

# WETLANDS INTERNATIONAL PANAMA OFFICE Project: Assuring ecological connectivity and community resilience through Nature-based Solutions (NbS) in Jamaica & Grenada

Terms of Reference for the Consultancy: Hydrologic assessment (Hydrology Engineer)

# Consultancy: Hydrologic assessment (Hydrology Engineer) (Jamaica) Dedication time: Consultancy

Type of contract: Professional Services

Location: Kingston Jamaica / Portland Bight Protected Area.

**Duration:** 3 months / Contract period from August 1 to October 31, 2024.

Interested companies or candidates should submit their technical and economic proposals, CVs, cover letter and professional references to [jorge.ruiz@wetlands.org] before July 31, 2024.

### 1. BACKGROUND

Wetlands International is an international organization dedicated to the conservation of wetlands and their resources, for the benefit of nature and people. It is the only non-governmental organization (NGO) dedicated to wetlands. It is a global non-profit organization with more than half a century of experience. We work through our 20 offices, our partners and experts. Most of our work is funded on a project basis through governments and private donations. We also have a growing portfolio of corporate collaborations. The regional office located in Panama is responsible for the development and implementation of the Strategic Intent 2020 – 2030 in collaboration with the other regional office located in Argentina, through coordination with partner organizations, government actors, as well as the implementation of projects. Wetlands International seeks to increase the impact of its work in Latin America and the Caribbean through the development of strategic partnerships and the acquisition of larger, longer-term programs.

Specifically, The project aims to protect and restore mangrove ecosystems in Jamaica's Portland Bight Protected Area (PBPA). This initiative is led by Wetlands International in partnership with the Jamaica Red Cross Society and The International Federation of Red Cross Red Crescent Societies and is supported by the Caribbean Biodiversity Fund -CBF-.

The Multiple Site Mangrove Restoration Project aims to rehabilitate and conserve mangrove ecosystems across various locations in Jamaica. The project seeks to address environmental degradation, enhance biodiversity, and contribute to climate change mitigation efforts. The hydrologist will play a crucial role in assessing and managing water-related aspects of the project.

### 2. OBJECTIVE OF THE CONSULTANCY

The general objective of the consultancy is to undertake a hydrological assessment of one of the selected sites for mangrove restoration. (Sites: 1. Salinas in Old Harbor Bay and 2. Portland Cottage in the Portland Bright Protected Area, Jamaica).







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# Specific objective:

Compile the necessary hydrological data requested by the National Environmental Protection Agency -NEPAto obtain permits to implement the restoration project.

# 3. KEY RESPONSIBILITIES:

### Hydrological site assessment:

- Hydrological assessments to understand water flow, drainage systems, sediment transport, and tidal patterns in the designated project areas.
- Identification of potential risks and opportunities related to fresh/marine water management in the selected site.
- Conduct a minimum of two monitoring sessions to assess water quality parameters, such as salinity, pH, temperature, dissolved oxygen, coliform bacteria, nitrogen, phosphorus, and hydrocarbons.
- Geotechnical information for the selected site, including data on soil properties, subsurface conditions, groundwater levels, and the stability of the riverbanks.
- Specific list of potential impact mitigation strategies/proposals for the list of proposed hydrological solutions at the selected site in order to ensure water flow within the restoration area.

### Data Collection and Analysis:

- Gather relevant hydrological data through field surveys, remote sensing, and existing sources.
- Analyze data to determine water availability, flow rates, sediment transport, and other relevant parameters.
- Hydrological modeling and simulations to predict future scenarios.
- Hydrological findings, including implications for mangrove health and growth.
- Bibliography with at least 20 references between scientific papers, books, technical reports, or other material.

### Water Management Planning:

- A Water management plan for the project site, considering local hydrological conditions, climate change impacts, and project objectives.
- A specific list of hydrological solutions to implement to guarantee the success of the mangrove restoration project.
- Planning and design of water control structures such as canals, levees, and tidal gates.
- Propose recommendations for the sustainable use of water and conservation strategies and best practices for water management to optimize conditions for mangrove survival and growth.

# Monitoring:

- Preparing a proposal for a robust system for continuous monitoring of water-related parameters.
- Prepare a format for periodic reports on the progress of the implementation of the proposed hydrological solutions at the selected site.





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#### **Capacity Development:**

- Provide at least, one training and capacity-building session for project team members and relevant stakeholders on hydrological concepts and techniques.
- Provide technical guidance and support to community groups and stakeholders involved in the project.

### Collaboration and Coordination:

- Take into consideration project stakeholders, including local communities, government agencies, and NGOs.
- Collaborate with other project team members, including ecologists, biologists, and community engagement specialists.

# 4. DUTY STATION

The consultant will work in selected project sites in PBPA with communities and partner organizations.

### 5. CONDITIONS FOR SATISFACTORY COMPLIANCE WITH THE AGREEMENT

The consultant will report to the WI LAC Project Coordinator on all responsibilities.

### 6. FIELD TRIPS / OTHERS

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Must be available to travel to the project sites in the country.

# 7. REQUIREMENTS

### ACADEMIC:

- A minimum of 5 years of professional experience in hydrology or a related field.
- Strong knowledge of hydrological modeling software and data analysis tools.
- Familiarity with mangrove ecosystems and coastal hydrology.
- Excellent communication skills, both written and verbal.
- Ability to work independently and as part of a multidisciplinary team.
- Previous experience in similar restoration projects is an advantage.

