

# Outreach and Education Strategies on MPAs

## Importance of Stakeholders Participation

177th CFMC public meeting  
February 9, 2022  
Carolina, PR

# Importance of MPAs

An MPA is defined as: “a clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”

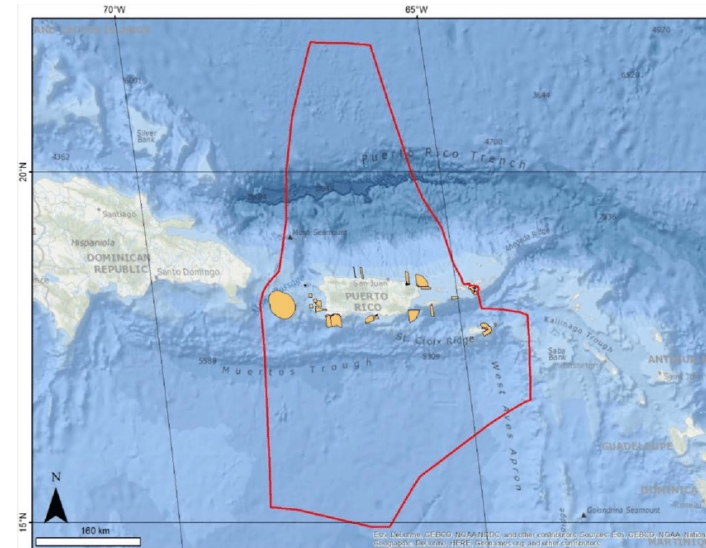
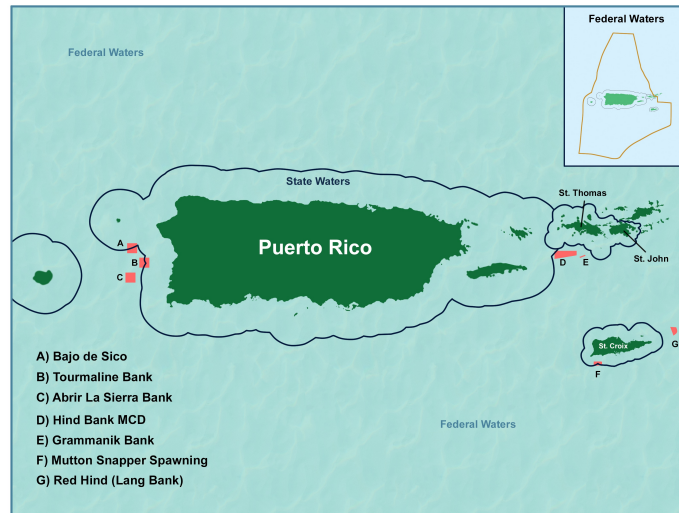
## **What is Protected?**

Ecologically significant ecosystems, habitats, processes, and taxa: mangroves, shallow coral reefs, seagrasses, deep coral reefs

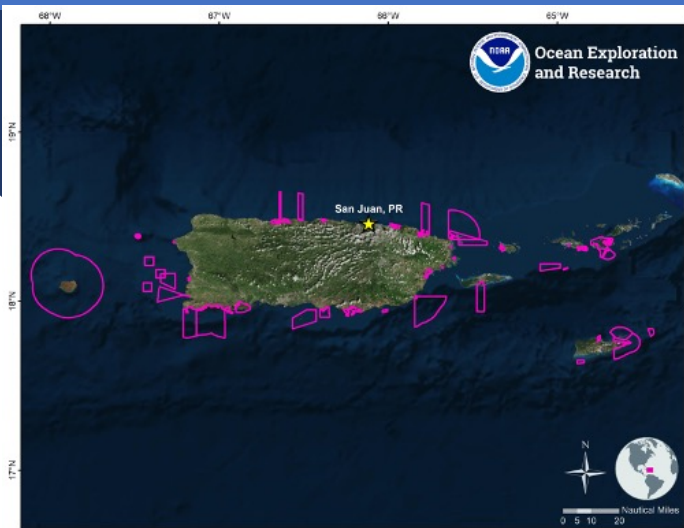
## **What is allowed?**

Multiple uses  
Some prohibit extraction of living resources

# MPAs in the CFMC jurisdiction



# MPAs in Puerto Rico



## RESERVA MARINA ARRECIFE DE LA ISLA VERDE

Ayúdanos a proteger este criadero de especies para su reproducción y propagación.



