Analyze the current national climate change strategy, identifying gaps and areas for improvement in alignment with NDC 3.0 and other national targets.
- **Stakeholder Engagement:** Conduct consultations with key stakeholders, including government agencies such as the Climate Finance Unit and National Climate Change Office, and international partners, to gather input and ensure the updated strategy reflects diverse perspectives and needs.
- **Quantification of Climate Finance Needs:** Assess and quantify the financial requirements for implementing the NDC 3.0 as well as the finance, technology & capacity needs identified in Belize's 2021 BUR and additional key targets of the government.
- **Identification of Financial Instruments:** Determine the best financial instruments to tap into, such as blended finance, thematic bonds, grants, and other mechanisms, and provide guidance on how to best utilize them.
- **Development of Updated Strategy:** Draft the updated national climate change strategy, incorporating findings from the baseline assessment and stakeholder consultations.
- **Capacity Building:** Provide training and capacity-building sessions for relevant government agencies on climate finance mechanisms and the implementation of the updated strategy.

5. Deliverables

- **Product 1:** A detailed work plan outlining the approach, timeline, and milestones for all activities, including data collection, analysis, and stakeholder engagement.
- **Product 2:** A comprehensive report documenting the financial requirements for implementing the updated climate change strategy and identifying the best financial instruments to utilize.
- **Product 3:** The updated national climate change strategy document, aligned with NDC 3.0 and other national targets.
- **Product 4:** Training materials and reports on capacity-building sessions conducted.

6. Project Schedule and Milestones

6.1 Schedule and Milestones:

| Deliverable | Date | Payments |
|-------------|--------------------------------------|----------|
| Product 1 | 0.5 month after signing the contract | 10% |
| Product 2 | 2 months after signing the contract | 30% |
| Product 3 | 4 months after signing the contract | 30% |
| Product 4 | 5 months after signing the contract | 30% |

7. Reporting requirements

7.1 The consultant(s) will present the deliverables following the schedule established in section 6 of these TOR. The deliverables must include reports in Word, PowerPoint presentation, and other documents used as the basis of the analysis (including other formats such as Excel spreadsheets, etc.) and a folder with the list of bibliographic references used to develop the analysis.

7.2 All materials must be delivered in English and submitted to the project team leaders Rodrigo Riquelme and Gerard Alleng.

7.3 All reports, studies, plans, drawings, source code, technical data, specifications, and any other material prepared by or worked upon by the consultant(s) exclusively for the IDB under this Agreement are the sole and exclusive property of the IDB and as such the IDB has exclusive title, rights, and interest in all such material including the right of dissemination, reproduction, and publication.

8. Acceptance Criteria

8.1 Payments will be authorized once the IDB accepts the products specified by the TOR. The IDB will have up to two weeks to provide written comments/recommendations on the consultant(s)' reports. Unless previously determined, the IDB will generally accept the deliverables once the consulting firm confirms the following: (i) receipt and additional inclusion of comments/recommendations in a revised version and (ii) provision of date for

presentation of the revised versions of the submitted deliverables. The consultant(s) are expected to include these comments two weeks after receipt.

8.2 The IDB Official Exchange Rate indicated in the Request for Proposals (RFP) will be applied for necessary conversions of local currency payments.

9. Selection Criteria

9.1 The consulting firm should ensure that the proposed team of experts includes personnel with advanced knowledge and practical experience in areas relevant to this assignment. The selection criteria are as follows:

9.2 Education:

- A member of the team with a graduate degree in environmental science, climate finance, sustainable development, or a related field is required.
- A member of the team with a graduate degree in finance, economics, environmental engineering, or related disciplines is highly desirable.

9.3 Experience:

- A minimum of 10 years of relevant work experience in climate finance, environmental impact assessment.
- At least 5 years of demonstrated experience in securing and managing climate finance, including blended finance, thematic bonds, and grants. Knowledge of international climate finance mechanisms and instruments is essential.
- Prior work experience in the Latin American and Caribbean region, particularly in Belize, or other Small Island Developing States (SIDS), is considered a strong asset.

9.4 Core and Technical Competencies:

- Excellent analytical skills, including the ability to synthesize large datasets and deliver clear, actionable recommendations.
- Exceptional communication skills, including technical report writing and public presentation abilities.
- Proven leadership and project management skills, with experience managing multidisciplinary teams and delivering complex projects on time and within budget.
- A demonstrated ability to work collaboratively with senior government officials and other stakeholders in high-level discussions and decision-making processes.
- Creative and practical problem-solving skills, with the capacity to address challenges in resource-constrained settings.
- Proficiency in the use of tools and software for spatial analysis, ecosystem modeling, or statistical analysis is an asset.

