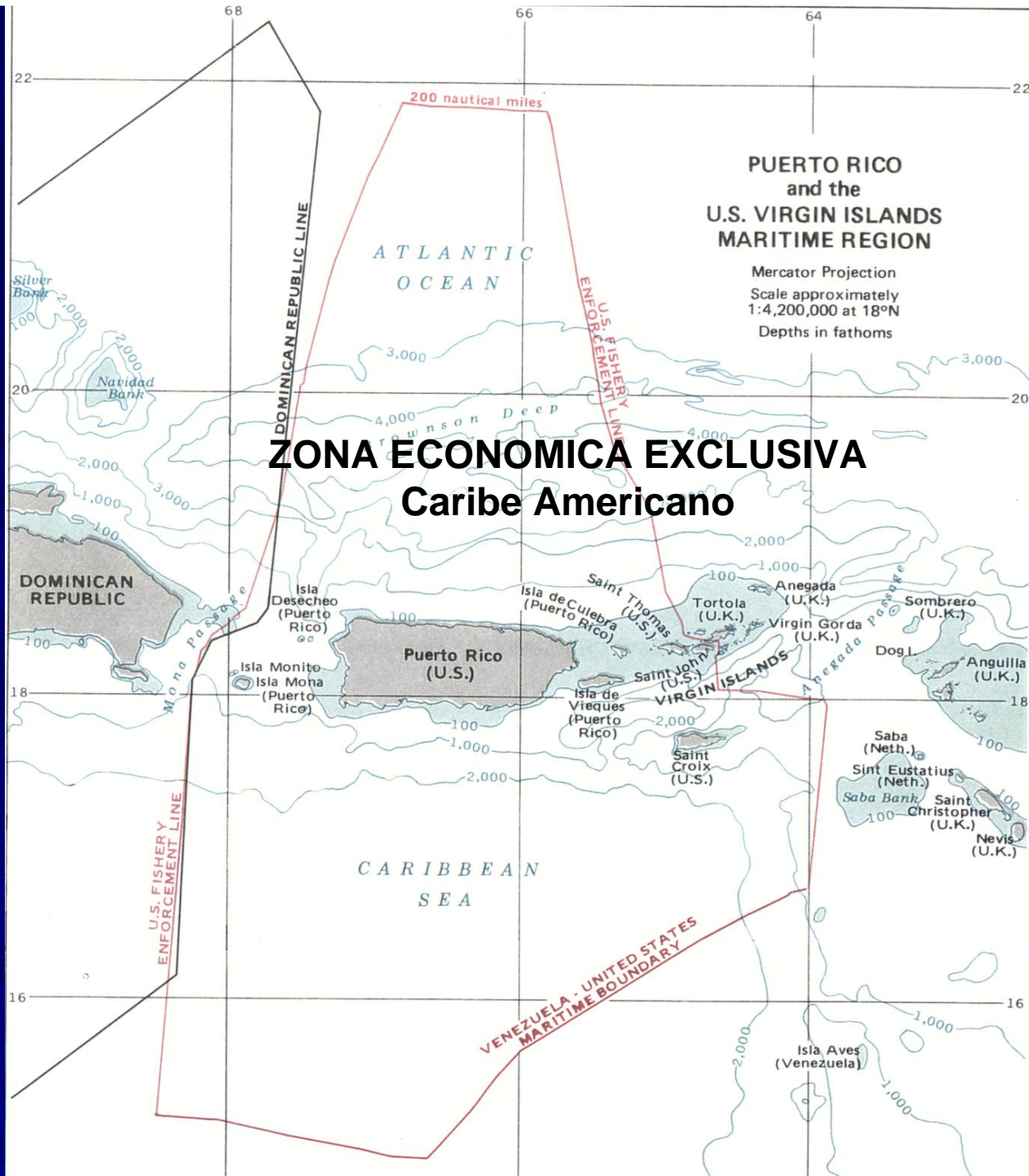


An underwater photograph of a coral reef. The scene is filled with diverse coral species, including large, flat, brain-like corals in the foreground and more complex, branching structures in the background. Small fish are scattered throughout the reef. The lighting is somewhat dim, typical of an underwater environment.