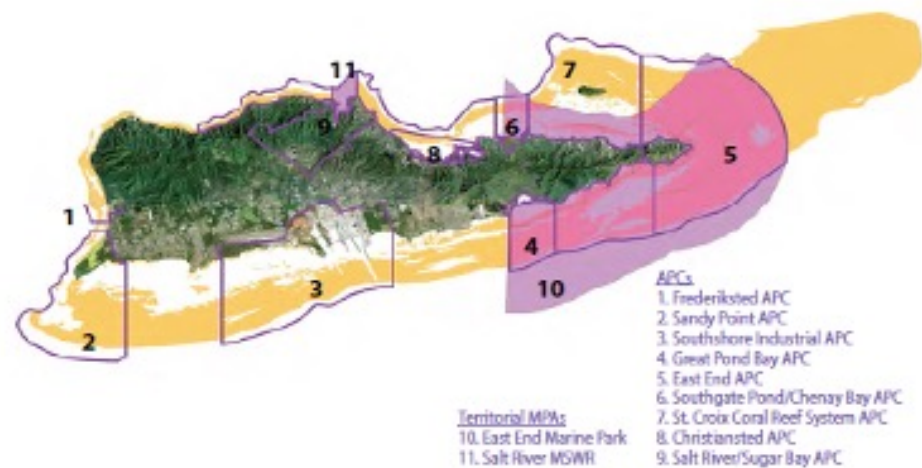
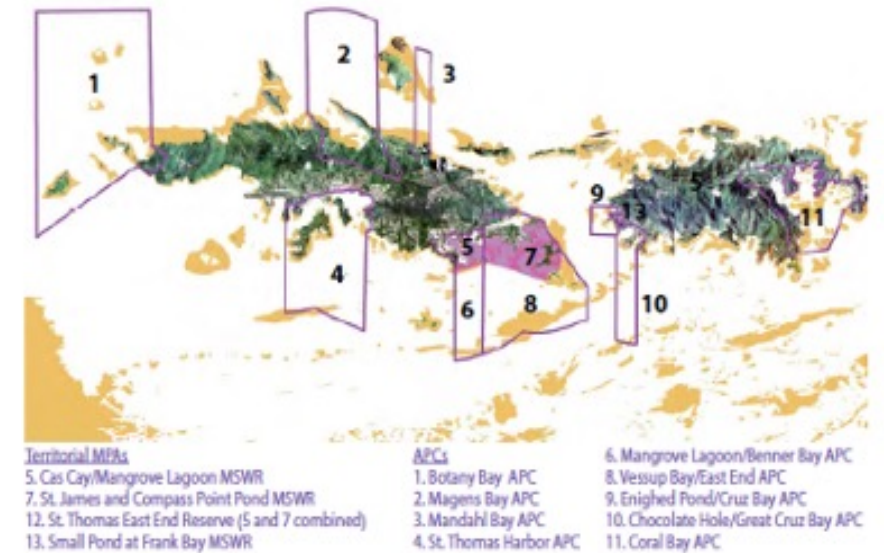
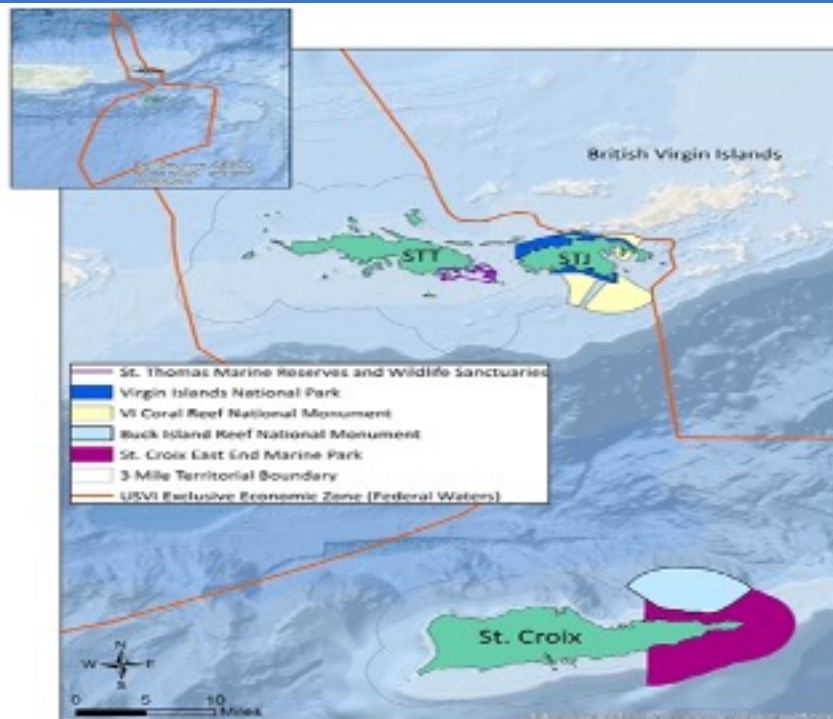
EN EL ÁREA DEMARCADA ESTÁ PROHIBIDA LA PESCA Y LAS EMBARCACIONES DE MOTOR.  
Multas por violación a la orden de no pesca: \$100 - \$5,000. Multas por embarcaciones de motor: \$250.  
Orden Administrativa DRNA Núm. 2014-01, Ley de Pesca 278 y Reglamento de Pesca 7949.  
Ley de Navegación 430 y Reglamento de Embarcaciones 6979. Cuerpo de Vigilantes DRNA: (787) 724-5700





