



BELIZE HIGH SEAS FISHERIES UNIT



# MANAGEMENT PLAN

[Management Plan for Blue Shark in the High Seas]

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# MANAGEMENT PLAN

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## Management Plan for Blue Sharks in the High Seas

### 1. Executive Summary

The effective management and regulation of Blue Shark (*Prionace Glauca*) in Belize's high seas fisheries is of great significance. The Belize High Seas Fisheries Unit (BHSFU), as the governing body responsible for overseeing Belize's high seas fisheries, plays a crucial role in ensuring the sustainability of its distant water fleet. By implementing robust management measures, the BHSFU can actively contribute to the conservation of blue sharks, preventing overfishing and promoting the sustainable utilization of these valuable resources. This can be achieved through the establishment of effective measures such as gear regulations, size limits, quotas, and other related initiatives that align fishing practices with conservation objectives.

### 2. Introduction

#### 2.1 Background

Blue shark is a globally distributed species that plays a crucial role in the marine ecosystem. Unfortunately, it faces significant conservation challenges, primarily due to the overexploitation of its fins and meat, resulting in a decline in its population. Recognizing the urgency of this situation, the blue shark has been listed as Near Threatened by the IUCN and listed in appendix II by CITES, an international agreement that governs the trade of endangered species.

For the BHSFU, the management and regulation of blue shark fishing is of utmost importance. By thoroughly understanding the background and conservation status of this species, the BHSFU can develop effective strategies to promote sustainable fishing practices. Furthermore, the BHSFU plays a crucial role in ensuring compliance with CITES regulations and closely monitoring the blue sharks caught by its vessels.

Through this comprehensive plan, the BHSFU aims to implement measures that encourage responsible fishing practices and safeguard the blue shark population from further depletion. Doing so contributes to the conservation efforts and ensuring the long-term sustainability of this remarkable species.

#### 2.2 Scope

The BHSFU is fully committed to the responsible and effective management of blue shark harvesting by its fishing vessels. This Plan aims to establish a comprehensive framework of

guidelines and practices that will ensure the suitable utilization of blue shark resources while minimizing the impact on their populations and the marine ecosystem.

## 2.3 Legal Status

This plan serves as the strategic framework for the BHSFU and does not hold legal authority on its own. However, the BHSFU will integrate specific elements of this plan into its operations through various forms, such as license conditions. To ensure its relevance and effectiveness, the plan will undergo regular reviews to align with emerging developments, including resolutions and recommendations put forth by the Regional Fisheries Management Organizations and CITES. Fishing vessel circulars will be introduced to establish the legal basis for the components of this plan that are not currently regulated. These circulars will provide precise guidelines and directives to govern fishing activities and enforce the principles outlined in this plan.

## 2.4 Objective

This management plan aims to ensure the sustainable management and conservation of the blue shark population. It focuses on implementing effective measures to prevent overfishing, minimize bycatches and promote responsible fishing practices. The goal is to maintain the balance of the marine ecosystem, protect the species and fulfil Belize's obligations as a responsible fishing nation.

# 3. Institutional Arrangements

## 3.1 Institutional Responsibilities

The responsibility for developing and executing this Plan lies with the Belize High Seas Fisheries Unit (BHSFU), which operates under the Ministry of Finance of the Government of Belize.

## 3.2 Sustainable Harvesting Practices

### 3.2.1 *Establishment of total allowable catch limits*

To ensure the sustainable management of the blue shark population, it is crucial to establish a total allowable catch (TAC) limit. In this regard the BHSFU has established a TAC of 500 m/t, consistent with Belize's average historical catches over the past five years. This catch limit serves as a reference point to regulate the harvesting of blue sharks, striking a balance between the needs of the high seas fishing sector and the conservation of the species; and is subject to change based on the best available science.

By implementing this catch limit, the BHSFU aims to preserve the stability and well-being of the blue shark population while promoting responsible and sustainable fishing practices

that align with international standards. This measure underscores the commitment of Belize to effectively manage its high seas fisheries and protect the long-term viability of the blue shark population.

### *3.2.2 Size restrictions*

To promote the sustainable harvesting of blue sharks and facilitate the recovery of their population, it is mandated that vessels engaged in blue shark fishing, whether intentional or incidental, refrain from targeting sexually immature blue sharks that measure less than 152 centimetres in length. This measure is implemented with the objective of safeguarding and allowing blue sharks to reach sexual maturity, thus ensuring their continued contribution to the growth and reproductive cycle of the species. By protecting sexually immature individuals, this Plan will support the long-term sustainability of blue shark population and maintain their ecological balance in the marine ecosystem.

### *3.2.3 Fishing gear selection*

To minimize the unintended capture of non-target species, such as sea turtles and seabirds, it is mandatory for vessels involved in the blue shark fishery to use circle hooks instead of the traditional J-hooks. Furthermore, operators are encouraged to employ selective fishing gear, such as nets with larger mesh sizes or escape panels. These gear modifications enable smaller non-target species to escape while retaining the desired blue sharks, effectively reducing the unintentional catch and mortality of non-target species.

In addition to gear modifications, operators will be required to utilize bycatch reduction devices (BRDs) as part of the conservation efforts. BRDs, such as line-weighted streamer lines or bird-scaring lines, have demonstrated their effectiveness in deterring seabirds and minimizing their entanglement in fishing gear. The implementation of these measures highlights strong commitment to sustainable fishing practices within the blue shark fishery. By employing circle hooks, selective fishing gear, and BRDs, the impact of non-target species will be mitigated, thus promoting responsible fishing practices that align with long-term conservation objectives. This proactive approach contributes to the overall sustainability of the blue shark fishery and supports the preservation of marine diversity.