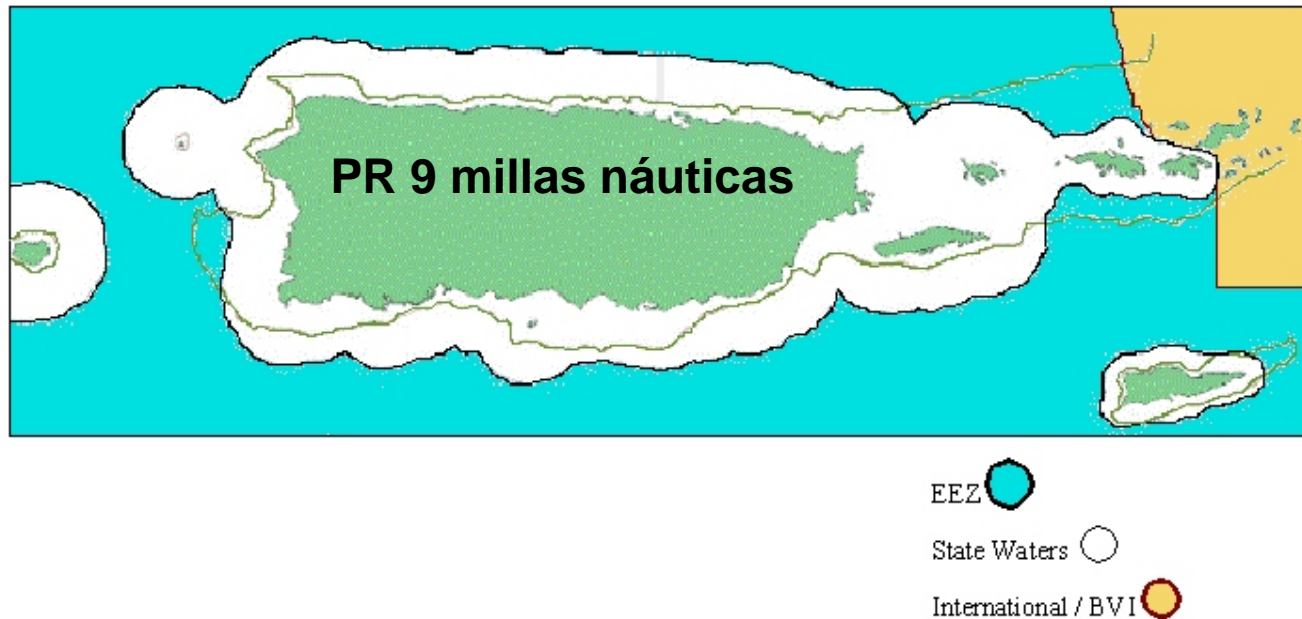
**Habitat Areas of Particular Concern:
Seasonal area closures in Puerto Rico
to protect fish spawning aggregations**

**Graciela García-Moliner
Caribbean Fishery Management Council
“Planificación y Manejo de los Terrenos Sumergidos”
PR-DNER
18 August 2010**



U.S. Caribbean Areas of Jurisdiction Áreas Jurisdiccionales del Caribe Americano

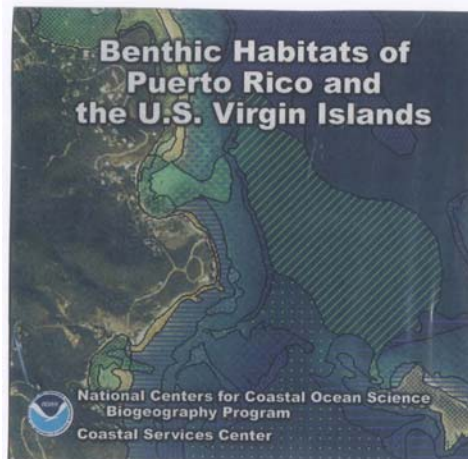
FEDERAL AND STATE WATERS AROUND PUERTO RICO AND THE US VIRGIN ISLANDS.



Puerto Rico State waters 9 nm (10.35 mi); USVI State waters 3 nm

Definitions

- EFH (essential fish habitat) means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (Magnuson-Steven Fishery Conservation and Management Act).