# MPAs in the USVI Virgin Islands

St. Thomas  
St. John



St. Croix

How many  
MPAs do you  
know in your  
area?...



# Stakeholders participation

- Social, cultural and economic aspects.
- Contribute their traditional and local ecological knowledge of the marine ecosystems in the MPA and the historical relationships with the area.
- Identify and promote the community responsibilities for effective MPA management: prohibitions, closed seasons, etc.

Who are the  
Stakeholders?

## **WE ARE ALL STAKEHOLDERS**

Fishing community

Educators

Business

Consumers

Planners

Government agencies/Federal - Territorial

# Stakeholders Participation

## Education

- Integrate scientific data on MPAs to ALL curricular content: social sciences, geography, natural sciences, art and environmental studies.
- . Resources for community education
- Integration of fishers in management decisions.



# Outreach & Education Communication Strategies



## INTRODUCTION

“Ocean Literacy is an understanding of the ocean’s influence on you and your influence on the ocean.”

This document melds the “Ocean Literacy: Essential Principles and Fundamental Concepts” developed by the National Geographic Society, NOAA and partners for K-12 curricula with resources from the National Marine Protected Areas Center (MPA Center) that illustrate those principles. The information is intended to help educators improve ocean literacy by highlighting MPA Center resources on marine protected areas and conservation. The seven Essential Principles are a practical resource that outlines the knowledge required to be ocean literate, and are aligned with the National Science Education Standards (NSES). For more information on how these principles map to educational standards and to view the original Ocean Literacy document, click here: <http://oceanservice.noaa.gov/education/literacy.html>.

