Toledo Institute for Development and Environment [TIDE]
Grant agreement No. BZ – KfW FIII - 006 - 2024

Invitation to submit a proposal to procure and install 23 Demarcation and 10 Mooring Buoys in SCMR and train rangers on the maintenance.

July 2nd 2025

TERMS OF REFERENCE

1. Background

The Mesoamerican Reef Fund, Inc. (MAR Fund) and Toledo Institute for Development and Environment (TIDE) have entered into a Grant Agreement under the project: *Enhancing Protection and Conservation of Commercial Species, Coral Reefs, and Fish Spawning Aggregation Sites in Sapodilla Cayes Marine Reserve, Belize* with the objective of increasing protection and biodiversity conservation of commercial species, coral reefs, and legally established FSAs within Sapodilla Caye Marine Reserve (SCMR) including Elbow and Cayman Crown.

The Sapodilla Cayes Marine Reserve (SCMR) is the most southern of the marine protected areas in Belize and encapsulates the southernmost tip of the Belize Barrier Reef. It lies in the general area of N16 6 32.9, W88 16 10.4 and is an integral part of the Belize Barrier Reef Reserve System (BBRRS), inscribed as a UNESCO World Heritage Site in 1996.10. *(SCMR management plan 2023)*

The expanded marine reserve covers an area of 321,623.5 acres (approximately 130,156 ha) and contains fourteen palm-fringed sand or mangrove cayes, fringe reefs, natural lagoons, and key spawning aggregation sites (SPAGs). It is one of the 17 barrier reef regions that compose the Mesoamerican Reef System that is home to more than 65 species of stony coral, 350 species of molluscs and more than 500 species of fish. *(SCMR management plan 2023).*

With the significant expansion of the Sapodilla Cayes Marine reserve from 38,595 acres to 321,623.5 acres which includes a large portion of the Cayman Crown, a resilient coral reef ecosystem, there is an urgent need for the Toledo Institute for Development and Environment [TIDE], a new co-manager of SCMR to seek significant funding for investment in infrastructure, urgent resource protection, sustainable management and socio-economic opportunities for primary users to increase management effectiveness of this world heritage site.

Commercial and recreational fisher-folk along with tour operators from southern Belize rely on the use of the Sapodilla Cayes Marine Reserve for income generation. For some years now, many resource users and visitors have been using local knowledge to identify the preservation and conservation zones and the spawning aggregation sites. Demarcation and Mooring buoys installed some years ago have been removed or lost due to weather conditions making it easy for illegal activities to occur in these zones. Demarcation buoys play a vital role in marine reserves as they clearly demarcate boundaries in an effort to help prevent illegal activities within the protected area. These buoys also help with the conservation and protection of marine ecosystems and the species that inhabit them by reducing the risk of damage from human interference. These visuals are reminders to visitors and resource users and help with education of the various zones, thus promoting sustainable practices.

Additionally, mooring buoys are needed in the marine reserve to avoid boats from anchoring on sensitive ecosystems. They provide a safe and convenient way for vessels to remain stationary without the risk of dragging anchor, which can occur in strong currents or winds. Vessel owners always need to feel confident that their vessels are safely moored.

This project aims to enhance management effectiveness by installing 23 demarcation and 10 mooring buoys to clearly demarcate preservation, conservation and spawning aggregation zones within SCMR and to provide safe mooring for boats in the marine reserve. TIDE will initially identify the recommended geographical locations based on SCMR SI for the buoy installations and the contractor will conduct a formal assessment of GPS coordinates provided to determine if buoys

can safely be installed. Following the assessment, the contractor will compile a report confirming sites that buoys can be installed and recommend alternate sites for installation based on physical and environmental conditions. TIDE, after consultation with relevant authorities, will confirm proposed sites prior to the installation of both demarcation and mooring buoys.

The contractor will be responsible for procuring durable, highly visible demarcation and mooring buoys along with the necessary materials suitable for water conditions. The contractor will provide its own equipment and trained personnel for the installation, as well as cover transportation and other related costs. Additionally, the contractor will cover training for at least 10 staff members on buoy maintenance.

