

Fish Spawning Aggregation Management Plan Takes Off

Despega el plan de gestión de agregaciones de desove de peces

Le plan de gestion des concentrations de poissons reproducteurs prend son envol

¹MYLES PHILLIPS, ²ANA SALCEDA and ³YVONNE SADOVY DE MITCHESON

¹ *Wildlife Conservation Society, Belize Program, P.O. Box 768, 1755 Coney Drive, Coral Groves, Belize City.*

mphillips@wcs.org

² *BelugaSmile Productions, 4915 Brandywine St NW, Washington, DC 20016, United States. production@belugasmile.com*

³ *Division of Ecology & Biodiversity & Swire Institute of Marine Science, School of Biological Sciences, University of Hong Kong, Pok Fu Lam Road, Hong Kong.*

yisadovy@hku.hk

EXTENDED ABSTRACT

The Fish Spawning Aggregation Management Plan (FSAMP) is a set of regional guidelines endorsed by the Western Central Atlantic Fishery Commission (WECAFC). The FSAMP has a particular focus on the management of endangered Nassau grouper, *Epinephelus striatus*, and the near-threatened mutton snapper, *Lutjanus analis*, but is indicative of management measures for general application to other aggregating reef fishes.

The Plan was finally approved for implementation in 2022 after a decade of development and work by the regional Spawning Aggregation Working Group (SAWG), a collaborative initiative between WECAFC, the Central American Fisheries and Aquaculture Organization (OSPESCA), the Caribbean Regional Fisheries Mechanism (CRFM), and the Caribbean Fishery Management Council (CFMC). The plan's 6 objectives (Sadovy et al. 2022) range from standardizing and advancing data collection and monitoring of focal species' spawning aggregations and fisheries, to mainstreaming management planning at both national and regional levels:

1. To increase the availability of information for and understanding of NG and MS population status to build support for FSA protection.
2. To determine the current status, including presence and fish abundance, location/timing of known FSAs and identify those in most of protection.
3. To develop regionally consistent/harmonized monitoring frameworks and protocols to collect key biological, trade and other socio-economic information associated with NG and MS and NG, both during and outside of FSA seasons/areas.
4. To establish coordinated and harmonized mechanisms for effective protection of FSAs from extractive use across the Caribbean region.
5. To significantly increase awareness and engagement among key stakeholders to enhance support for the protection of FSAs, with special attention to equitable benefits for local communities.
6. To integrate FSA protection into broader planning and ecosystem-scale management initiatives.

The endorsement of the plan resulted in two new recommendations by the SAWG to the 19th Session of WECAFC. The first proposed the establishment of a Fish Aggregation Management Plan Coordination Committee within the SAWG, which will function to promote and facilitate broad implementation of the FSAMP in Member States across the Wider Caribbean. The second recommendation was to elevate Nassau grouper and mutton snapper as WECAFC Group 1 species to emphasize their institutional priority under the FSAMP.

Funding has been obtained from the European Union Directorate General for Maritime Affairs (EU-DG-MARE) to support the commencement of FSAMP implementation of the FSAMP. A pilot project has begun to advance data collection, monitoring and management planning for spatial/seasonal protections in 3 case study countries: Belize, Cuba and The Bahamas. In each pilot country, focal points have been engaged to compile information on monitoring and management of fish spawning aggregations, with emphasis on the status of Nassau grouper and mutton snapper. Simultaneously, a technical team supported by WECAFC's Fishery and Data Statistics working group worked to operationalize the WECAFC Information System (WECAFIS) and Data Collection Reference Framework (DCRF), regional databases which would allow the collection and storage of fisheries information from member states. These systems are being designed with the specific needs of FSA managers in mind.

The FSAMP is accompanied by a major public engagement campaign called the Big Fish Initiative, which was also endorsed by WECAFC in 2022 in recognition of the importance of broad public support and understanding for successful and effective management. Communications work under the auspices of this plan is making great progress, with the release of a one-hour documentary "Treasure of the Caribbean" on PBS Nature in April 2023 as a key success to date. The 10-year tri-lingual public engagement campaign was officially launched in September 2023 with funding from the EU-DG-MARE, The Howard Hughes Medical Institute, the Public Broadcasting Service and CFMC *inter alia*. Big Fish initiative comprises a multimedia approach which targets decision-makers, fishers and resource users through short-films, radio programs,

podcasts, public service announcements and posters to be distributed through the Big Fish interactive hub (<https://bigfishinitiative.com>) and social media platforms.

KEYWORDS: fish spawning aggregations, small-scale fisheries, regional management, grouper, snapper

LITERATURE CITED

Sadovy, Y., Prada Triana, M., Azueta, J. O., & Lindemann, K. C. 2022. Regional Fish Spawning Aggregation Fishery Management Plan: Focus on Nassau Grouper and Mutton Snapper (FSAMP). Western Central Atlantic Fishery Commission (WECAFC) 18th Session.