## HOW TO USE THIS DOCUMENT

The original seven Essential Principles of Ocean Literacy and Fundamental Concepts are shown below with those concepts that



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UPR Sea Grant

## Áreas Marinas Protegidas

- Reserva Marina Isla de Desecheo
- Reserva Marina Tres Palmas
- Un acercamiento bibliográfico a las áreas marinas protegidas (Parte I)

## Marine Protected Areas (MPAs)

**1. HND BANK MCD**  
 Point Latitude Longitude  
 A 19°12.0' 88°53.0'  
 B 19°13.0' 88°49.0'  
 C 19°11.0' 88°50.0'  
 D 19°13.0' 88°56.0'

**2. GROUNDING BANK**  
 Point Latitude Longitude  
 A 19°11.0' 88°50.0'  
 B 19°11.005' 88°49.220'  
 C 19°11.000' 88°50.200'  
 D 19°11.311' 88°47.317'

Map scale: 10 km  
 North arrow  
 Bathymetric contours: 1000, 2000, 3000, 4000, 5000, 6000, 7000, 8000, 9000, 10000, 11000, 12000, 13000, 14000, 15000, 16000, 17000, 18000, 19000, 20000, 21000, 22000, 23000, 24000, 25000, 26000, 27000, 28000, 29000, 30000, 31000, 32000, 33000, 34000, 35000, 36000, 37000, 38000, 39000, 40000, 41000, 42000, 43000, 44000, 45000, 46000, 47000, 48000, 49000, 50000, 51000, 52000, 53000, 54000, 55000, 56000, 57000, 58000, 59000, 60000, 61000, 62000, 63000, 64000, 65000, 66000, 67000, 68000, 69000, 70000, 71000, 72000, 73000, 74000, 75000, 76000, 77000, 78000, 79000, 80000, 81000, 82000, 83000, 84000, 85000, 86000, 87000, 88000, 89000, 90000, 91000, 92000, 93000, 94000, 95000, 96000, 97000, 98000, 99000, 100000, 101000, 102000, 103000, 104000, 105000, 106000, 107000, 108000, 109000, 110000, 111000, 112000, 113000, 114000, 115000, 116000, 117000, 118000, 119000, 120000, 121000, 122000, 123000, 124000, 125000, 126000, 127000, 128000, 129000, 130000, 131000, 132000, 133000, 134000, 135000, 136000, 137000, 138000, 139000, 140000, 141000, 142000, 143000, 144000, 145000, 146000, 147000, 148000, 149000, 150000, 151000, 152000, 153000, 154000, 155000, 156000, 157000, 158000, 159000, 160000, 161000, 162000, 163000, 164000, 165000, 166000, 167000, 168000, 169000, 170000, 171000, 172000, 173000, 174000, 175000, 176000, 177000, 178000, 179000, 180000, 181000, 182000, 183000, 184000, 185000, 186000, 187000, 188000, 189000, 190000, 191000, 192000, 193000, 194000, 195000, 196000, 197000, 198000, 199000, 200000, 201000, 202000, 203000, 204000, 205000, 206000, 207000, 208000, 209000, 210000, 211000, 212000, 213000, 214000, 215000, 216000, 217000, 218000, 219000, 220000, 221000, 222000, 223000, 224000, 225000, 226000, 227000, 228000, 229000, 230000, 231000, 232000, 233000, 234000, 235000, 236000, 237000, 238000, 239000, 240000, 241000, 242000, 243000, 244000, 245000, 246000, 247000, 248000, 249000, 250000, 251000, 252000, 253000, 254000, 255000, 256000, 257000, 258000, 259000, 260000, 261000, 262000, 263000, 264000, 265000, 266000, 267000, 268000, 269000, 270000, 271000, 272000, 273000, 274000, 275000, 276000, 277000, 278000, 279000, 280000, 281000, 282000, 283000, 284000, 285000, 286000, 287000, 288000, 289000, 290000, 291000, 292000, 293000, 294000, 295000, 296000, 297000, 298000, 299000, 300000, 301000, 302000, 303000, 304000, 305000, 306000, 307000, 308000, 309000, 310000, 311000, 312000, 313000, 314000, 315000, 316000, 317000, 318000, 319000, 320000, 321000, 322000, 323000, 324000, 325000, 326000, 327000, 328000, 329000, 330000, 331000, 332000, 333000, 334000, 335000, 336000, 337000, 338000, 339000, 340000, 341000, 342000, 343000, 344000, 345000, 346000, 347000, 348000, 349000, 350000, 351000, 352000, 353000, 354000, 355000, 356000, 357000, 358000, 359000, 360000, 361000, 362000, 363000, 364000, 365000, 366000, 367000, 368000, 369000, 370000, 371000, 372000, 373000, 374000, 375000, 376000, 377000, 378000, 379000, 380000, 381000, 382000, 383000, 384000, 385000, 386000, 387000, 388000, 389000, 390000, 391000, 392000, 393000, 394000, 395000, 396000, 397000, 398000, 399000, 400000, 401000, 402000, 403000, 404000, 405000, 406000, 407000, 408000, 409000, 410000, 411000, 412000, 413000, 414000, 415000, 416000, 417000, 418000, 419000, 420000, 421000, 422000, 423000, 424000, 425000, 426000, 427000, 428000, 429000, 430000, 431000, 432000, 433000, 434000, 435000, 436000, 437000, 438000, 439000, 440000, 441000, 442000, 443000, 444000, 445000, 446000, 447000, 448000, 449000, 450000, 451000, 452000, 453000, 454000, 455000, 456000, 457000, 458000, 459000, 460000, 461000, 462000, 463000, 464000, 465000, 466000, 467000, 468000, 469000, 470000, 471000, 472000, 473000, 474000, 475000, 476000, 477000, 478000, 479000, 480000, 48

