# Mexico Campeche finfish - vertical and bottom longline

## Overview

**FIP Description**

The fishery of the red snapper (*Lutjanus campechanus*) is one of the most important in terms of the scale resource in the Gulf of Mexico (GM) region, being the fifth species of fish with greater extraction in Campeche (González-de la Rosa, Sánchez and Arreguín-Sánchez, 1994; Government of the State of Campeche, 2015).

During the decade of the 70s, the annual catch of red snapper in this same region was represented in 93% by *L. campechanus*, without indications of reduction of the population stock (Anderson et al. 2015). During the 80s, González-de la Rosa et al. (1994), Monroy-García, Garduño-Andrade and Espinosa (2002), as well as, Monroy-García, Arceo and Ríos (2004) stated that the red snapper resource was under-exploited and the fishery growing in the north from Yucatan, showing an increase in annual catches from 1,800.0 to 4,500.0 tonnes.

In Mexico, there was a historical maximum in the catch of red snapper during 1993. In the period 1986-1996, 4,956.0 t of the average annual catch was recorded and from 2000 to 2015 a decrease of 39.0% was observed with 2,996.0 t annual average according to the CNP (2018).

Monroy García et al. (2002) estimated that this indicator decreased from 32,957.0 t in 1984 to 16,877.0 in 1999, which is 51.0%, indicating that this population does not show signs of recovery. They also calculated a maximum sustainable yield (RMS) of 1,271.0 t / year. Recording a capture of 3,083.0 t in 1992, and an average of 1,384.0 t in the period 1984-1999, which exceeds the CMS and therefore there is a strong decrease, reporting that landings in the Gulf of Mexico (GM) declined from 71.0 to 80.0% by 2013 (Anderson et al., 2015).

It is noted that the results only showed the decency until 2015, and most recent information was not included in the profile. However, managers concluded that the fishery is exploited to the maximum sustainable extent with a tendency to find deteriorated in the future (DOF, 2023). Garcia-Rodriguez et al. (2024) used the Catch-MSY (CMSY) data-limited to determine the stock status of red snapper in the Gulf of Mexico. The authors used a combination of catch data, resilience, and qualitative stock status information on the data-limited model to estimate the biomass-producing MSY (BMSY), the fishing pressure-producing MSY (FMSY), catch in terms of MSY (CMSY) and reference points such as stock size (B/BMSY) and exploitation rate (F/FMSY). Based on the results, the authors recognized the transition of the red snapper population in recent years and reported signs of

a relatively positive trend. With the most recent year putting the species with a status of the biomass above the MSY (BMSY).

*Lutjanus synagris:*The species in the Gulf of Mexico was classified as near threatened by the IUCN in 2015 (Lindeman et al. 2015). Not recent stock assessment has been conducted in Mexico. In the US, managers assumed that a single unit stock for the GOM. Although some evidence of two genetically distinct stocks in the northern GOM based on microsatellites: a western stock which includes individuals from the northwestern and north central GOM and an eastern stock that includes individuals from the west coast of FL, the Florida Keys, and the Atlantic coast of FL (Karlsson et al. 2009).

*Rhomboplites aurorubens:*In the Mexican region of the Gulf of Mexico, there are no recent stock assessment for the species, in the US, however, at least five stocks (or subpopulations) of vermilion snapper have been described, as follows: The South Atlantic, the Gulf of Mexico, the Puerto Rico Snapper Complex, the St. Croix Snapper Complex and the St. Thomas/St. John Snapper Complex (NOAA 2023).

According to the most recent stock assessments: The Gulf of Mexico stock is not overfished (2020), and is not subject to overfishing based on 2022 catch data. The stock assessment information from the Stock SMART tool by NOAA explained shows the variations of the estimated stock abundance from 1950 to 2018, but also a constant increasing in landings during the same time period.