Definitions

- HAPCs are areas judged to be particularly important to the long-term productivity of populations of one or more managed species
- Whereas EFH must be described and identified for each species and life stage in the fishery management units (FMUs),



- HAPCs are identified on the basis of the condition of the habitat. The Final Rule lists the following considerations in the designation of HAPCs (50 CFR 600.815 (a) (8)):

The importance of the ecological function provided by the habitat;

The extent to which the habitat is sensitive to human-induced environmental degradation;

Whether and to what extent development activities are or will be stressing the habitat;

and

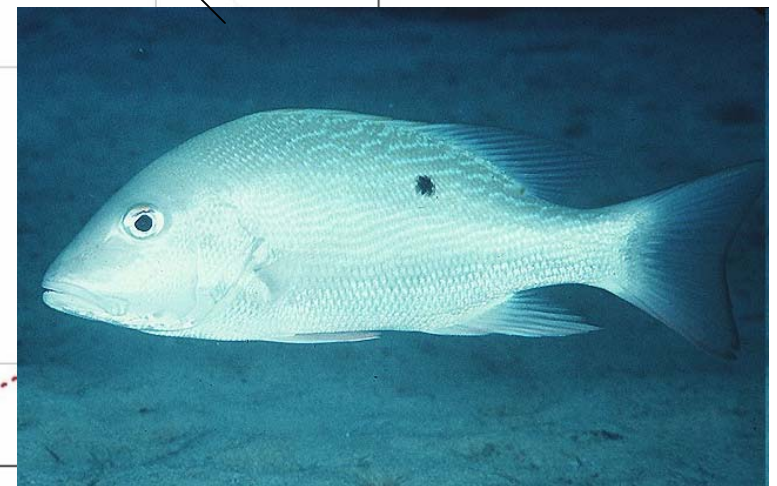
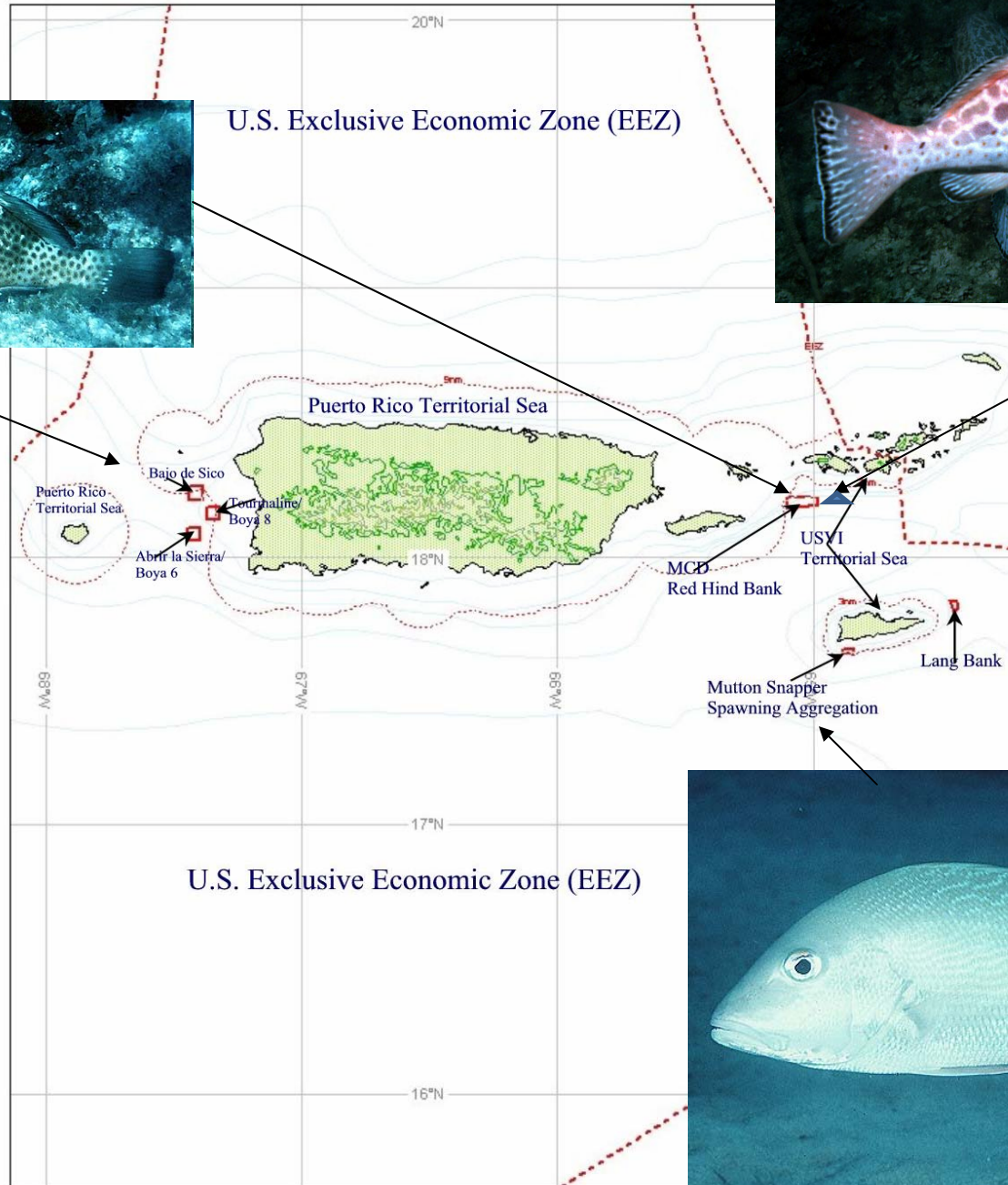
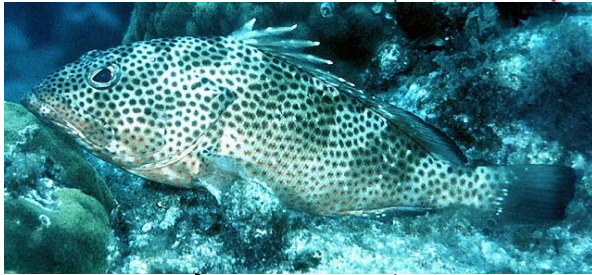
The rarity of the habitat type.