#### SKILLS:

- Proficiency in hydrological monitoring techniques and equipment.
- Strong analytical skills and experience with hydrological modeling software.
- Ability to interpret and report complex data effectively.
- Excellent written and verbal communication skills.

#### **Key Competencies:**

- Strong problem-solving and critical-thinking skills.
- Ability to work both independently and as part of a multidisciplinary team.
- High attention to detail and accuracy in data collection and analysis.
- Commitment to environmental sustainability and conservation principles.

### 8. LANGUAGE:

English/Spanish proficiency would be advantageous.









### 9. KNOWLEDGE AND SKILLS:

#### PROFESSIONALISM

- Ability to identify issues, analyze, and participate in the resolution of issues/problems. Ability to apply judgment in the context of given assignments, plan work, and manage conflicting priorities.
- Effective interpersonal skills with a facilitative and advisor-oriented style.

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### TEAMWORK

- Experience in teamwork, with recognition in the field of their specialty to cooperate with consultants from other specialties.
- Excellent communication, articulation, coordination, and teamwork skills to achieve the agreed objectives, facing challenges constructively.

### **10. DURATION OF THE CONSULTANCY**

• The hydrologic assessment lasts three (3) months, (60 working days) ideally it will be contracted for the project period from August 1 to October 31, 2024.

### PAYMENTS AND DELIVERABLES

The consultant shall provide the following deliverables:

- The first deliverable will be an inception report that clearly indicates how the consultant plans to achieve the assigned objectives for this consultancy. The initial report must contain a detailed work plan with timelines.
- Mid-term report at the end of the second month of the consultancy that includes the detailed progress of the items mentioned in section 3 Key responsibilities of the Hydrological assessment ToR.
- Final report of the Hydrological assessment consultancy that includes compliance with the items mentioned in section 3 Key responsibilities of the ToR.
  - Final Hydrological assessment Report as follows:
  - submitted in hardcopy and electronic versions. The electronic version should be sent in an editable format (word, excel, PowerPoint or other, and PDF);
  - written in "Calibri (body)" font, size 11, easy spacing, moderate margins.
  - The document should include an index, introduction, objectives, methodology, discussion results, conclusion, APA format bibliography, and photos.
- Payments will be disbursed in US dollars (USD) in 3 installments based on the completion of the agreed deliverables according to the following table:

40%	Upon approval of the detailed inception report including work plan with timelines	uding work plan	
40%	Upon approval by the FWI Technical team of the mid-term report at the end of the second month of the consultancy (draft of the final document).		





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20%	Upon the approval by the FWI Technical Team of the final report of the Hydrological assessment consultancy at the end of the 3 months (Final hydrological assessment document).	
100%	Total	

### **REPORTING:**

• The Hydrologist will report directly to the WI Project Coordinator and collaborate closely with other project team members.

### **APPLICATION PROCESS**

The acquisition of these consulting services will be carried out by the "Quality and Cost-Benefit Selection" ("QCBS") method, which uses a competitive process between preselected companies or individuals that considers the quality of the proposal or product and the cost of the service in the selection of the winning bidder.

The application process includes the submission of two general technical proposals and two economic proposals (two separate documents for each site), one for the Salinas site in Old Harbor Bay, and one for the Portland Cotagge site, from which only one option will be selected in the final process.

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### **EVALUATION CRITERIA**

The proposals will be evaluated based on the following criteria to ensure a thorough and fair assessment. Each proposal will be scored according to the quality score table provided below.

#### 1. Relevance and Innovation (15 points)

- **Relevance to the objectives**: How well does the proposal align with the primary goals and objectives of the project?
- **Innovative Approach**: Does the proposal offer a new or unique approach to solving the problem or achieving the project goals?

#### 2. Feasibility and Implementation Plan (30 points)

• **Feasibility**: Is the proposed solution practical and achievable within the given timeframe and resources?

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• **Implementation Plan**: How detailed and realistic is the plan for implementing the project? Does it include clear milestones and deliverables?





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#### 3. Expertise and Experience (25 points)

- **Expertise of the Team**: Does the team have the necessary skills and experience to successfully execute the project?
- Past Performance: Has the team demonstrated success in similar projects in the past?

#### 4. Budget and Cost Effectiveness (20 points)

- **Budget Justification**: Is the budget reasonable and well-justified in terms of the proposed activities and outcomes?
- **Cost Effectiveness**: Does the proposal offer good value for money?

#### 5. Impact and Sustainability (10 points)

- **Impact**: What is the potential impact of the project on the target audience or field?
- **Sustainability**: Is there a plan for sustaining the project's outcomes beyond the initial funding period?

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Poor (2)	Unacceptable (1)
Relevance and Innovation	17-20 points	13-16 points	9-12 points	5-8 points	0-4 points
Feasibility and Implementation Expertise and Experience	25-30 points 21-25 points	19-24 points 16-20 points	13-18 points 11-15 points	7-12 points 6-10 points	0-6 points 0-5 points
Budget and Cost Effectiveness Impact and	13-15 points 9-10 points	10-12 points 7-8	7-9 points 5-6 points	4-6 points 3-4	0-3 points 0-2 points
Sustainability		points		points	

#### Quality Score Table

Interested companies or candidates should submit their technical and economic proposals, CV, cover letter and professional references to [jorge.ruiz@wetlands.org] Before July 25, 2024.

All inquiries regarding the consultancy must be requested by indicated email up to July 22, 2024.

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25/06/2024









