

NOAA's Habitat
Blueprint Focus Area in
the Caribbean:

***Northeast Marine Corridor and
Culebra Island, Puerto Rico***

NOAA's Habitat Blueprint Guiding Principles

Foster and leverage partnerships



*Integrate and improve the delivery of habitat
science across disciplines to facilitate conservation actions*

NOAA's Habitat Blueprint Guiding Principles

Make decisions in an ecosystem context that considers competing priorities



*Implement innovative **place-based** habitat solutions to address coastal and marine resource challenges*

Why Puerto Rico's NE Marine Corridor and Culebra Island?

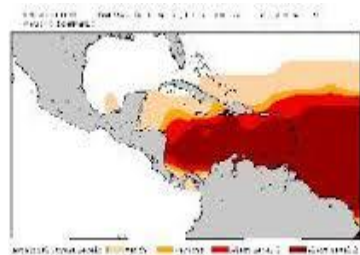
- Variety of high value ecosystems support tourism, recreational, and commercial fisheries
- Combination of protected and unprotected areas threatened by:
 - Land-based activities
 - Fishing impacts
 - Recreational pressure
 - Climate change
- NOAA and its partners can move the conservation needle here
- Goals:
 - Improved management to support resilience of coastal and marine habitats
 - Increased population size, abundance, and health of ESA-listed coral species
 - Sustainable management of living marine resources dependent on coral reefs
 - Promotion of recreational practices that preserve ecological integrity of marine habitats



NOAA Programs



Coral Reef Watch



Forecasting coral bleaching to prepare managers.

Weather Ready Nation



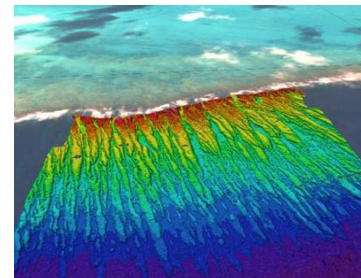
Real-time storm surge predictions to protect coastal societies.

Southeast Fisheries Science Center



Spawning aggregations and conch habitat identified for conservation.

National Centers for Coastal Ocean Science



Benthic habitat mapped, vessel use tracked for more appropriate zoning.

Restoration Center



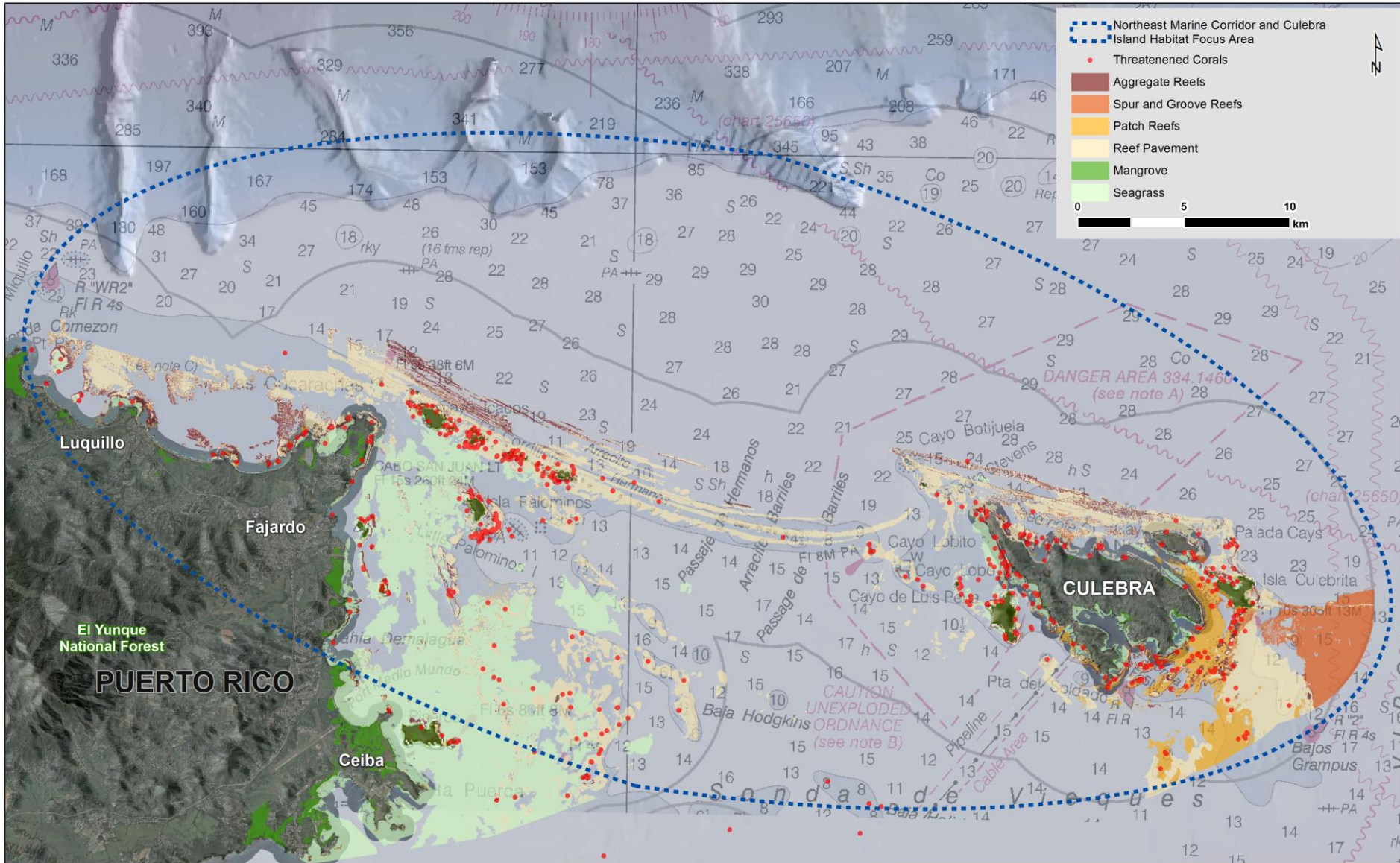
On the ground actions to reduce threats and restore habitat.

