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Ministerio de Ambiente
y Desarrollo Sostenible

**PROSPERIDAD
PARA TODOS**

Colombia

The Ministry of Environment and Sustainable Development

28th ICRI General Meeting
Belize – Oct. 14 2013

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General Context

Ministry of Environment and Sustainable Development (MADS)

- ❖ National Executive Ministry of the Colombian Government in charge of formulating, implementing, and orienting environmental policies to ensure the sustainable development of the country.

Lead Institution of the National Environmental System with the support of:

- 33 Regional Autonomous Environmental Authorities
- 7 Large City Autonomous Environmental Authorities
- National Environmental Licensing Authority
- National Natural Parks System
- Five Research Institutes





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Colombia's Coastal and Marine Area

- Only South American Country with both Caribbean and Pacific Coasts
- Total **Coastline** of approximately **3,000km**
- Extensive **Marine Area** of **928,660km²** (45% of total territory)





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Coastal & Marine Biodiversity

❖ Colombia's Marine and Coastal areas host a diverse range of ecosystems rich in biodiversity

- Coral Reefs
- Mangroves
- Seagrass Beds
- Beaches
- Wetlands
- Seamounts
- Deep Ocean Water



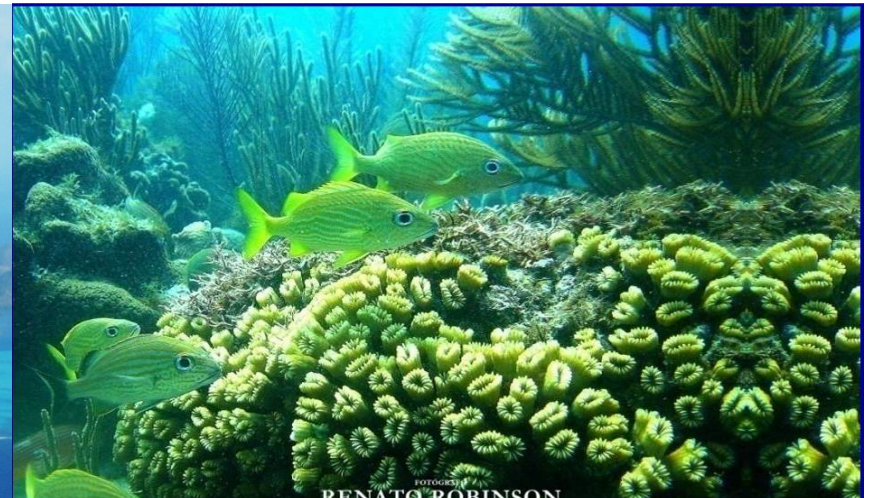


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Colombia's Coral Reefs

- Total Reef Surface Area: **2,861km²**
- The Archipelago of San Andres, Old Providence, and Santa Catalina contains 76% of Colombia's coral reefs and is a **Western Caribbean Coral Reef Hotspot**
- The remaining 24% of Colombia's coral reefs are distributed along the continental coastlines of the Caribbean and Pacific





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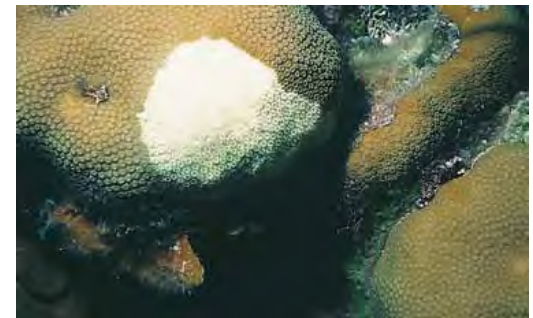
Threats to Colombia's Coral Reefs

❖ Numerous natural and human induced threats (global, national, local) endanger the health the Colombia's Coral Reefs and associated ecosystems:

- Coral Bleaching
- Sedimentation/Siltation
- Over-Fishing
- Urban Development
- Algae Proliferation
- Invasive Species (Lionfish)
- Coral Diseases (White Plague/Black Spot Disease)



