## Why Does This Matter?

- Collapse of Belize's fisheries would have far-reaching and potentially irreversible impacts on the local economy, fishers' livelihoods, the ecology of the Mesoamerican Reef, and Belize's reputation as a global leader in marine conservation.
- Approximately 13,000 people in Belize directly benefit economically from the fishing industry; conch and lobster are important sources of export revenue.
- Belizeans rely on marine resources; finfish like groupers and snappers are an important local food source and have cultural significance.
- Tourism in Belize depends relies on heathy fisheries for internationally renowned sport fishing and supply of local fish to restaurants.
- Belize is at a critical moment: the country is working to expand its Blue Economy, while also developing a Belize Sustainable Ocean Plan and a marine and coastal Project Finance for Permanence initiative. These efforts, along with the passage of the 2020 Fisheries Resources Act, provide a **unique opportunity for the country to ensure healthy, resilient, and sustainable fisheries**.

## What Does Science Tells Us?

- A new scientific analysis by leading international fisheries experts, relying on a comprehensive set of observations, data and previous analyses shows that key fisheries in Belize, including for conch and lobster, are currently harvested at unsustainable levels.
- The chart to the right is a "Kobe Plot" showing the status of most of the 20 species analyzed, including conch, lobster, groupers, snappers and pelagic species.



- The plot's X-axis represents curent abundance of each species relative to healthy stock abundance, while the Y-axis represents the amount of fishing relative to sustainable fishing. The plot is made up of four quadrants: green is for healthy, sustainable stocks, while stocks in the red zone have abundance that is too low and fishing levels that are too high.
- The table below describes the condition of the assessed stocks. Seventeen of the 20 are in the red zone and 19 need fisheries management adjustments to prevent further decline and become sustainable.
- Analysis of conch and lobster since 1950 (conch) and 1932 (lobster) shows that fishing effort over time has increased beyond sustainable levels, leading to overfishing and depletion of spawning stock biomass. Science-based management adjustments can reverse this situation, rebuilding the stocks and putting both fisheries back in the healthy and sustainable green zone.

% of Catch	Status
21	Unsustainable (overfished & undergoing overfishing)
10	Unsustainable (overfished & undergoing overfishing)
23	Unsustainable (overfished & undergoing overfishing)
8	Crevalle: unsustainable (overfished & undergoing overfishing)
	King mackerel: heavily overexploited (healthy stock about to be depleted by overfishing)
	Horse-eye: healthy (sustainable fishing pressure)
3	Unsustainable (overfished & undergoing overfishing)
2	Unsustainable (overfished & undergoing overfishing)
2	Unsustainable (overfished & undergoing overfishing)
<1	Nassau and goliath: unsustainable (overfished & undergoing overfishing) Black: overexploited (few fish left)
	% of Catch   21   10   23   8   3   2   2   1

## What Can Be Done About It?

- Practical fishery management adjustments can reverse current trends and transition Belizean fishers to sustainability. By adjusting management based on the currently available scientific information and input from fishers, fisheries can be rebuilt improving livelihoods and food security for Belizeans.
- Belize has the necessary foundations in place to support **Fishery Management Plans** a transition to sustainable fisheries, and conch and lobster especially can recover quickly under the right management. With the necessary management changes, the future of Belize's fisheries is very bright and could be a model for the region.
- For conch, lobster, and many finfish, the management adjustments needed are to ensure enough reproduction occurs to increase and sustain resilient populations of these species, and ideally to support maximum sustainable yield ("MSY" catch) for the fisheries.
- These adjustments should be designed such that more conch, lobster and finfish live long enough to reproduce before being caught and also protect the large "megaspawners" that produce exponentially more eggs than smaller adults.
- Building upon and strengthening Belize's system of Marine Protected Areas in line with international commitments (30x30) are a vital component of improving fisheries management. This includes maintaining, even strengthening protections for deep water areas.

About the Project

The Belize Fisheries Project seeks to support sustainable fisheries in Belize. The project team comprises experts from Comunidad y Biodiversidad (COBI), the Environmental Law Institute (ELI), Healthy Reefs for Healthy People Initiative (HRI), MRAG Americas, and the University of British Columbia's *Sea Around Us* initiative (SAU), as well as Dr. Alexander Tewfik, who has experience in fisheries in Belize and regionally.