

CFMC Fishery Ecosystem Plan

2021 Stakeholder Engagement Workshops

Council Member Ongoing Development Workshop

Background

- Large, coordinated effort by Council and others to reach as many stakeholder groups as possible, as per Fishery Ecosystem Plan (FEP) best practices
 - Fishers and fishing communities
 - Scientists and coastal/marine experts
 - Managers
 - Other (non-fishing) stakeholder groups
- Few support for subset of stakeholder engagement workshops (local businesses, eNGOs)
- Coordination with Lenfest grantees (scientists, non-DAP fishers)
- Project timeframe: late August 2020-August 2021


Purpose

- **Ensure that a variety of stakeholder viewpoints are incorporated** into the development of the Council's overall conceptual model.
- **Engage a subset of stakeholder groups** that are not frequently involved in the Council's work.
 - Coastal businesses: dive shops, surf shops, sailing charters, outdoor guides, restaurants, hotels, guest houses, etc.
 - Local environmental nongovernmental organizations (eNGOs) based in each island district.
- **Develop conceptual models** of fishery ecosystem for each stakeholder group in each district (Puerto Rico, St. Thomas/St. John, St. Croix).

Methods

- Bilingual 2-page background briefs in advance
- Virtual 2-hour facilitated workshops w/translation
 - ▶ Review of background information
 - ▶ Trigger questions, individual brainstorming
 - ▶ Identification of biological, social, and economic ecosystem components, and relationships
- Output: 6 conceptual models, 2 per island district

Fishery Ecosystem Plans





The Caribbean Fishery Management Council (Council) is responsible for conserving, restoring, and managing the fishery resources in federal waters of the U.S. Caribbean. As part of the Council's work, they are developing a Fishery Ecosystem Plan (FEP), which is a comprehensive plan that acknowledges the connections among fish and other marine life, the changing ocean environment, and the humans who rely on and use these resources.

What is an ecosystem? What is a fishery? What is a fishery ecosystem plan?

An **ecosystem** is a community or group of living things that interact with one another in a particular environment. There are many types of ecosystems – for example, forest ecosystems, desert ecosystems and coral reef ecosystems. The most important characteristics of an ecosystem are the linkages between living and non-living things.

A **fishery** = fish + people. It consists of a species or group of species and the people who catch those fish. Fisheries can be defined by many characteristics, such as the type of gear used, an area fished, or a user group (e.g. commercial, private angler, charter). Fisheries are systems that have biological, social, cultural, economic, and human components.

A **fishery ecosystem** consists of all the linkages between a fishery (or fisheries) and its components: human (fishermen, processors/dealers, boat mechanics), biological (fish, habitats, predator-prey relationships), social (seafood restaurants, ocean recreation), cultural (fishing-dependent communities), and economic (market demands, costs for fuel, bait, crew, etc.).

What is an ecosystem?

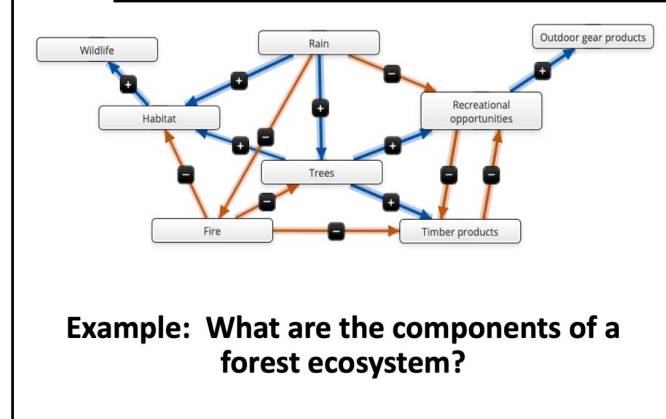
- **Ecosystem** = a community or group of living things that interact with one another

What is a fishery?