CLIMATE CHANGE



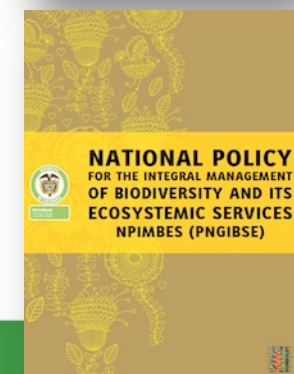
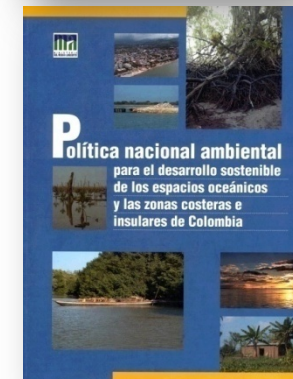


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Legal & Policy Framework

- Colombia's National Development Plan (Law 1450/2011)
 - **Article 207:** Calls for the conservation of coral reefs, mangroves and seagrass ecosystems
 - **Article 208:** Granted marine jurisdiction to the coastal regional autonomous corporations
- National Environmental Policy for the Sustainable Development of the Ocean, Coastal Areas, and Islands (PNAOCI)
- National Policy for the Integrated Management of Biodiversity and Its Ecosystem Services (PNGIBSE)





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Initiatives/Strategies

- Marine Protected Areas (MPAs)
 - Two MPAs listed under SPAW Protocol
- National and Regional Parks
- National Action Plans

Lionfish

Sharks

Sea Turtles





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Initiatives/Strategies (cont.)

- Coral Reef Monitoring System of Colombia (SIMAC)
- National Coral Reef Restoration Protocol (pilot phase)

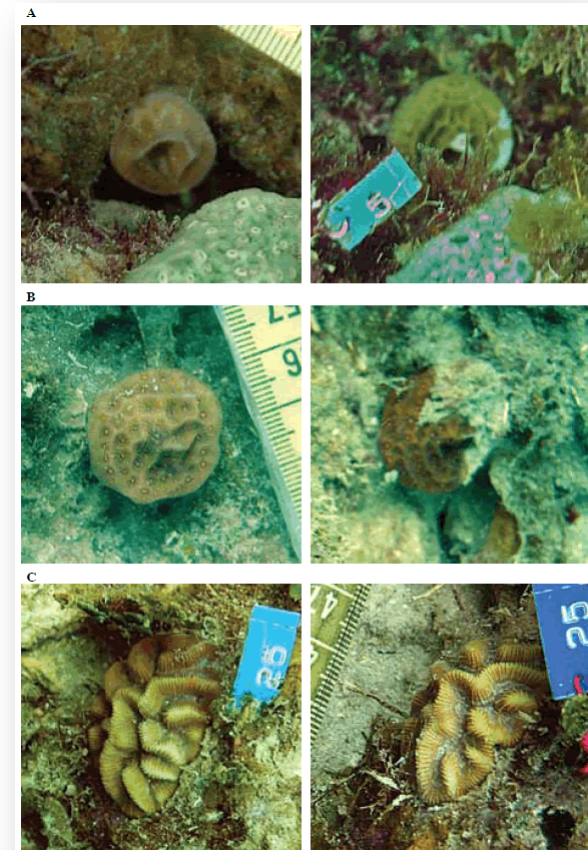


Figure 1. Initial (left) and final condition (right) of some of the juvenile corals surveyed in Tesoro Island. (A) *Agaricia agaricites* found partially bleached, (B) *A. agaricites* found partially smothered by algae, and (C) *Diploria strigosa* found healthy.

Colombia's Protected Areas with Coral Reefs

Region	Protected Area	Order	Type	Total Area	Marine Area
Caribbean	Tayrona National Natural Park	National	Coastal Marine	15,000 ha	15,000 ha
	Corales del Rosario and San Bernardo National Natural Park	National	Marine	120,000 ha	120,000 ha
	Deep-Water Coral National Natural Park	National	Coastal	142,192 ha	142,192 ha
	Rosario and San Bernardo Archipelago MPA	National	Coastal Marine	558,610 ha	558,610 ha
Insular Areas (Caribbean)	Old Providence McBean Lagoon National Natural Park	National	Coastal Marine	995 ha	995 ha
	MPA of Seaflower Biosphere Reserve	National	Coastal Marine	6,500,000 ha	6,500,000 ha
	Johnny Cay Regional Natural Park	Regional	Coastal Marine	4.5 ha	4.5 ha
	Old Point Mangrove Regional Natural Park	Regional	Coastal Marine	92.33 ha	92.33 ha
Pacific	Utria National Natural Park	National	Coastal	54,300 ha	18,511.50 ha
	Gorgona National Natural Park	National	Coastal Marine	61,687.50 ha	61,687.50 ha
	Malpelo Flora and Fauna Sanctuary	National	Marine	974,474 ha	974,474 ha