CFMC Managed Areas and shared jurisdiction management							
Name of Area and location	Jurisdiction	Area (nm2)	Year Implemented/ Changes in management	Species Protected	Season	Management	FMP
Hind Bank, St. Thomas	Federal	16	1990	Red hind/all species	Dec-Feb	No fishing	RF A1
	Federal	16	1999	Coral/ all fish species/lobster /conch	Year round	No Take	Coral A1
Tourmaline Bank, West coast PR	Federal /State	15	1993	Red hind/all species	Dec-Feb	No fishing	RF A2
	Federal /State	9/(5.2 Federal)	1996	Red hind/all species	Dec-Feb	No fishing	RF Reg A2 /Administrative Order 96-09 DNER
	Federal /State	9/(5.2 Federal)	2005/2007	All species/Corals	Year round	No bottom tending gear	SFA RF A3 /Regulation Num. 7326
Lang Bank, St. Croix	Federal	~3	1993	Red hind/all species	Dec-Feb	No fishing	RF A2
	Federal	~3	2005	All species/Corals	Year round	No bottom tending gear	SFA /RF A3
Mutton snapper Area	Federal/State	~2/(<1 Federal)	1993/1994/1996	Mutton snapper	Mar-Jun	No fishing	RFA2 /USVI code/RF Reg A1
	Federal	~2/(<1 Federal)	2005	All species/Corals	Year round	No bottom tending gear	SFA /RF A3
Bajo de Cico, West coast PR	Federal /State	9/(7.4 Federal)	1996	Red hind/all species	Dec-Feb	No fishing	RF Reg A2 /Administrative Order 96-09 DNER
	Federal/State	9/(7.4 Federal)	2005	All species/Corals	Year round	No bottom tending gear	SFA RF A3 /Regulation Num. 7326
Abrir La Sierra, West Coast PR	Federal	9	1996	Red hind/all species	Dec-Feb	No fishing	RF Reg A2
	Federal	9	2005	All species/Corals	Year round	No bottom tending gear	SFA /RF A3
Grammanik Bank, St. Thomas	Federal	6.88	2005	Yellowfin grouper/all species	Feb-April	No Fishing	RF Interim Rule

