

MANAGEMENT PLAN FOR FISH AGGREGATING DEVICES

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| RESPONSIBLE OFFICE | BELIZE HIGH SEAS FISHERIES UNIT | RESPONSIBLE EXECUTIVE | DIRECTOR FOR HIGH SEAS FISHERIES | |
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1.0 INTRODUCTION

1.1 Scope

This Plan sets out the methods and measures that the Belize High Seas Fisheries Unit (BHSU) will utilize to standardize the use of Fish Aggregating Devices (FADs) for various purposes including limiting fishing mortality on vulnerable tropical tuna species such as juvenile bigeye, yellowfin, and skipjack tuna.

Fundamentals of this Plan apply to Belize flagged purse seine fishing vessels operating on the high seas. Unless otherwise indicated, reference to fishing or fishing vessels apply to purse seine fishing vessels, group purse seine fishing vessels and their support vessels.

1.2 Legal Status

In the first order, this FAD Management Plan represents the strategy of the BHSFU and does not have legal effect. It is the objective of the BHSFU to introduce specific features of this Plan through various means in the short term which may contain permit conditions and legally binding Fishing Vessel Circulars.

In the long term, this Plan will be reviewed according to further developments, such as to resolutions and recommendations adopted by Regional Fisheries Management Organizations (RFMOs). Specific regulations will be introduced via Fishing Vessel Circular to give legal effect to this Plan.

1.3 Objective

The objective of this FAD Management Plan is, inter alia to:

- a) Reinforce the gathering of scientific data.
- b) Decrease the catch or by-catch of small tunas on FADs.
- c) Effectively manage the deployment and retrieval of FADs.
- d) Limit the number of active FADs deployed.

2.0 DESCRIPTION

2.1 Definition and Types of FADs

For this Plan, the following definitions shall apply:

“*Floating object (FOB)*” is any natural or artificial floating (i.e. surface or substance) object with no capability of moving on its own. FADs are those FOBs that are man-made and intentionally deployed, and/or tracked. Logs are those FOBs that are accidentally lost from anthropic and natural sources.

“*Fish-Aggregating Device (FAD)*” is any permanent, semi-permanent or temporary object, structure, or device of any material, man-made or natural, which is deployed, and/or tracked, and used aggregate fish or subsequent capture. FADs can either be anchored (aFADs) or drifting (dFADs).

“*FAD set*” is setting a fishing gear around a tuna school associated with a FAD.

“Operational buoy” is any instrumental buoy, previously activated, switched on and deployed at sea, which transmits position and any other available information such as eco-sounder estimates.

“Activation” is the act of enabling satellite communication services by the buoy supplier company at the request of buoy owner. The owner then starts paying fees for communication services. The buoy can be transmitting or not, depending if it has been manually switched on.

2.2 FAD Limits

Purse seine vessels that are licensed may deploy and use FADs. The total number of FADs with operational buoys that may be deployed shall not exceed the amount set by this Administration in accordance with the limits set out in conservation and management measures adopted by a RFMO. The number of FADs that can be deployed at any given time shall be communicated via Fishing Vessel Circular on an annual basis and shall be included in the FAD Permit granted to a vessel.

The deployment of FADs in the EEZ of other States are outside the restrictions imposed by this management plan and shall be in accordance with the laws of that State.

2.3 Consideration of interaction with other gear types.

In reference to possible conflict between purse seine fishing and the long line fleet which may result from the wide range use of FADs in the purse seine fishery, the situation will be monitored. Specifically, data will be gathered on the operation of the tuna long line fleet as it continues to grow and on the characteristics of purse seine catches as determined through our observer program. Any unfavorable impacts resulting from FAD fishing or FADs having obstructed the operation of the long line fleet will result in this policy being reviewed should such impacts be clearly established.

2.4 By-catch policy

Vessel owners/operators of vessels fishing on FADs shall be required to submit information on the by-catch taken during fishing operations by species, estimates of volume of number of fish in catches. This shall be reported through the catch log sheets.