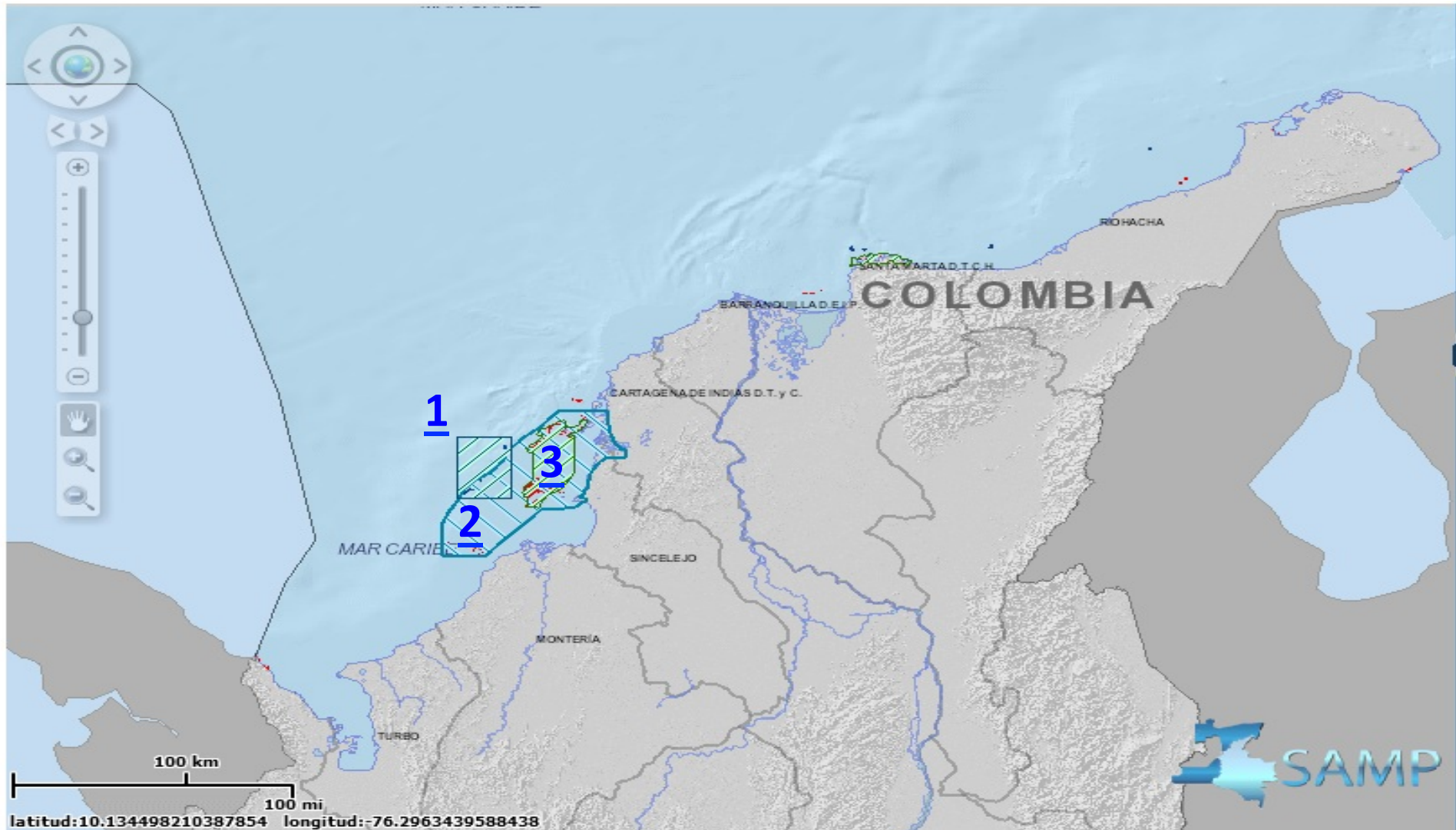


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