2. **Objective:** Within 4 months, assess proposed areas within the Sapodilla Cayes Marine Reserve for the installation of 23 demarcation and 10 mooring buoys, procure all buoys and associated materials for their installation ensuring they meet durability, visibility standards and successfully install the buoys in designated areas based on the assessment and consultation with TIDE and regulatory agencies. Additionally, train at least 10 park rangers on their maintenance, ensuring improved safety and navigation for visitors.

3. Contracting activities

The following activities will be carried out as part of the contract:

3.1 Assess areas identified by TIDE for installation of demarcation and mooring buoys. In areas where buoys cannot be installed due to environmental conditions, propose GPS points and consult with TIDE to confirm placement of buoys.

3.2 Prepare a plan that includes a description of demarcation and mooring buoys and relevant materials that would be purchased, and a step-by-step description of installation at given locations, from initial site preparation to final positioning and securing of buoys. Include a detailed schedule for installation of both demarcation and mooring buoys, including roles and responsibilities of all parties involved in the installation, key milestones and deadlines. Add any relevant references, drawings, standards, or guidelines that have been used to inform the installation process.

3.3 Provide TIDE with a safety compliance plan, outlining procedures that will be implemented during the installation process to ensure the safety of personnel and equipment.

3.4 Describe the procedures for quality control checks and any testing that will be conducted to ensure the buoys are installed correctly and are functioning as intended.

3.5 Review the Social and Environmental Assessment report provided by TIDE and include, in your plan, how any potential environmental impacts from the installation would be addressed, ensuring compliance with environmental regulations and social implications.

3.6 Identify, if any, necessary permits or approvals are required for the installation of demarcation buoys, and outline the process, so TIDE can obtain approvals.

3.7 Provide TIDE with a Response plan, outlining procedures to be implemented in the event of an emergency or unexpected incident during the installation process.

3.8 Specify the documentation to be maintained throughout the installation, including record of inspections, approvals, and any deviations from the original plan. Outline reporting requirements.

3.9 Provide a detailed breakdown of the costs associated with the installation of 23 demarcation and 10 mooring buoys. This includes procurement of buoys, relevant materials,

labour, equipment, transportation, field cost for installation team, and any other relevant expenses. Include the cost of training 10 park rangers for maintenance of buoys.

3.10 Procure buoys, materials and all necessary equipment for installation, such as anchor systems, mooring lines, buoys, tools, shackles and safety gear.

3.11 Transport buoys, materials and equipment to Hunting Caye base for installation in the SCMR.

3.12 Install demarcation and mooring buoys at specified locations provided by TIDE based on assessment and approved plan.

3.13 Verify the visibility of the buoys from different angles and distances to ensure they can be easily spotted by boaters and other watercraft.

3.14 Provide TIDE with a Demarcation & Mooring Maintenance manual for standard operating procedures

3.14 Train at least 10 park rangers to regularly inspect the demarcation buoys for any signs of damage, wear, or displacement and to perform routine maintenance tasks such as cleaning, painting, and repositioning as needed to ensure continued effectiveness.

3.15 Prepare and submit a final report on the installation of demarcation and mooring buoys and training on their maintenance. Include pictures at different stages of the project.

4. Presentation of the Bid

4.1 The Bidder shall submit a Financial Bid based on the demarcation and mooring assessment provided by TIDE

4.2 The bidder submits a technical proposal outlining the work plan

4.3 If the Estimated Completion Date cannot be met by the Bidder, the Bidder shall indicate in its Financial Bid the earliest Estimated Completion Date for the demarcation and mooring installation.

4.4 The Bid must be signed by the Contractor's natural person or the legal representative or attorney-in-fact of the Contractor for such a purpose.

