**REQUEST FOR PROPOSALS ON RESEARCH FOR FAD DESIGN**

The proposal must be sent to the following email address: njimenez@drna.pr.gov

Questions should be sent to the following email address: njimenez@drna.pr.gov

Due date: 31 de enero de 2025

The Department of Natural and Environmental Resources (DNER) is requesting proposals for the following professional services.

**Background information for proponents:**

Fish aggregating devices (FADs) are used to "hold" pelagic fishes in an area to enhance the fishing experience. The objective of deploying them is to facilitate recreational fishing opportunities in Puerto Rico and help perpetuate traditional fishing activities by maintaining a FAD network to help anglers increase their catch and reduce the time and fuel spent searching for fish schools.

In the past, DNER have deployed FADs along the north, northeast and west coast of Puerto Rico, and implement new FAD designs (surface and submerged) and arrangements (single and cluster). Still there are requests from fishers to deploy additional FADs in other areas of the Island.

The surface FADs had a shorter average life span than expected. To address this situation submerged FADs were implemented in two formats, single and cluster. Anglers’ feedback have been varied, because the submerged ones are more difficult to fish. There is concern on the current status of the submerged ones, and the service they are providing. Catch per unit effort reported for other countries such as Dominican Republic, using different type of FADs, are greater than those reported for Puerto Rico.

Other aspect to consider is the environmental impact that the structures have in the environment. Some of the surface FADs deployed, were rescued from areas relatively close to shore, were marine ecosystem could be harmed. In addition, some of the last surface FADs deployed were reported arriving as debris impacting marine ecosystems in other countries (Mexico and Dominican Republic). The impacts that they have in the marine ecosystem needs to be evaluated as well as the design in order to deploy FADs that have benefit for the anglers without negative consequences to the environment.

To continue supporting the deployment of the FADs, it is critical that the impact the structures are having over the environment is assessed, as well as the use the anglers are giving to the submerged FADs. Nature based designs used in other countries must be evaluated, as well as a potential alternative that could provide the service the anglers are requesting and that at the same time minimize the impact to the environment.

**Service requested**

DNER is seeking proposals to address the following objectives:

1. Evaluate nature-based FAD designs used and the feasibility to be implemented in PR. This should include information on the permits needed to implement the nature-based FAD in Puerto Rico, a list of pros and cons of the nature-based FAD designs vs other FAD designs deployed previously and estimated costs for the construction of the nature based FAD.
2. Conduct a pilot tryout of the nature-based FADs design and evaluate effectiveness. It should include construction, deployment, and monitoring. Monitoring must include fishers interviews on the services obtained from it. DNER will be responsible for the permits as needed.
3. Collect data Catch Per Unit Effort, Fishery dynamics and Fish Community Diversity around deployed FADs.

The objectives are in order of priority. One proposal does not need to address all three objectives. Each objectives requires submission of progress and final reports with all collected data and analysis.

PROPOSAL SUBMITTAL INSTRUCTIONS

The proposal will be evaluated based on previous experience, background information, objectives addressed adequately, narrative, proposed methodology, final product, sound budget, timeline, General Services Administration certification and Grants Management System (SAM.) certification. Proponents will be notified of the final determination by email.

Proposals must have the following sections and be written in English:

* Background
* Objectives
* Methodology
* Final products
* References
* Timeline
* CV
* Detailed budget