

November 8, 2022

TERMS OF REFERENCE

Catch and release sportfishing and Marine Protected Areas: best available information on ecological, economic, and cultural considerations in tropical regions.

1. BACKGROUND AND PURPOSE

The Nature Conservancy (TNC) is supporting countries around the world with development of sustainable financing options for ocean conservation and marine protections. The Blue Bonds for Ocean Conservation program provides financial, government relations, scientific, technical, and planning expertise to support governments to reach biodiversity conservation, climate change and other goals. Starting in 2014 with the Seychelles debt conversion and Marine Spatial Plan, the Blue Bonds program now includes Belize (2021) and Barbados (2022). Using an evidence-based, participatory, and transparent marine spatial plan (MSP) process, nations are supported to achieve long-term ocean conservation and sustainable economic development goals including marine protected areas (MPAs) and implementation effectiveness.

The coastal and marine recreation and tourism sector can be a significant component of nation's economy and livelihoods and is one of the key stakeholders in an MSP process. Within the MSP process and methodologies, spatial conflicts are identified and discussed, and compatibility of uses and activities are discussed and analyzed in relation to proposed or existing zone or area objectives. Within one sector, there may be several different types of activities and a more granular analysis is needed to best understand each activity in relation to planning goals. For example, "recreational fishing¹" includes different types of activities such as sport fishing tournaments, big game fishing, marine charters, catch and release sport fishing and non-commercial recreational fishing by individuals. Some of these activities may be compatible with areas designated for biodiversity protection, such as Marine Protected Areas, and other activities may not be. Compatibility will also depend on the designation or status of protection for the MPA, such as Marine Parks, because not all MPA designations result in the same level of protection. Having the best available science, knowledge and information is key to informing these discussions about compatibility and conflicts for MSP and MPAs.

Catch and release sport fishing is recognized globally as a key tourism activity in the recreational fishing sector and is an important contributor to many national and local economies, from both domestic and international participants. Clarifying the trends from published studies and peer reviewed reports on documented ecological or ecosystem impacts from catch-and-release fishing activities is difficult, and

¹ Recreational fishing is defined as fishing of aquatic animals (mainly fish) that do not constitute the individual's primary resource to meet basic nutritional needs and are not generally sold or otherwise traded on export, domestic or black markets. [Source: FAO 2012. Recreational fisheries.](#)

there are both within and among species inconsistencies in trends or results. In addition, there are cultural considerations in terms of acceptance of catch and release and culturally important species.

The purpose of this project is to better understand the current state of scientific knowledge on the known and possible ecological impacts of catch-and-release fishing on tropical marine biodiversity and ecosystems, the range of policies and regulations for catch-and-release sportfishing in marine protected areas and documented global best practices for minimizing any detrimental impacts of catch-and-release sportfishing in areas where it is permitted.

The results from this project will be used to inform discussions of allowable activities in relation to marine protected areas and in MSP processes, especially for fully protected MPAs. The regulation, policy, and best practice information will support discussions regarding how this economically important sector can co-exist with the objectives of marine protected areas.

2. OBJECTIVES AND CONTEXT

Under the Blue Bonds program, TNC is seeking to better understand the sport fishing sector in relation to marine protected areas and respond to inquiries concerning scientific evidence and best practices from experts in the field.

The objectives of this consultancy are to provide:

- 1) Best available, science-based statistics and trends related to catch-and-release sport fishing for: (a) major species targeted in tropical regions; (b) impacts on survival and health of target species, and (c) impacts on ecosystem health or function and biodiversity metrics, where applicable.
- 2) The estimated annual economic value of catch and release sport fishing by region or country*.
- 3) A comparative overview of catch-and-release sportfishing regulations in marine protected areas.
- 4) A summary of global and/or national best practices for operators that engage in catch-and-release fishing including monitoring and evaluation for the efficacy of, and adherence to, these best practices.
- 5) Recommendations for catch and release sport fishing in relation to marine protected areas including best practices for targeted species and the long-term ecological sustainability of this sector.

*Due to confidentiality restrictions for the Blue Bonds program, specific country names will be provided after signing of the contract, which includes a non-disclosure clause. The broad geographical regions being considered are the Caribbean, Western Indian Ocean, tropical Atlantic, Central America, and Asia-Pacific.

3. SCOPE OF WORK

The consultant will use a range of methods including literature review, internet searches, grey or unpublished studies, peer-reviewed technical government reports, and consultations or interviews with key experts, organizations, and sport fishing representatives.