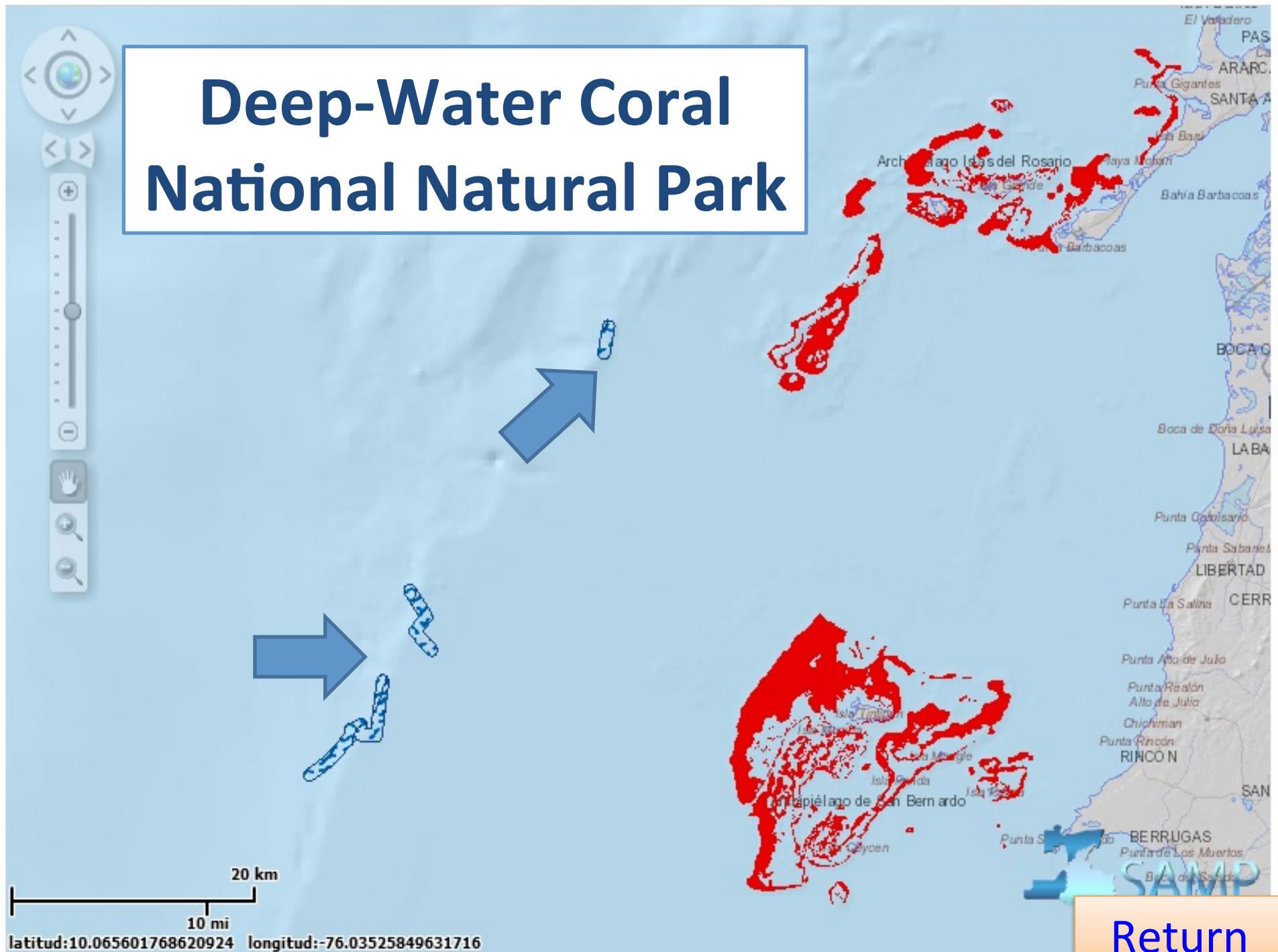
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Maps of Coral Reef Locations