4.5 The Bidder shall attach to its Bid the documentation requested: for **INDIVIDUALS –** copy of ID card or passport (in case of foreigners), copy of legal invoice to be used for payment, Resume/CV (3 pages max), 2 professional references; **LEGAL ENTITIES:** copy of company registration, copy of legal status/power of attorney of legal representative, copy of identification document of legal representative or passport, copy of legal invoice to be used for payment, entity presentation/resume/CV (3 pages max), 2 professional references.

4.6 The e-mail address for submission of the Bid is: info@tidebelize.org

4.7 The bidder request and submit to the contracting party a singed declaration of understanding

4.8 The **deadline** for submission of the Bid is **5:00 p.m. on *18/07/2025***

4.9 The proposal will be submitted in **electronic form** in unmodifiable PDF format.

5. Bid Pricing

5.1 The Prices offered by the Bidder shall be fixed and shall not be subject to any variation for any reason whatsoever.

5.2 The rates and prices submitted shall be deemed to include all costs of materials, labor, overhead, utilities, insurance, taxes, duties, liabilities, risks and other matters necessary for providing the contracted work. The Contracting Party shall not accept any costs other than those clearly indicated in the financial proposal to be considered for the performance of the Contract.

5.3 The Contractor shall be responsible for paying taxes according to the country's regulations.

5.4 Freight costs for materials and equipment shall be borne by the Contractor, as well as the costs of transportation of its personnel.

5.5 Additional items not requested by the Contracting Party should not be included in the Financial Bid.

6. Currency of the Bid and payment

The Bidder shall quote prices in **US Dollars**

7. Period of validity of the Bid

The Bid shall remain valid for a period of **90 days** from the deadline established by the Contracting Party for submission of the Bid.

8. The Contracting Party's right to accept and reject the Bid

The Contracting Party reserves the right to cancel the Procurement Process and to accept or reject the Bid at any time prior to notification of award, without thereby acquiring any liability to the Bidder.

9. Notification of award and signing of the contract

Prior to the expiration of the period of validity of the Bid, the Contracting Party shall notify the Bidder in writing whether its Bid has been accepted in writing in the form of **Acceptance letter.** The contract will then be sent for review, and a date will be arranged for its signing at the office of the contracting party.

10. Estimated Work Schedule (4 months)

Activities	**Weeks**															
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
10.1 Assess areas identified by TIDE for installation of demarcation and mooring buoys. In areas where buoys cannot be installed due to environmental conditions, propose GPS points and consult with TIDE to confirm placement of buoys.																

10.2 Prepare a plan that includes a description of demarcation and mooring buoys and relevant materials that would be purchased, and a step-by-step description of installation at given locations, from initial site preparation to final positioning and securing of buoys. Include a detailed schedule for installation of both demarcation and mooring buoys, including roles and responsibilities of all parties involved in the installation, key milestones and deadlines. Add any relevant references, drawings, standards, or guidelines that have been used to inform the installation process.															
10.3 Clearly outline the safety protocols and precautions that will be implemented during the installation process to ensure the safety of personnel and equipment.															
10.4 Describe the procedures for quality control checks and any testing that will be conducted to ensure the buoys are installed correctly and are functioning as intended.															
10.5 Review the Social and Environmental Assessment report provided by TIDE and include, in your plan, how any potential environmental impacts from the installation would be addressed, ensuring compliance with environmental regulations and social implications.															
10.6 Identify, if any, necessary permits or approvals required for the installation of demarcation buoys and outline the process for obtaining them so TIDE can obtain approval.															
10.7 Outline the steps that would be taken in the event of an emergency or unexpected incident during the installation process.															
10.8 Specify the documentation to be maintained throughout the installation, including record of inspections, approvals, and any deviations from the original plan. Outline reporting requirements.															

