



Milestones and Mapping: Belize Advances its Debt-for-Nature Swap Marine Protection Goals with the Engagement of Sportfishers

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Belize's coast is lined by mangroves thriving with juvenile fish, a vibrant coral reef, and shallow, aqua-blue sand flats where fly fishers search for elusive sportfish. These ecosystems provide food, jobs, and storm protection, and are a source of joy for the people living alongside them. Coastal communities in Belize have cared for and managed their environment for hundreds of years. However, sustainability has become increasingly difficult with the globalization of the seafood market, population growth, warming ocean waters, and increased tourism.

In 2021, the Belizean government signed a “debt-for-nature swap,” also known as the Belize Blue Bond for Ocean Conservation, in part to address these environmental management issues.

Debt-for-nature swaps are facilitated by banks, non-governmental organizations (NGOs), and investors to restructure and decrease a country's debt in exchange for national conservation commitments. Belize's deal included three binding commitments: 1) Developing a marine spatial plan for the entire Exclusive Economic Zone (EEZ), 2) protecting 30% of its oceans by 2026 to meet “30x30” commitments, and 3) updating Belize's Integrated Coastal Zone Management Plan. Debt-for-nature swaps can be an effective tool for advancing conservation, but as with any agreement of this size, positive outcomes rely heavily on the actual implementation on the ground.

KEY WORD DEFINITIONS

Marine Spatial Plan (MSP)

A public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas (UNESCO)

Exclusive Economic Zone (EEZ)

The 200 nautical miles of ocean from a country's shore that it has jurisdiction over

30 x 30

International goal outlined in the Kunming-Montreal Global Biodiversity Framework to protect 30% of lands and oceans by 2030

Blue Bond

A debt instrument issued by governments or banks to raise capital from impact investors to finance ocean-positive projects (World Bank)

For more than 15 years, the Environmental Defense Fund (EDF) has worked with fishers, NGOs, and government partners in Belize to make fisheries sustainable. In 2022, EDF and Belize's Coastal Zone Management Authority and Institute (CZMAI) formed a partnership focused on the sportfishing sector, expanding fly fishing summer camps for Belizeans ages 14-18. The camps have helped communities across the nation better understand the importance of healthy coastal ecosystems and the livelihoods they support, and have increased access to one of the highest income opportunities in rural, coastal communities in Belize. This collaboration ultimately evolved into a partnership between EDF and CZMAI to advance two of the key milestones of the Blue Bond, ensuring the process is inclusive, participatory, and science based.

CZMAI is one of the lead entities implementing the milestones of the Blue Bond and is designated as the [primary authority](#) in Belize for managing sportfishing as defined: "Fishing that is done either for pleasure or competition, where the fish is caught and released, and not retained for the commercial purpose of selling, exporting, or otherwise." Target species



include bonefish, permit, and tarpon (all three species protected by catch-and-release requirements), along with several species of marlin, snook, mackerel, and pompano.

Because of EDF's history working with fly fishers, who operate as tourism guides and practice catch-and-release methods, EDF advocated for them to be interviewed and included in Belize's marine spatial planning and management plan revision process.

EDF provided support for three rounds of national consultations with key members of sport fishing communities to review sport fishing regulations. Existing sportfishing regulations were limited and hadn't been updated since 2010, so they no longer aligned with the current challenges or size of the sector. The new comprehensive regulations give CZMAI the tools it needs to manage the industry for economic and environmental sustainability and will go into effect in November 2025.

Next, CZMAI and EDF worked together in a participatory mapping process, interviewing over one hundred sport fishing tour guides and local leaders about their goals for designating protected areas while developing the blue economy. Using a software platform called SeaSketch, fishers marked areas important to them for their fly fishing and

ecotourism business. This included not just the areas they fish, but also sites they have identified for spawning, migration, feeding, nurseries, or other important ecological functions that support fish populations. The final product was a heat map showing habitats that support sportfishing species and livelihoods. This information will be used to determine both where protected areas should be located and which areas should be reserved for human use, limiting displacement of fishers and tour guides.

The next step will be to integrate this information with ecological studies and data on coral reef, seagrass, and mangrove habitats to propose areas for protection. The level of protection and regulations in the proposed areas will be informed by the direct input of Belizean coastal communities. By advocating for the inclusion of sportfishing guides in the participatory mapping process, EDF hopes to uplift ocean-positive businesses and ensure that communities have a voice in designating Belize's new marine protected areas.