The consultant will prepare a synthesis report that will include the following elements. The report will contain references, citations, and sources of information. Copies of digital references will be provided to TNC as a deliverable.

1. An analysis, based on a review of relevant scientific literature, of the impact of catch and release fishing on the health and survival of target species and impacts on ecosystem health, where applicable. The analysis will include information on characteristic responses of specific taxa and/or ecosystems that makes them more or less sensitive to impacts of catch and release fishing including mortality or predator vulnerability.
2. A summary of best available ecological and economic data and statistics related to catch-and-release fishing such as:
 - Key species and/or taxonomic groups targeted by catch-and-release fishing, where available.
 - Contribution of the sector or industry to GDP
 - Metrics for livelihoods or socio-economic parameters such as the percentage of jobs or persons employed, seasonality of employment.
 - Maps or other spatial information representing distribution and trends in catch and release sport fishing at local, national, or global scales, as applicable to the key findings.
3. A summary of legislation, regulations and/or policy documents for catch-and-release fishing with respect to marine protection designations. For example, what are the regulations associated with catch and release sport fishing in a marine reserve or a marine national park designation for highest protection status? Is catch-and-release fishing considered non-extractive in the legislation or regulations for a marine protected area? Of key interest is the regulations for fully protected, highly protected or 'no take' protected areas.
4. A summary of global and/or national best practices including reducing mortality, reducing ecosystem disruption.
5. Recommendations for how countries with active catch and release sectors can maximize sustainability, taking into consideration monitoring and evaluation.
6. Recommendations for catch-and-release sport fishing in marine protected areas designated for full protection vs for sustainable uses.
7. Executive Summary on 2 pages that can be used as stand-alone document to highlight key findings for internal discussions and partners collaborations.

4. DELIVERABLES

- a) Draft Workplan
- b) Report Outline
- c) Draft report and recommendations in MS Word that incorporates the requirements listed above including statistics, trends, and global best practices. List all individuals and experts consulted, references, other resources, and annexes, as needed. Provide maps or other spatial information, where applicable or useful.
- d) Final report and recommendations in MS Word that incorporates, or responds to, revisions or edits from TNC.
- e) Microsoft PowerPoint presentation summarizing the main points that is suitable for a presentation within TNC, with government partners, NGOs, and stakeholders in the sport fishing sector.
- f) Executive summary document, max 2 pages
- g) Digital folder with copies of all references, documents, maps, and reports used to complete the final report.

5. MATERIALS

TNC will provide the consultant with any preliminary information including publications or reports that have been gathered to date. TNC and the consultant will agree on individuals to interview and assist with introductions.

TNC will provide access to peer-reviewed publications, if needed.

The consultant will provide all equipment necessary to conduct this work including a computer, software, Internet connection, telephone, or other means of communicating (e.g., Zoom, Teams).

6. QUALIFICATIONS

- Graduate degree in fisheries science, marine ecology or related field, or experience commensurate with education.
- At least 2 years of experience working or studying catch and release sport fishing in tropical marine regions.
- Existing knowledge of sport fishing and marine protected areas.
- Familiarity with marine spatial planning and fisheries management is an asset.
- Familiarity with sport fishing catch and release in the Caribbean and Central America is an asset.

7. EXPECTATIONS FOR WORKING TOGETHER

Given the strategic importance of this project to TNC and its partners, TNC will develop a mutually agreed upon process to communicate with the consultant to learn about findings as they emerge and address issues that may arise during the literature search and review. TNC expects regular communication with the consultant and will seek early communication around any challenges or issues that arise from the initial work.

8. TIMELINE

Signing of contract by mid-December. Begin work in December and draft outline of report by January 2023. Draft report by March 2023. The work is expected to be completed by 20 June 2023, including review and revisions.

9. BUDGET

This is a fixed cost with reimbursement for approved expenses. Fixed price will be discussed with interested parties and is subject to negotiation. Contract is in USD. The total contract value not to exceed USD \$40,000. Travel or other reimbursable expenses can be discussed during contract development, where needed.

10. APPLICATION

To apply, submit a cover letter and proposal to the Contact Information below that demonstrates your understanding of the Terms of Reference, methodology or approach to complete the deliverables, and availability for the timeline. Include a current resume or Curriculum Vitae that clearly identifies your qualifications and experience for the Terms of Reference and include resumes for all individuals that will assist with the project. Please submit a proposed scope of work, draft workplan, budget (including daily rate), and summary of qualifications. References can be provided in the proposal or available on request.

Application deadline: 5 PM Eastern time on November 21, 2022.

11. CONTACT INFORMATION

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