

**Building a Sustainable National Marine Protected Area Network
Mangrove Restoration (Phase 2)**

REQUEST FOR PROPOSAL

Title of Position: Mangrove Restoration Expert

Contracting Agency: The Nature Conservancy

Position type: Contractual

Position Location: The Bahamas

Reports to: The Nature Conservancy

Project Timeframe: July 15, 2012 – September 30, 2013

PROJECT BACKGROUND:

During the Seventh Conference of the Parties (COP-7) of the Convention for Biological Diversity (CBD), that was held in Malaysia in February 2004, the signatories reached a historical agreement to promote the establishment and management of national systems for protected areas. The agreement is articulated within a Program of Work on Protected Areas (PoWPA) that includes a series of specific activities that the signatories, including the Government of the Commonwealth of The Bahamas, are committed to implementing within clearly defined time frames.

In an effort to ensure successful implementation of the PoWPA, the Bahamas Environment, Science, and Technology (BEST) Commission, The Bahamas National Trust (BNT), Department of Marine Resources (DMR) and The Nature Conservancy Northern Caribbean Program (TNC NCP) entered into a Memorandum of Understanding to ensure in-country collaboration. Under the NISP Agreement, these agencies have been able to successfully complete a number of assessments including an ecological gap assessment, management effectiveness assessment, capacity assessment and sustainable finance assessment (SFP).

A key recommendation of the SFP was the need to establish a Protected Areas Fund as a mechanism for sustained funding for the Bahamas National Protected Area System (BNPAS). This fund was conceived as an endowment fund with the interest generated from the capital investment being utilised for protected area projects across The Bahamas.

The Bahamas 2020 Declaration was formally presented in Bonn, Germany at the Ninth Conference of the Parties in May 2008. The 2020 Declaration served as the Government of The Bahamas' confirmation of its intent to preserve the country's marine and terrestrial environments and to meet the targets established by the UN CBD PoWPA for 2010 and 2012. The Government of The Bahamas also stated its intent to exceed CBD goals by effectively conserving at least twenty percent (20%) of the near-shore marine resources across The Bahamas by 2020. The declaration was made as part of the official launch of the Caribbean

Challenge, which represents a regional initiative to sustainably finance PA's and ensure effective management to enable them to function in the important role of providing a means to achieve important goals of sustainable fisheries and ecosystem-based adaptation to climate change.

In June 2010, The Bahamas deposited the instruments of accession to the Cartagena Convention for the Protection and Development of the Marine Environment in the Wider Caribbean, including two of its three protocols: the Oil Spills Protocol and the Protocol Concerning Pollution from Land-based Sources and Activities. The Cartagena Convention is the comprehensive, umbrella agreement for the protection and development of the marine environment in the region, and provides the only legal framework for cooperative regional and national actions in the Wider Caribbean Region (WCR). Through the GEF FSP, it is envisioned that The Bahamas will also accede to the third protocol under the Convention; the Biodiversity Protocol Concerning Specially Protected Areas and Wildlife (SPA- just recently passed).

The GEF FSP was developed to achieve The Bahamas' goal of 20 percent conservation of the near-shore marine resources by 2020, as well as the Caribbean Challenge goal of sustainable fisheries and ecosystem-based adaptation to climate change. The GEF FSP will also implement a key recommendation of the SFP, to establish the Bahamas Protected Area Fund (BPAF) as a mechanism for sustainable funding for the BNPAS.

SCOPE OF WORK

Overall Objective:

The main objective to be completed by The Nature Conservancy is to successfully complete Project Component 2.4(2) of the GEF Full Size Project document, a demonstration project on incorporating climate change (phase 1) and mangrove conservation/restoration into conservation planning (phase 2).

Specific Objectives (Phase 2):

The Mangrove Restoration expert will plan and implement mangrove restoration efforts based on the following objectives:

- a. Assess mangrove and fish communities within the Bonefish Pond National and around nearby coral reefs at the suitable site/s selected, to determine if restored mangrove sites will greatly benefit reef species that carry out ontogenetic migration;
- b. Conduct the best, and practical mangrove restoration efforts and;
- c. Develop a community-based monitoring plan for the mangrove restoration site.