10.9 Provide a detailed breakdown of the costs associated with the installation of 23 demarcation and 10 mooring buoys. This includes procurement of buoys, relevant materials, labour, equipment, transportation, field cost for installation team, and any other relevant expenses. Include the cost of training 10 park rangers.															
10.10 Procure buoys, materials and all necessary equipment for installation, such as anchor systems, mooring lines, buoys, tools, shackles and safety gear.															
10.11 Transport buoys, materials and equipment to Hunting Caye base for installation in the SCMR.															
10.12 Install demarcation and mooring buoys at specified locations provided by TIDE, based on approved plan.															
10.13 Verify the visibility of the buoys from different angles and distances to ensure they can be easily spotted by boaters and other watercraft.															
10.14 Train at least 10 park rangers to regularly inspect the demarcation buoys for any signs of damage, wear, or displacement and to perform routine maintenance tasks such as cleaning, painting, and repositioning as needed to ensure continued effectiveness.															
10.15 Prepare and submit a final report on the installation of demarcation and mooring buoys and training on their maintenance, including maintenance manual Include pictures at different stages of the project.															

11. Expected products

The consultant will deliver the following product(s):

No	Deliverables	Time Frame
1st deliverable	Detailed plan and budget for procurement and installation of demarcation and mooring buoys including materials and all listed activities related to	4 weeks after signing contract

	plan and training of 10 park rangers on buoy maintenance. Provide TIDE with a safety compliance plan. Conduct and submit an assessment of areas identified by TIDE for installation of demarcation and mooring buoys	
2nd deliverable	Report with pictures of the visible installation of demarcation and mooring buoys as per plan.	12 weeks after signing contract
3rd deliverable	Provide TIDE a Demarcation & Mooring Maintenance manual. Report on training of 10 park rangers to regularly inspect the demarcation buoys for any signs of damage, wear, or displacement and to perform routine maintenance tasks.	16 weeks after signing of contract

12. Contractor's Profile

The contractor or contracting team must possess the following qualifications/skills:

12.1 A degree in Engineering with Knowledge in Marine and Environmental science, Oceanography, Marine Construction, or a related field is preferred

12.2 Proven experience in marine project management, particularly in the installation and maintenance of buoys in marine reserves.

12.3 Familiarity with national regulations regarding marine installations, environmental protection, and marine reserve management. Understanding of permitting processes is crucial.

12.4 Proficiency in marine engineering principles, buoy design, and installation techniques. Knowledge of the materials and technologies used in buoy construction and deployment is also important.

12.5 Ability to ensure that the installation does not adversely affect marine ecosystems.

12.6 Strong project management skills, including planning, budgeting, and coordinating with relevant stakeholders.

12.7 Excellent verbal and written communication skills to effectively convey project plans, findings, recommendations, training and reports.

12.8 Certification in marine safety and first aid, as well as knowledge of best practices for working in marine environments.

12.9 Ability to develop an emergency plan for safety of the buoy installation crew.

12.10 Relevant reference from recognized organizations in marine management or environmental consulting to enhance credibility.

13. Payment for the contract shall be made upon approval of the deliverables by the Contracting Party and submission of corresponding legal invoices in *3* payments in accordance with the payment schedule below.

Payment No.		**Payment %**
1	Detailed plan and budget for procurement and installation of demarcation and mooring buoys including materials and all listed activities related to plan.	60%

2	Report on the visible installation of demarcation and mooring buoys.	25%
3	Submit a Demarcation and Mooring Maintenance manual. Report on training of 10 park rangers to regularly inspect the demarcation buoys for any signs of damage, wear, or displacement and to perform routine maintenance tasks such as cleaning, painting, and repositioning as needed to ensure continued effectiveness.	15%
Total		**100%**

8. Contract supervision

The contractor will be supervised by the TIDE Project Coordinator and TIDE Executive Director.

The contractor shall attend virtual and/or face-to-face meetings to which he/she is summoned for the execution of this consultancy.

The contractor deliverables will be submitted to the contract supervisor for review and approval. If improvements are required, the contract will proceed to make the requested adjustments.

Payment for each product will be made once it has been verified and approved by the TIDE reviewers.

In all discussions and comments made *on site*, the contractor shall expressly state that these reflect his/her opinion and not necessarily the position or opinion of the Contracting or Executing Party.