9.5 Language:

- Excellent command of oral and written English is required.

TERMS OF REFERENCE

BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize CONSULTANCY FOR A PROJECT MANAGER TO SUPPORT BELIZE WATER SERVICES (BWS) WITH THE REQUIREMENTS OF BL-T1179

Post of Duty: Belize

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position:

We are looking for a Project Manager to support Belize Water Services (BWS) in managing the requirements of the Technical Cooperation (TC) under the IDB CLIMA program. The consultant will focus on task coordination, data collection management, and facilitating collaboration among BWS teams, technical consultants, and external stakeholders. This role is essential in ensuring that the necessary data gathering and administrative processes run smoothly, allowing technical experts to conduct specialized analyses effectively.

Caye Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.

To address these challenges, Belize Water Services Limited (BWS) aims to design a wastewater treatment plant with climate and nature considerations. This aligns with Belize's broader environmental commitments, such as its 2021 blue bond issuance, which supports ocean protection and sustainable development. Strengthening BWS's capacity to design climate-resilient infrastructure is crucial for leveraging green finance and enhancing environmental sustainability.

What you'll do:

- **Coordination of Data Collection and Management:** The consultant will oversee and facilitate the collection of necessary data for greenhouse gas (GHG) emissions calculations, climate risk and vulnerability assessments (CRVA), and materiality assessments. This includes working closely with BWS teams to ensure that data is collected in a timely and

structured manner, assisting in organizing internal resources, and ensuring that data quality standards are met. The consultant will act as the key liaison between BWS staff and technical consultants conducting specialized analyses.

- **Project Coordination and Task Management:** The consultant will support BWS in managing the workflow of tasks required under the TC, ensuring that all project milestones and deliverables are met on schedule. This will involve tracking progress, maintaining updated work plans, and coordinating inputs from multiple teams within BWS. The consultant will help streamline communication between BWS leadership, technical consultants, and external stakeholders, ensuring that information flows efficiently across all project components.
- **Stakeholder Engagement and Internal Communication:** The consultant will facilitate coordination between BWS, government agencies, development partners, and financial institutions to align the project with Belize's national climate and wastewater management priorities. This will include organizing internal meetings, supporting decision-making processes, and ensuring that BWS staff members are well-informed of their roles and responsibilities within the project.
- **Reporting and Administrative Support:** The consultant will be responsible for compiling progress reports, summarizing key findings from technical consultants, and ensuring that all administrative requirements of the TC are met. This includes preparing reports for BWS and IDB, monitoring compliance with project timelines, and identifying any administrative bottlenecks that may affect implementation.

Deliverables and Payments Timeline:

| Deliverable | Date | Payments |
|---|--------------------------------------|----------|
| Product 1: Detailed work plan outlining approach, timeline, and milestones for project management and coordination. | 0.5 month after signing the contract | 10% |
| Product 2: Progress report on data collection and project coordination, detailing key challenges and resolutions. | 3 months after signing the contract | 30% |
| Product 3: Stakeholder engagement summary and coordination report, outlining progress on inter-agency collaboration. | 6 months after signing the contract | 30% |
| Product 4: Final report summarizing overall project management efforts, lessons learned, and recommendations for sustaining coordination efforts. | 12 months after signing the contract | 30% |

What you'll need

Education: A bachelor's degree in project management, environmental management, business administration, public administration, or a related field is required.

Experience: A minimum of 7 years of relevant work experience in project management, coordination, or administration, preferably in climate resilience, environmental management, or infrastructure projects. Experience managing multi-stakeholder projects and coordinating data collection efforts. Strong organizational and task management skills with the ability to manage multiple workstreams simultaneously.

Languages: Proficiency in English, both oral and written, is required.

Key Skills

- Learn continuously.
- Collaborate and share knowledge.
- Focus on clients.
- Communicate and influence.
- Innovate and try new things.
- Proficiency in the use of tools and software for spatial analysis, hazard mapping, and global circulation modelling is an asset.

Requirements:

- **Citizenship:** You are a citizen of one of our 48-member countries with residency or legal permit to work in Belize.
- **Consanguinity:** You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

Type of contract and duration:

- **Type of contract:** Products and External Services Consultant (PEC), Lump Sum.
- **Length of contract:** 12 months.
- **Work Location:** In person, based in Belize.

What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A **competitive compensation** package.
- A flexible way of working. You will be evaluated by deliverable.

Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.

Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at diversity@iadb.org to request reasonable accommodation to complete this application.

Our Human Resources Team reviews carefully every application.