Coral Reef Conservation Program



Supports effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems for future generations.

The Northeast Marine Corridor and Culebra Island Habitat Focus Area

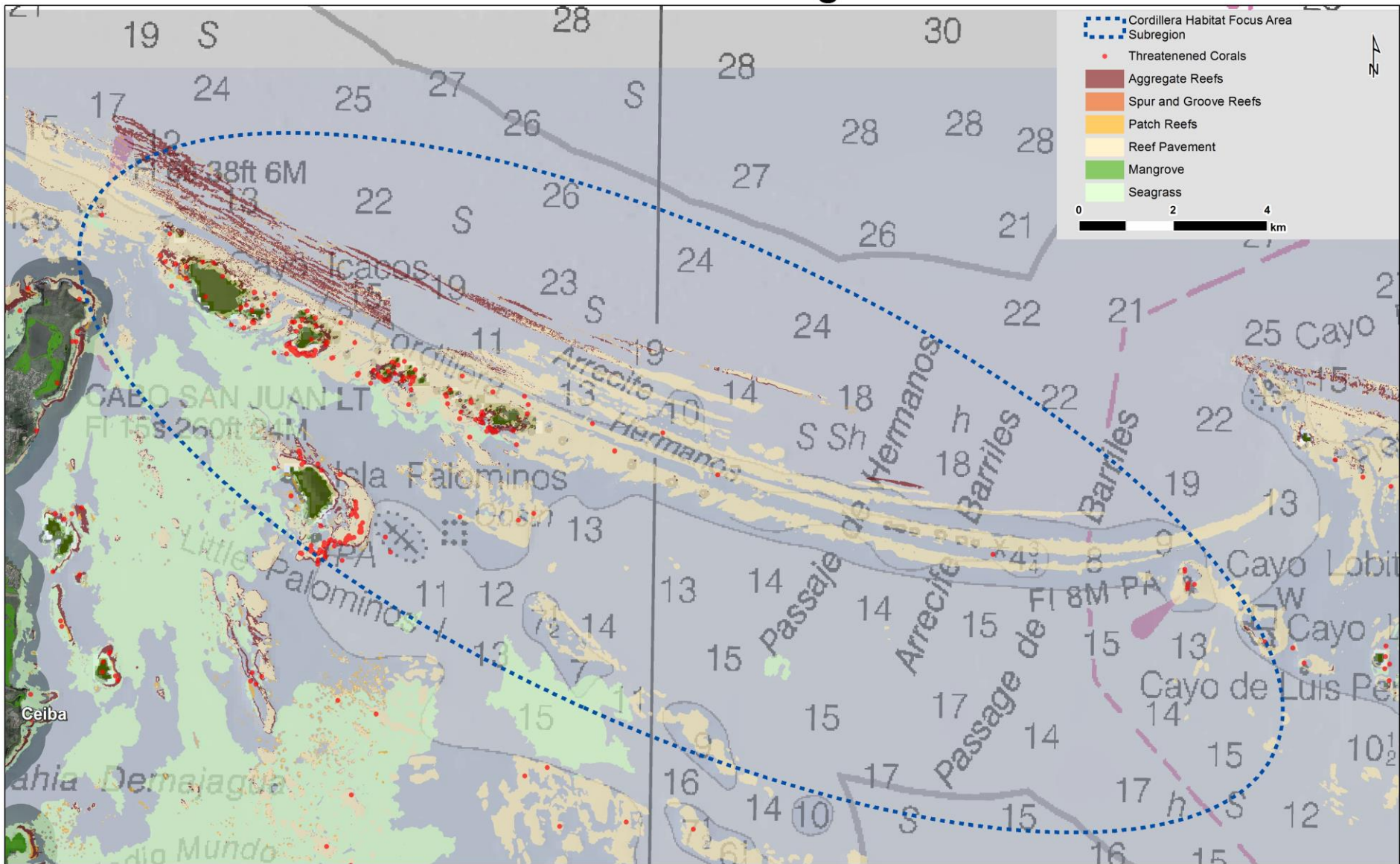


Draft Action Plan: Culebra Island

- Implement at least 8 watershed restoration projects
- Reduce impacts from recreational boating, diving, swimming, and snorkeling
- Install ATON's at three reefs and improve response to storms and vessel groundings
- Outplant >6000 nursery corals annually



Northeast Marine Corridor and Culebra Island Habitat Focus Area: Cordillera Subregion



Draft Action Plan - Cordillera Region

- Reduce impacts from recreational boating, diving, swimming, and snorkeling.
- Improve fishery management by studying queen conch dynamics and other key fishery's nursery habitat annually
- Install ATON's at three reefs and improve response to storms and vessel groundings
- Outplant >6000 nursery corals annually



Draft Action Plan - Science

- Reef resilience assessment and monitoring.
- Understand connectivity between land inputs and reef effects.
- Identify grouper spawning aggregations
- Synthesize fishery impacts on marine resources
- Develop vessel-use zones using satellite imagery to characterize distribution of vessels in time and space
- Establish water quality targets to help manage LBSP
- Predict storm surge in real time.

Key Take Away Messages