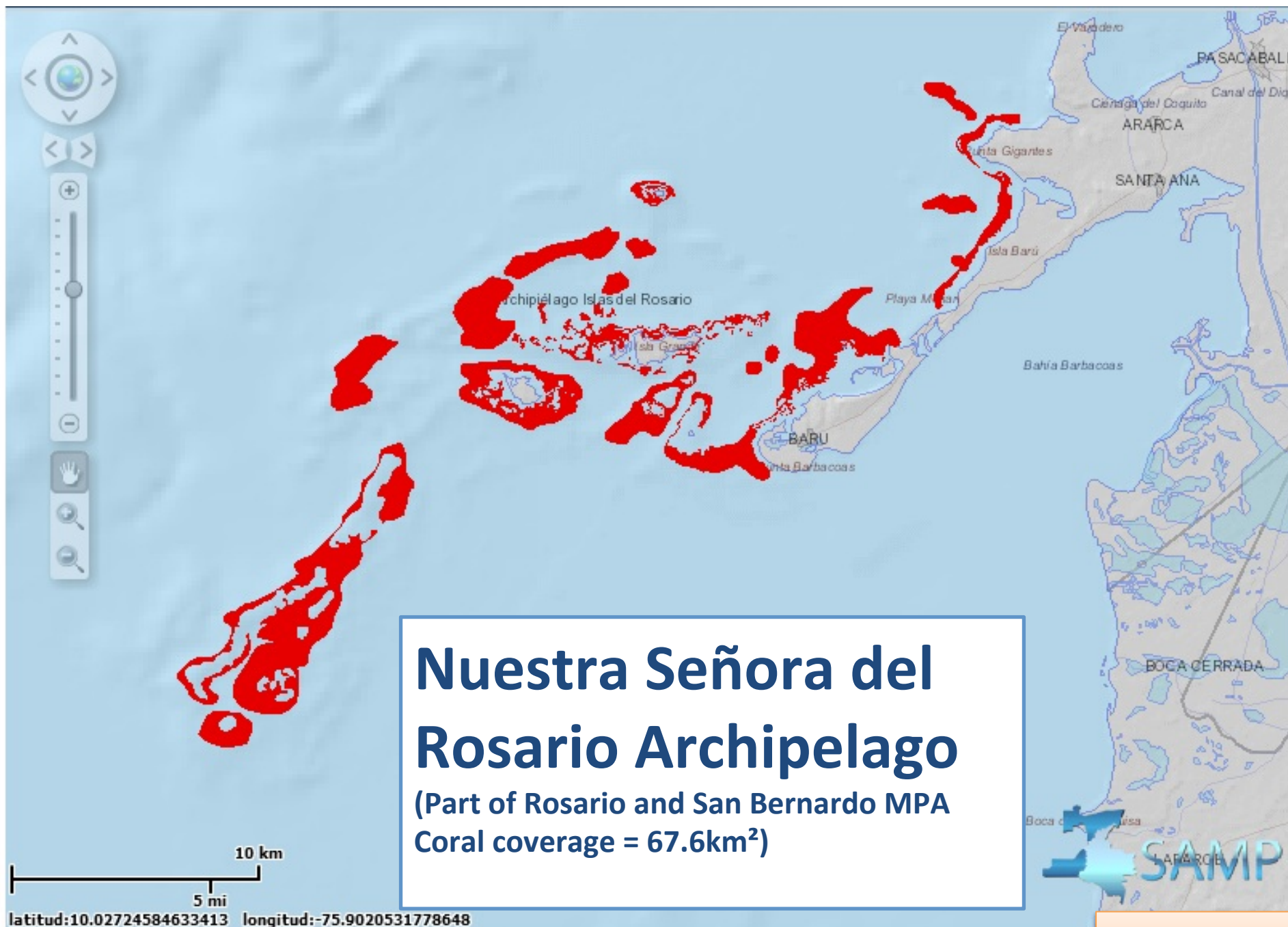
Caribbean Coastal Areas



Deep-Water Coral National Natural Park



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Nuestra Señora del Rosario Archipelago

(Part of Rosario and San Bernardo MPA
Coral coverage = 67.6km²)