Contractor Duties:

The Mangrove Restoration Expert (“Contractor”) will assume the following responsibilities:

- Develop a literature review that highlights past and current mangrove restoration efforts, mangrove restoration monitoring studies and, research that shows the value of connectivity between mangroves and reef-fish species;
- Review any available historical and current data for Bonefish Pond National Park to determine impacts and possible future threats (including climate change and sea level rise) to areas where mangroves were, and are present;
- Identify, train and supervise research team responsible for data collection;
- Groundtruth potential mangrove restoration sites within the Bonefish Pond National Park and select sites most suitable to support productive, long-lasting mangrove restoration. This includes:
 - Conducting pre-restoration baseline assessments within mangrove and fish communities as well as around nearby coral reefs (preferably *Montastraea* reefs) at the site/s that are deemed suitable, to determine if mangroves that are restored will greatly benefit reef species that carry out ontogenetic migration.
- Conduct water quality assessment to determine if there are water-related factors that may prohibit mangrove productivity;
- Document the methodology and results used to conduct baseline assessments;
- Develop maps that show the location and type of mangroves within the Park, nearby coral reefs and, where mangrove restoration will take place;
- Use the results of the baseline assessment to conduct the best, practical mangrove restoration efforts, including:
 - Excavation of areas where sedimentation has limited mangrove productivity and reduced water levels to the point where these areas are no longer suitable nursery areas for juvenile fish and;
 - Mangrove planting where marine habitats and/or mangroves have been modified in the past.

Develop a community based monitoring plan that can be adopted by Park Managers to assess mangrove restoration success.

Project Site:

The Bonefish Pond National Park has some of the largest remaining creeks and wetlands on New Providence, Island containing vast mangrove communities encompassed in 1,280 acres. The Park is located in close proximity to patch reefs south of New Providence and fore-reef areas to the East and West. It is believed that the mangroves within the Park serve as an important nursery for New Providence Island. Though this area has great ecological value, there are still visible signs of impacts including debris dumped by humans, clearing of mangroves and

dredging altering water movement reducing the nursery function of mangroves for reef fish. In an effort to improve the nursery function of mangroves within the Park effective restoration must be done.

1. Deliverables due to The Nature Conservancy:

- A literature review that highlights past and current mangrove restoration efforts, mangrove restoration monitoring studies and, research that shows the value of connectivity between mangroves and reef-fish species;
- A list of research team members including their organization/agency affiliation committed to participating in data collection and mangrove restoration work;
- A workplan to complete the agreed upon scope of work submitted on time and approved;
- A detailed report describing research objectives, methods used to conduct the baseline assessments, results (including maps) and recommendations for mangrove restoration;
- Detailed quarterly progress reports submitted on time and approved and;
- Detailed community based monitoring plan submitted on time and approved.

2. Qualifications, Experience and Qualities Required:

- Minimum of a Master's degree in Marine Science or related fields
- Minimum of 10 years' experience in successful mangrove restoration efforts
- Experience in fish, mangrove and coral reef community assessments
- Experience in GIS mapping
- Possesses excellent organizational and communication skills
- Skilled in detail technical reporting
- Willingness to travel frequently within the Bahamas (i.e. New Providence)

Required Proposal Format:

The proposal must contain a (1) detailed technical section and (2) a project budget to complete work.

Technical Proposal:

In the technical section, the applicant must detail project objectives, proposed methodology, anticipated results, and timeline showing expected dates for completion of various project activities.

Project Budget:

The budget should include projected expenses including personnel, travel, equipment, supplies and other.

Request for References

Two references must be submitted to The Nature Conservancy

Official Language

For all purposes, including communications, proposal submission, etc., the official language is English.

Submit Proposal and Associated Documents To:

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For Additional Information or Clarification, Contact:

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