TERMS OF REFERENCE

BELIZE

BL-T1179: Support the development of an IDB CLIMA pilot project in Belize CONSULTANCY FOR A PROJECT MANAGER TO SUPPORT BELIZE WATER SERVICES (BWS) WITH THE REQUIREMENTS OF BL-T1179

Post of Duty: Belize

The IDB Group is a community of diverse, versatile, and passionate people who come together on a journey to improve lives in Latin America and the Caribbean. Our people find purpose and do what they love in an inclusive, collaborative, agile, and rewarding environment.

About this position:

We are looking for a Final Evaluation Consultant to conduct a concise review of the implementation and outcomes of the Technical Cooperation (TC) under the IDB CLIMA initiative in Belize. The consultant will assess the overall effectiveness and impact of the TC, document lessons learned and provide recommendations for future initiatives.

Caye Caulker is a small limestone coral island located 20 miles north-northeast of Belize City. Divided into north and south sections by a natural split, the island spans about 5 miles by less than 1 mile and is home to approximately 2,000 residents, primarily in the southern area. As a popular tourist destination, over 30% of Belize's overnight visitors chose Caye Caulker as of June 2019. Despite its prominence, the island lacks a centralized wastewater system. Current wastewater management relies on individual septic tanks and pit latrines, many of which are poorly designed due to a high-water table. This inadequate system poses significant risks to human health and the environment. Proximity to the Belize Barrier Reef—part of the UNESCO World Heritage-designated Mesoamerican Reef System—exacerbates concerns, as untreated wastewater can lead to the proliferation of pathogens, threatening reef biodiversity and ecosystem services.

To address these challenges, Belize Water Services Limited (BWS) aims to design a wastewater treatment plant with climate and nature considerations. This aligns with Belize's broader environmental commitments, such as its 2021 blue bond issuance, which supports ocean protection and sustainable development. Strengthening BWS's capacity to design climate-resilient infrastructure is crucial for leveraging green finance and enhancing environmental sustainability.

What you'll do:

- **Review of TC Implementation and Outcomes:** The consultant will review key project documents, including reports, deliverables, and progress updates, to assess whether the TC achieved its intended objectives. The focus will be on evaluating the relevance, effectiveness, and efficiency of the project interventions.

- **Performance Assessment and Lessons Learned:** The consultant will assess the TC's performance against key evaluation criteria, including relevance, efficiency, effectiveness and impact. This will include identifying the best practices, challenges encountered, and areas for improvement.
- **Recommendations and Final Evaluation Report:** The consultant will prepare a concise final evaluation report summarizing findings, conclusions, and key recommendations. The report will highlight lessons learned and provide insights to guide future similar initiatives.

Deliverables and Payments Timeline:

| Deliverable | Date | Payments |
|---|------------------------------------|-----------------|
| Product 1: Draft final evaluation report with key findings and recommendations. | 3 weeks after signing the contract | 50% |
| Product 2: Final evaluation report incorporating stakeholder feedback. | 5 weeks after signing the contract | 50% |

What you'll need

Education: A degree in evaluation studies, public policy, environmental management, development studies, or a related field is required.

Experience: A minimum of 5 years of experience in program evaluation, impact assessment, or monitoring and evaluation (M&E). Experience conducting evaluations for international development projects. Strong analytical and report-writing skills.

Languages: Proficiency in English, both oral and written, is required.

Key Skills

- Ability to conduct rapid evaluations and synthesize key findings.
- Strong communication and stakeholder engagement abilities.
- Experience in climate resilience or infrastructure projects is an asset.

Requirements:

- **Citizenship:** You are a citizen of one of our 48-member countries with residency or legal permit to work in Belize.
- **Consanguinity:** You have no family members (up to the fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB, IDB Invest, or IDB Lab.

Type of contract and duration:

- **Type of contract:** Products and External Services Consultant (PEC), Lump Sum.
- **Length of contract:** 1.5 months.
- **Work Location:** In person, based in Belize.

What we offer

The IDB group provides benefits that respond to the different needs and moments of an employee's life. These benefits include:

- A **competitive compensation** package.
- A flexible way of working. You will be evaluated by deliverable.

Our culture

At the IDB Group we work so everyone brings their best and authentic selves to work, willing to try new approaches without fear, and where they are accountable and rewarded for their actions.

Diversity, Equity, Inclusion and Belonging (DEIB) are at the center of our organization. We celebrate all dimensions of diversity and encourage women, LGBTQ+ people, persons with disabilities, Afro-descendants, and Indigenous people to apply.

We will ensure that individuals with disabilities are provided reasonable accommodation to participate in the job interview process. If you are a qualified candidate with a disability, please e-mail us at diversity@iadb.org to request reasonable accommodation to complete this application.

Our Human Resources Team reviews carefully every application.