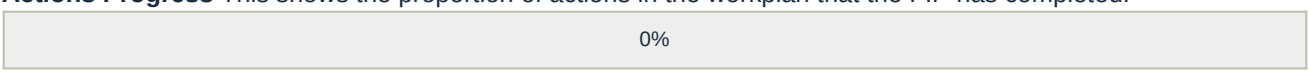
*Bagre marinus:* The stock structure is unknown, the most recent report on the status was published by managers within the National Fisheries Chart (NFC) where it was reported that the species was above the MSY. However, information on how this was estimated or peer-reviewed was unshared.

Currently, in the Mexican states, the use of these resources does not present specific regulations such as a fishing management plan, reproductive closures, quotas, or minimum catch sizes, considering its known status, its a need to update the public information about the resources, and the development of strategies for fishery management for this species, which involve the fisheries, government, academic and civil society organizations to establish standards for responsible fishing.

## How is this FIP Doing?

**Current Status:**


**Actions Progress** This shows the proportion of actions in the workplan that the FIP has completed.




**Actions Overview** This shows the proportion of actions that are behind schedule, on track,completed, or not yet started.

| Behind | On Track | Complete | Future |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 17% | 50% | 0% | 33% |

**Red Indicator Progress** This shows the proportion of actions specifically addressing red indicators that are behind schedule, on track, completed, or not yet started. This helps users understand the progress the FIP is making on the biggest challenges in the fishery.

| Behind | On Track | Complete | Future |
|---|---|---|---|
| 20% | 40% | 0% | 40% |

**FIP Progress Rating**

A - Advanced Progress

**FIP Objective(s)**

Objectives

By the end of 2027, the FIP aims to achieve a management performance in accordance with all the 28 MSC indicators for sustainable fisheries. This FIP is also working towards completing the following objectives:

- Expand a continuous monitoring program that permits generating basic fishery information integrating the snappers and Gafftopsail species into the FIP (September 2019 - December 2027).
- Analyze the fishery impact on the ecosystem, habitat and associated species, to improve its management (January 2020 - December 2027).
- Promote a quota management program with an ecosystem approach to mitigate fishing pressure (January 2021 - December 2027).
- Achieving the development of fishery regulations and improvements in compliance (January 2021 - December 2027).

Additional objectives to the MSC standard:

- Generate financial and political support, from collaboration among stakeholders (August 2019 - December 2027).
- Share research results and improvements obtained through workshops, scientific publications, and other materials to research and decision-making processes (January 2021 - December 2027).

**FIP Type**

Comprehensive

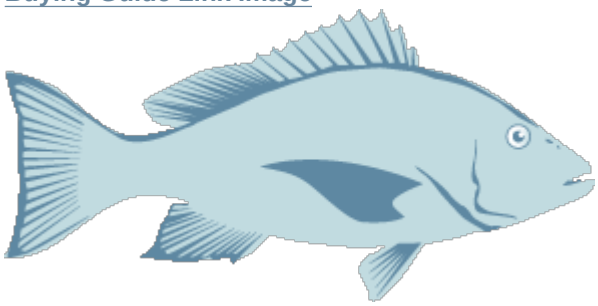
**FIP Stage**

Stage 5: Improvements on the Water

**Start and Projected End Dates**
November, 2019 -
December, 2027

**Species**

**Common Name**
Red Snapper
**Scientific Name**
Lutjanus campechanus
**Buying Guide Link Image**



Red Snapper
Buying Guide

**Common Name**
Lane Snapper
**Scientific Name**
Lutjanus synagris

**Common Name**
Vermillion Snapper
**Scientific Name**
Rhomboplites aurorubens

**Common Name**
Blue Catfish
**Scientific Name**
Bagre marinus

**Gear Type**
Bottom Longline

Longline

## Location

### FAO Major Fishing Area

Area 31 (Atlantic, Western Central)

### Exclusive Economic Zones

**Country**

Mexico

**Geographic Scope**

Gulf of Mexico

**Estimated Total FIP Landings**

30 metric tons

## FIP Leads

**Organization Name**

Comunidad y Biodiversidad, A.C.

**Organization Type**

NGO

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