- Habitat Focus Areas are about Place, Purpose, and Partnership
- The HFA process has revealed there is untapped energy, enthusiasm, and expertise in internal, cross-NOAA collaboration
- There is also a lot of interest and support that can be created with external partners, as well as funding that can be leveraged

<http://www.habitat.noaa.gov/habitatblueprint/hfagrants.html>

Partnership & Collaboration Opportunities

- ★ EPA, PR EQB, PRASA: improve sewage treatment in the HFA
- ★ EPA, PR EQB, DNER: address unsustainable development in HFA
- ★ USDA NRCS: implementation of agricultural conservation practices in the NE reserves through EQIP
- ★ DOI FWS: conservation assistance through Conservation Partnership Program
- ★ USDA Rural Development funds for sewage treatment on Culebra
- ★ USCG aids to navigation to mark shallow reefs
- ★ USCG keep up the good work with reporting grounding events!
- ★ USACE and DOD coordination in planning for removal of unexploded ordinance in Culebra

New Cooperative Funding Agreement

NOAA recently awarded approximately \$267,000 to Protectores de Cuencas (in partnership with CATEC & SAM) in funding to support habitat conservation.

The partnership will:

- Implement four high priority recommendations in the Culebra Watershed Management Plan.
- Support the expansion of ongoing coral farming and out-planting efforts in Culebra and Fajardo.
- Reduce recreational impacts to coastal ecosystems in Culebra and Fajardo.