Atlantic Ocean

U.S. Virgin Islands

St. Thomas

St. John

Caribbean Sea

1. Red Hind Bank, Marine Conservation District
2. Denmark Bank Seasonal Closure
3. Virgin Islands National Park
4. Virgin Islands Coral Reef National Monument

Three types of fish are shown: a spotted grouper (Siganus punctatus), a silver grouper (Siganus lineatus), and a blue tang (Siganus lineatus).



Hind Bank MCD and Grammanik Bank CFMC Map

**Common Snook** / *Centropomus undecimalis*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Black snapper** / *Acantholatris latipes*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Blackfin snapper** / *Lutjanus buchanani*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Queen snapper** / *Ethia aeneus*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Stk snapper** / *Lutjanus viridis*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Mutton snapper** / *Lutjanus analis*  
No harvest or possession April 1 through June 30 in St. Thomas/St. John. Same regulation for EEZ.

**Yellowtail snapper** / *Ocyurus chrysurus*  
Harvest around.

**Redband parrotfish** / *Sparisoma ruberulum*  
No harvest or possession April 1 through June 30 in St. Thomas/St. John. Same regulation for EEZ.

**Redfin snapper** / *Lutjanus fulvus*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Vermilion snapper** / *Thromboclinus aurantiatus*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Blue-striped grunt** / *Haemulon lineatus*  
No harvest or possession October 1 through December 31 in St. Thomas/St. John. Same regulation for EEZ.

**Cottonwick grunt** / *Haemulon melanurum*  
No harvest or possession April 1 through June 30 in St. Thomas/St. John. Same regulation for EEZ.

**Red grouper** / *Paralichthys medius*  
February 1 - April 30 each year in both EEZ and territorial waters.

**White grunt** / *Haemulon plumieri*  
No harvest or possession April 1 through June 30 in St. Thomas/St. John. Same regulation for EEZ.

**Ruffin** / *Angelichthys pomacanthus*  
No harvest or possession April 1 through June 30 in St. Thomas/St. John. Same regulation for EEZ.

**Redtail parrotfish** / *Sparisoma chrysotum*  
No harvest or possession April 1 through June 30 in St. Thomas/St. John. Same regulation for EEZ.

**Map of the Chesapeake Bay**  
A map of the Chesapeake Bay showing the locations of St. Thomas and St. John, and the EEZ (Exclusive Economic Zone) boundary. The map includes a scale bar and a north arrow.

**Fish trap diagram**  
A diagram of a fish trap with a scale bar and a north arrow. The diagram shows the trap's structure and the direction of water flow.

[illegible]

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# All MPAs should be adequately identified with pertinent information for the users: consumers, fishers and tourists



# Questions?

For more information:  
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