If the bycatch taken is utilized in any way, it is required that the operator submit a report on the disposition of the by-catch on a species-by-species basis.

The BHSFU through its observer program shall monitor the by-catch in both the anchored and drifting FAD operations with a goal of establishing the average weight of species make-up of by-catch.

2.5 FAD Ownership

This Plan does not generate any property rights over FADs or fish that may aggregate to them. No exceptionality of access is considered when a particular vessel deploys a FAD in accordance with this Plan.

3.0 INSTITUTIONAL ARRANGEMENTS

3.1 Institutional responsibilities for the FAD Management Plan

The Belize High Seas Fisheries Unit under the Ministry of Finance of the Government of Belize is the competent authority responsible for the development and implementation of this FAD Management Plan.

3.2 Application for FAD deployment approval

Vessel owner/operators shall provide prior notice to the BHSFU of their intention to deploy FADs. The information to be provided shall include:

- a) Location in latitude and longitude
- b) Date of deployment
- c) New or replacement FAD
- d) FAD number assigned

3.3 FAD Replacement

The owners/operators shall notify the Belize High Seas Fisheries Unit before any lost FADs are replaced. Replacement of FADs shall be deployed with a new identification number in accordance with this Plan.

3.4 Additional reporting obligation

3.4.1 Location of FADs and reporting

Owners/operators of tuna purse seine FAD fishery shall record in their FAD logbooks information on FADs deployed.

3.4.2 Monitoring of the FAD Fishing

Catch data shall be collected from all purse seine vessels based on the use of FADs to monitor the species make-up of tunas and other information of the FAD associated catches.

3.4.3 Reporting requirements for FAD fishing

Owners and operators that utilize FADs in their fishery shall comply with the reporting requirements as set out in this Plan and other legally binding circulars regarding information on their catches.

3.4.4 FAD License

FADs cannot be deployed and utilized without a FAD Permit issued by the BHSFU.

- a. Any vessel owner/operator who intends to deploy FADs on the high seas shall be required to have a FAD License.
- b. A FAD license shall be issued simultaneously with the high seas fishing license and shall be valid for similar period.
- c. Each vessel shall be required to keep an electronic copy of its FAD permit on board while fishing on FADs.

3.5 Conflict Resolution in relation to FADs

Any conflict arising between operators in the purse seine FAD fishery shall be referred to the Director of the Belize High Seas Fisheries Unit and where a resolution cannot be made then the matter shall be taken to the Registrar of Ships in accordance with Belize's High Seas Fishing Act, 2013 and subsidiary regulations, and whose decision shall be final.

3.6 Details of any closed areas or periods

This section of the Plan describes the provisions that will be applied to Belize flagged purse seine fishing vessels operating in the high seas.

The requirements below will be endorsed via conditions of a FAD license issued to relevant vessels until such time as this Plan is reflected in Belize's Regulations.

All Belize flagged purse seine fishing vessels operating in the high seas and any other jurisdictions utilizing FADs will be required to observe any Area/Time closures in accordance with all active recommendations issued by a relevant RFMO and implementing Fishing Vessel Circular issued thereto by Belize.

The prohibition indicated above includes but is not limited to:

- Launching any floating objects, with or without buoy.
- Fishing around, under, or in association with artificial objects, including vessels.
- Fishing around, under, or in association with natural objects.
- Towing floating objects from inside to outside the closure area.

3.7 Requirement for deploying FADs

The deployment of any FADs during the FAD closure periods is strictly prohibited. At any other times, deployment must be directed in accordance with the requirements below.

All Belize flagged purse seine fishing vessels operating on the high seas during the area/time closure will be subject to 100% observer coverage under the relevant Scientific Observer Program.

The vessel master must provide the following information in writing to the Director of High Seas Fisheries of the Belize High Seas Fisheries Unit, when deploying a drifting FAD:

- i. The date of deployment.
- ii. The location (latitude and longitude) recorded in degrees and minutes.
- iii. FAD type (anchored FAD, drifting artificial FAD, etc.)
- iv. The FAD number that has been assigned; and
- v. A declaration that the FAD meeting the marking and design requirements contained in sections 6.1 and 6.2 respectively.