### *3.2.4 Shark handling guidelines*

To safeguard the well-being and survival of blue sharks caught incidentally in non-targeted operations, operators in the blue shark fishery will be required to adhere to the shark handling guidelines and protocols set forth by the BHSFU. These guidelines provide detailed instructions on the appropriate procedures for handling and releasing blue sharks, with the primary objective of minimizing the post-capture mortality rate.

By following established guidelines, operators can ensure that blue sharks are handled in a manner that minimizes stress and potential harm during the release process. This proactive

approach contributes to the overall conservation efforts and supports the long-term sustainability of blue shark populations in the marine ecosystem.

### 3.2.5 *Shark Finning*

In accordance with Belize's High Seas Fishing Act, 2013, operators involved in the blue shark fishery are obligated to land all blue sharks with their fins naturally attached. This regulation aims to ensure that the entire shark is utilized, thereby reducing waste, and maximizing the value of the catch. It also enables proper species identification, which is crucial for effective fisheries management and conservation efforts. The enforcement of this conservation measure demonstrates Belize's commitment to responsible fishing practices and the sustainable utilization of marine resources.

## 4. Measures to Manage and Regulate Shark Fishery

### 4.1 Regulatory Compliance

Owners and operators of Belize-flagged fishing vessels involved in targeting blue sharks, whether as a primary target or as bycatch, are obligated to comply with both national and international regulations governing the harvesting of blue sharks. This includes adhering to the provisions established by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

By following these regulations, owners and operators ensure that their fishing activities align with the conservation and sustainability measures outlined by CITES. This commitment to responsible fishing practices contributes to the protection of blue shark populations and supports the wider efforts to conserve marine biodiversity.

### 4.2 Application to target Blue Shark

On an annual basis, owners/operators who are interested in harvesting blue sharks, either as a targeted species or as bycatch, are required to apply for approval from the BHSFU. This application process ensures that participants in the blue shark fishery adhere to the regulations and guidelines set forth by the BHSFU. It also allows the BHSFU to maintain oversight and control over the harvesting of blue sharks, thus promoting responsible fishing practices and the sustainable management of the species.

### 4.3 CITES Certification

As an integral part of this plan, vessel owners/operators intending to target blue shark for export purposes must actively participate in the CITES Certification process. This process involves submitting a request for the issue of a CITES Certificate together with relevant supporting documentation. The application will be carefully reviewed to ensure

compliance with national and international regulations and to assess the sustainability of the fishing and export activity.

#### 4.4 Catch reporting

Vessels that target blue shark are required to submit their catch and effort report together with the landing report in accordance with the designated catch reporting process. All catch and effort data submitted will be thoroughly reviewed and analysed to ensure it aligns with the requirements for data reporting and compliance with catch quotas. This assessment will ensure compliance with these regulations and thereby achieve accurate monitoring and management of catch levels and fishing activities related to blue sharks. Operators are also required to log all catches and interactions with blue sharks in their physical logbooks kept on board the vessel for vetting.

#### 4.5 Vessel Monitoring

Effective management of the blue shark fisheries requires robust monitoring and enforcement measures. A key component of this will be comprehensive vessel monitoring for all vessels engaged in the blue shark fishery under Belize.

All vessels are required to install and operate a functional vessel monitoring system that shall continuously transmit to the BHSFU's FMC. This data will be used to detect any unauthorized fishing activities or entry into prohibited areas ensuring that vessels are adhering to designated fishing areas, closed seasons, and other restrictions. Cross referencing with catch reports to verify accuracy of landings and logbook records and to facilitate rapid response to incidents.

#### 4.6 At-sea Observers

To ensure careful management of the blue shark fishery, vessels that specifically target this species will be required to comply with our at-sea observer policy, which mandates selective placement of observers on board during fishing operations. This measure is an international legal requirement established by the Regional Fisheries Management Organizations (RFMOs) and serves to monitoring fishing activities and compliance with established conservation and management measures, thereby achieving transparency in sensitive fisheries.

#### 4.7 Electronic Monitoring System (EMS)

To enhance the monitoring and enforcement of the blue shark fishery, in addition to at-sea observers, vessels targeting this species will be required to install and operate an electronic monitoring system. This system utilizes advanced technology to capture and record vessel activities including fishing operations, in real-time. By implementing this system, we can

further ensure the accuracy of compliance with regulations and facilitate data collection for the sustainable management of blue shark fishery.

To ensure careful management of the blue shark fishery, vessels that specifically target this species will be required to comply with our at-sea observer policy and/or EMS. This measure is necessary due to the importance of monitoring and maintaining transparency in this sensitive fishery.

## 5. Compliance and Enforcement

### 5.1 Vessel Inspection

Regular inspections and audits of fishing vessels engaged in blue shark fishery will be conducted to verify compliance with national regulations and conservation and management measures. Periodic inspections based on risk assessment and vessel performance evaluations will help to identify potential violations and deter non-compliance.

### 5.2 Sanctions and Penalties

Failure to comply with the provisions established in this management plan will result in sanction and penalties in accordance with Belize's High Seas (Sanctions) Regulations and its implementing Administrative and Sanction Assessment Policy.

## 6. Review of Plan

The BHSFU will periodically review this Plan and consider revisions or modifications as appropriate to ensure that it continues to serve the stated purpose.

Approved this **10<sup>th</sup>** day of **MAY** in the year **2024** at BELIZE CITY, Belize.