- **Fishery** = fish + people

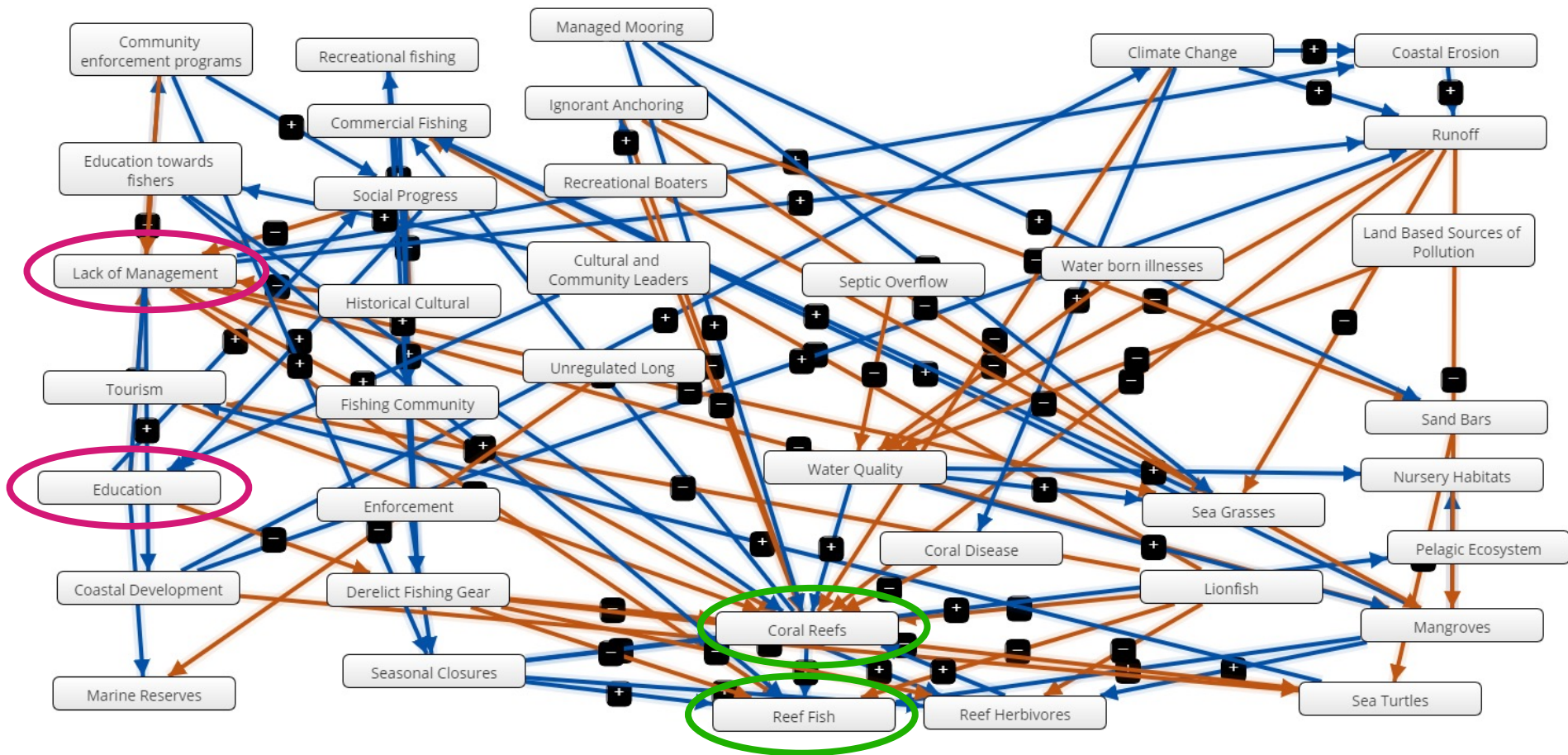
What is a fishery ecosystem plan?

- **Fishery ecosystem** = linkages between a fishery and its components
- **Fishery ecosystem plan** = comprehensive management system based on the connections between human and biological components of fisheries



Puerto Rico

Coastal Business Community



PINK = driver component
 GREEN = receiver component

Conceptual Models

Ecosystem drivers

- Education: Puerto Rico Businesses, Puerto Rico eNGOs, St. Thomas/St. John Businesses
- Government/Regulatory Agencies/Management: Puerto Rico Businesses, St. Thomas/St. John Businesses, St. Croix NGOs
- Others: water quality, coral, runoff, land-based pollution, climate change, habitat restoration

Conclusions

- Stakeholder engagement drives identification of tradeoffs
- Scientists, managers, and traditional stakeholders may not be aware of certain tradeoffs
- More upfront engagement => greater acceptance of priorities and likelihood of success