The BHSFU shall not authorize the deployment of a FAD if records show that the FAD limit would be surpassed by the relevant vessel.

4.0 FAD CONSTRUCTION, SPECIFICATION AND REQUIREMENTS

4.1 FAD Marking

Deployed FADs must be clearly marked as follows:

- a) With the raft section clearly painted with reflecting paint so that it can be seen from a distance of 1 kilometer for aFAD.
- b) The raft section should support a radar reflector that must be suspended at least 2 meters above the waterline of the raft for aFAD and dFAD.
- c) With the name of the vessel that has deployed it
- d) The FAD numbers for aFAD and dFAD.
- e) Electronic devise such as transponders and radio beacons which mechanically and constantly indicate their location by way of signals may be used in addition to other devices, but should not be activated at radio signals that could clash with other devices used for navigation and search and rescue purposes for aFAD and dFAD.

The name of the vessel and FAD number shall be contained on a removable plate such that if FADs are changed, the plate can be connected to the new FAD ensuring that the same FAD number corresponds to the same deployment location in terms of latitude and longitude.

The marking of the FAD above must be in lettering at least 30cm high and of a color that contrasts with the color of the plate. The plate must be connected to a point on the FAD where it is clearly noticeable.

The FAD number is to be allocated by the vessel master and shall be the first three letters of the vessel name followed by a three-digit number (which shall be sequential according to the number of FADs deployed in the high seas), followed by the letters “HS” to indicate deployment in the high seas. For example:

Vessel Name: RANDOM
FAD ID: RANo1HS

4.2 FAD design and construction

To minimize the ecological impact of FADs, in particular the entanglement of sharks, turtles and other non-target species and the release and synthetic persistent marine debris, all deployed man-made FADs must meet the following minimum criteria.

- a) The surface structure of the FAD should not be covered or only covered with material implying minimum risk of entanglement by-catch species and should be constructed such that they can be easily located at their place of deployment for aFAD.
- b) The sub-surface components should be exclusively composed of non-entangling material (eg. ropes or canvas)
- c) The use of biodegradable and non-entangling material should be prioritized in the designing of FADs.
- d) The design should include an appropriate number of counterweights along the synthetic rope to ensure that it sinks to the bottom if the floater becomes detached and drifts away.

- e) A radar reflector must be attached to the raft of the section at least 2m above the water line to ensure that it is detectable from a reasonable distance.
- f) The design and maintenance of FADs shall be the responsibility of the owner/operator deploying the FADs.

4.3 Replacing lost FADs

The vessel master shall notify the BHSFU that a FAD has been permanently lost by completing the FAD logbook sheet which should be submitted monthly:

The BHSFU will review this information and may grant approval to deploy a replacement FAD depending on the situation.

4.4 Requirements for retrieving FADs

Belize flagged purse seine fishing vessels operating on the high seas during the area/time closure will be subject to 100% observer coverage under their Scientific Observer Program. Observers will monitor all FAD retrievals.

The vessel master must supply the following data in writing to the BHSFU:

- i. The date of retrieval.
- ii. The location (latitude and longitude) recorded in degrees and minutes of retrieval; and
- iii. The FAD numbers.

5.0 FAD REGISTER

The BHSFU shall keep a register of all deployed FADs to maintain the number of FADs deployed. All information held on the register shall be kept confidential and shall only be used when reviewing applications for FAD deployment and for any research and reporting purposes. FAD data may also be used in the investigation of any breaches to this Plan.

6.0 APPLICABLE PERIOD FOR FAD MANAGEMENT PLAN

This Plan is applicable for a period of 1 year from date of issuance.

7.0 MONITOR REVIEW AND IMPLEMENTATION OF THIS PLAN

This FAD Management Plan shall be reviewed every year and may be amended at any time as deemed necessary.