Yellowfin grouper

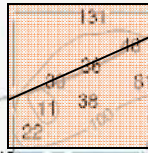
Red hind



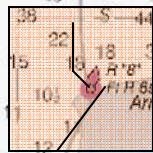
AREAS CERRADAS TEMPORERAMENTE

No se permiten palangres de fondo, nasas, cajones, filetes, trasmallos

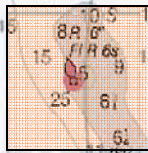
Bajo de Cico



Tourmaline



Abrir la Sierra

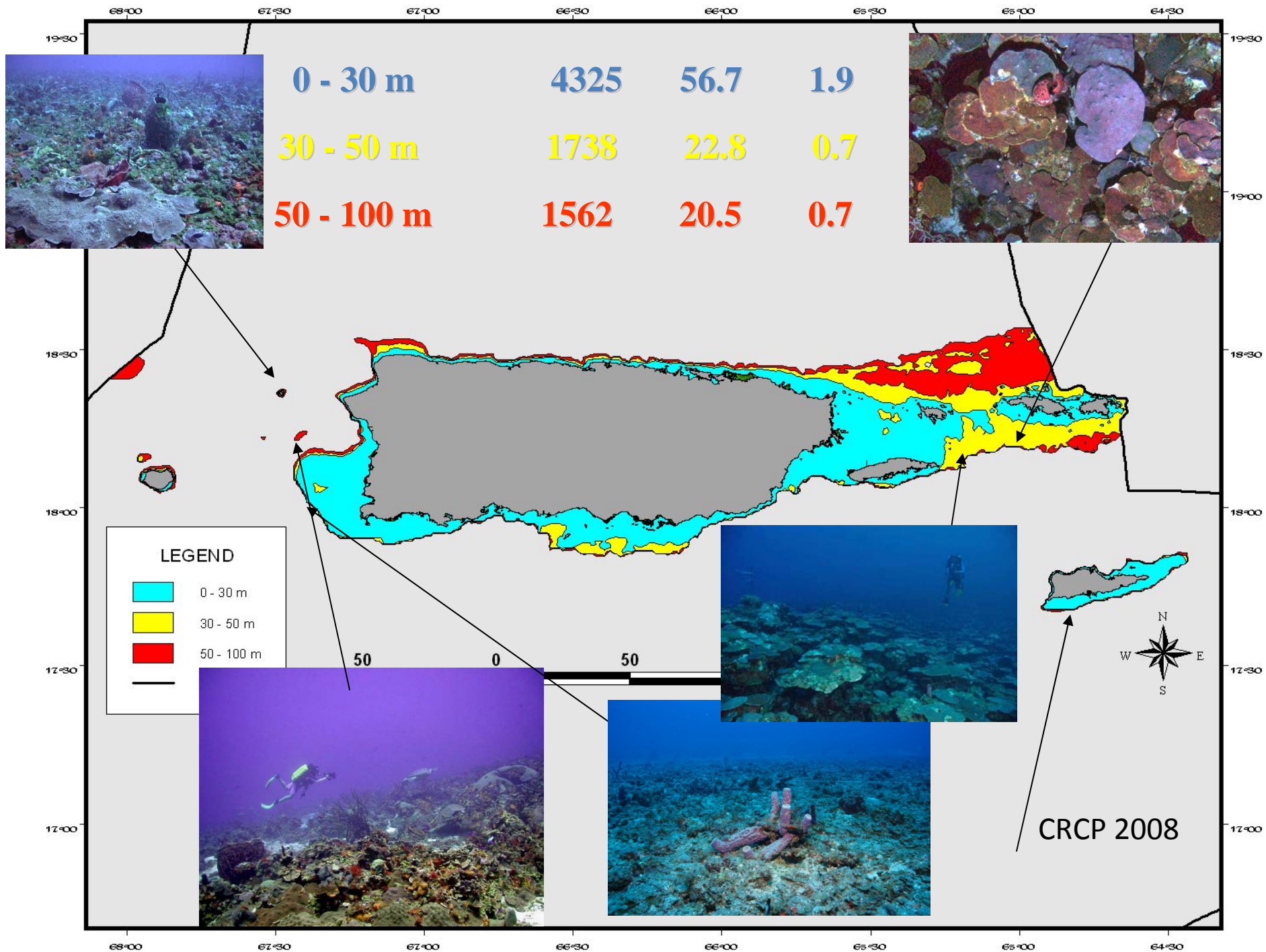


Temporada de veda y cierre
diciembre 1 a febrero 28
Cada año y todos los años

PROHIBIDA TODA LA PESCA

Chart Name: PUERTO RICO AND VIRGIN ISLANDS
Chart ID: REG10
Top Left: 18° 21' 22" N 67° 38' 18" W
Bottom Right: 17° 56' 37" N 67° 0' 32" W





Abrir La Sierra Inner Wall



Abrir La Sierra Rhodolith Reef Benthos

Insular Slope – 30 m (Sessile-Benthic Community)



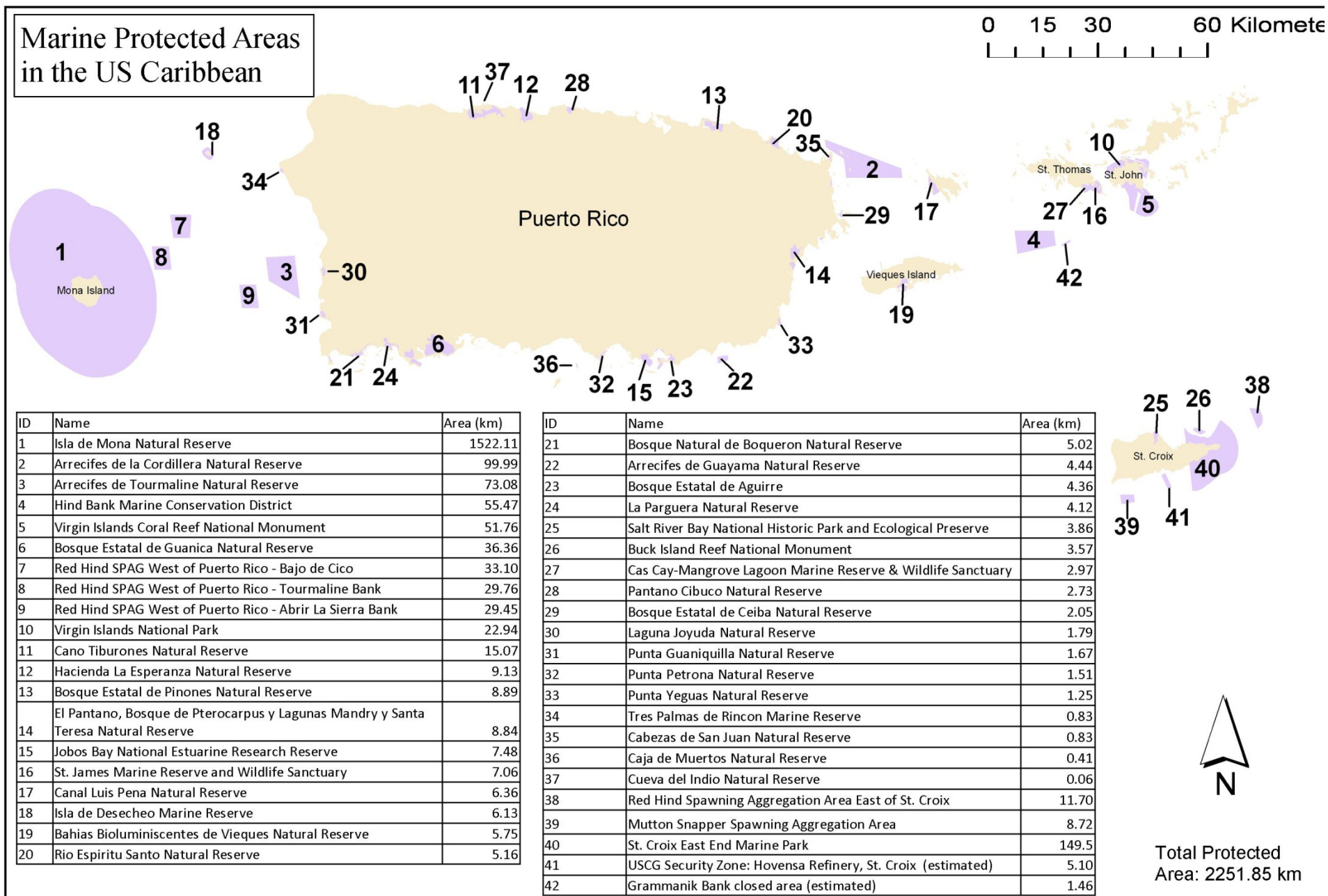
Abrir La Sierra Insular Slope 40m



Abrir La Sierra Slope 50m



Other HAPCs designated as those EFH areas having particular ecological significance





QUESTIONS?