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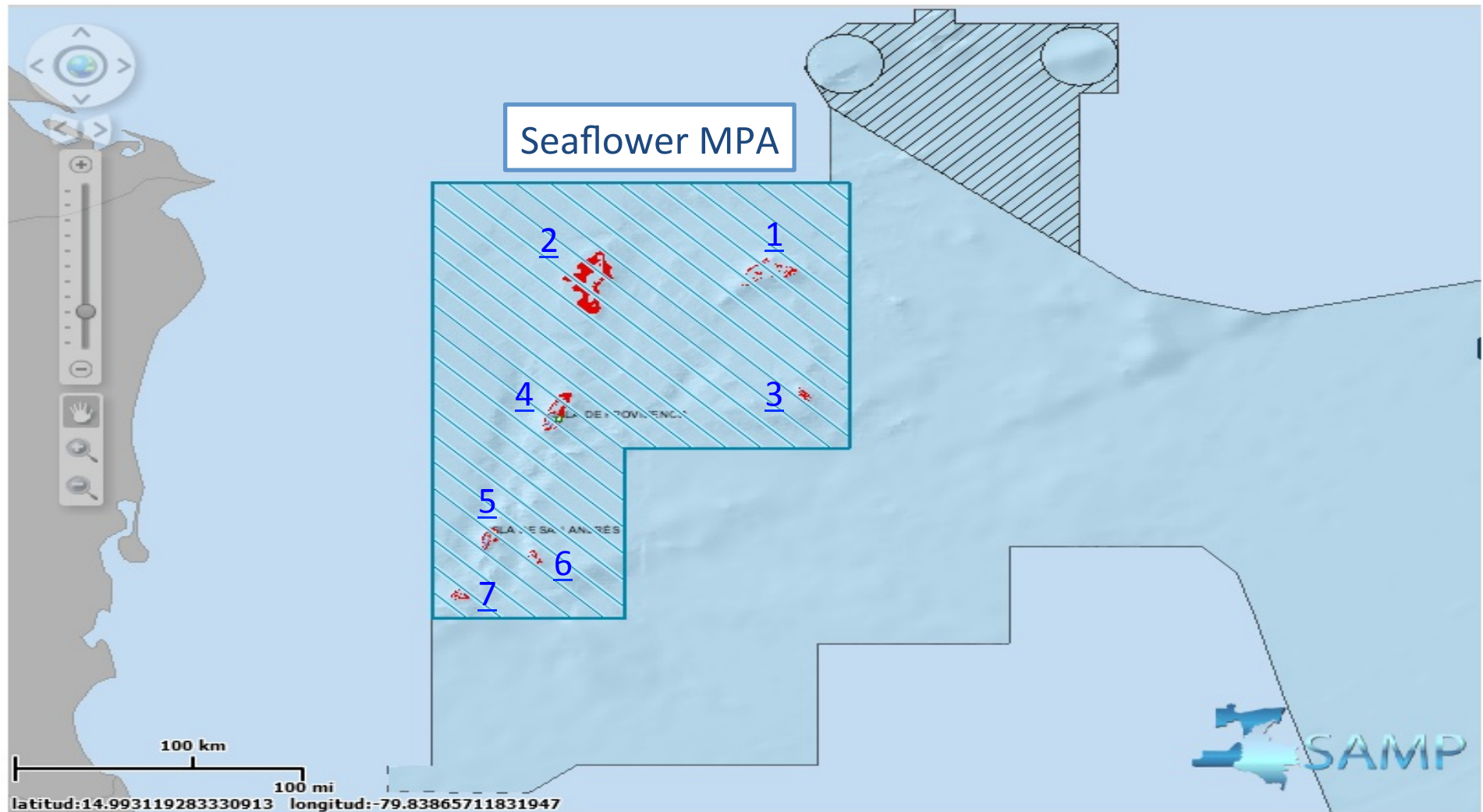


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Maps of Coral Reef Locations

Insular Caribbean Region



Serrana Bank

(Coral Coverage = 74.4km²)



10 km
5 mi
latitud:14.382453833785052 longitud:-80.26606808741468



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Quitasueño Bank

(Coral Coverage = 496 km²)



10 mi 20 km
latitud:14.104440561884344 longitud:-80.9656883321111

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Roncador Cay

(Coral Coverage = 29.8 km²)

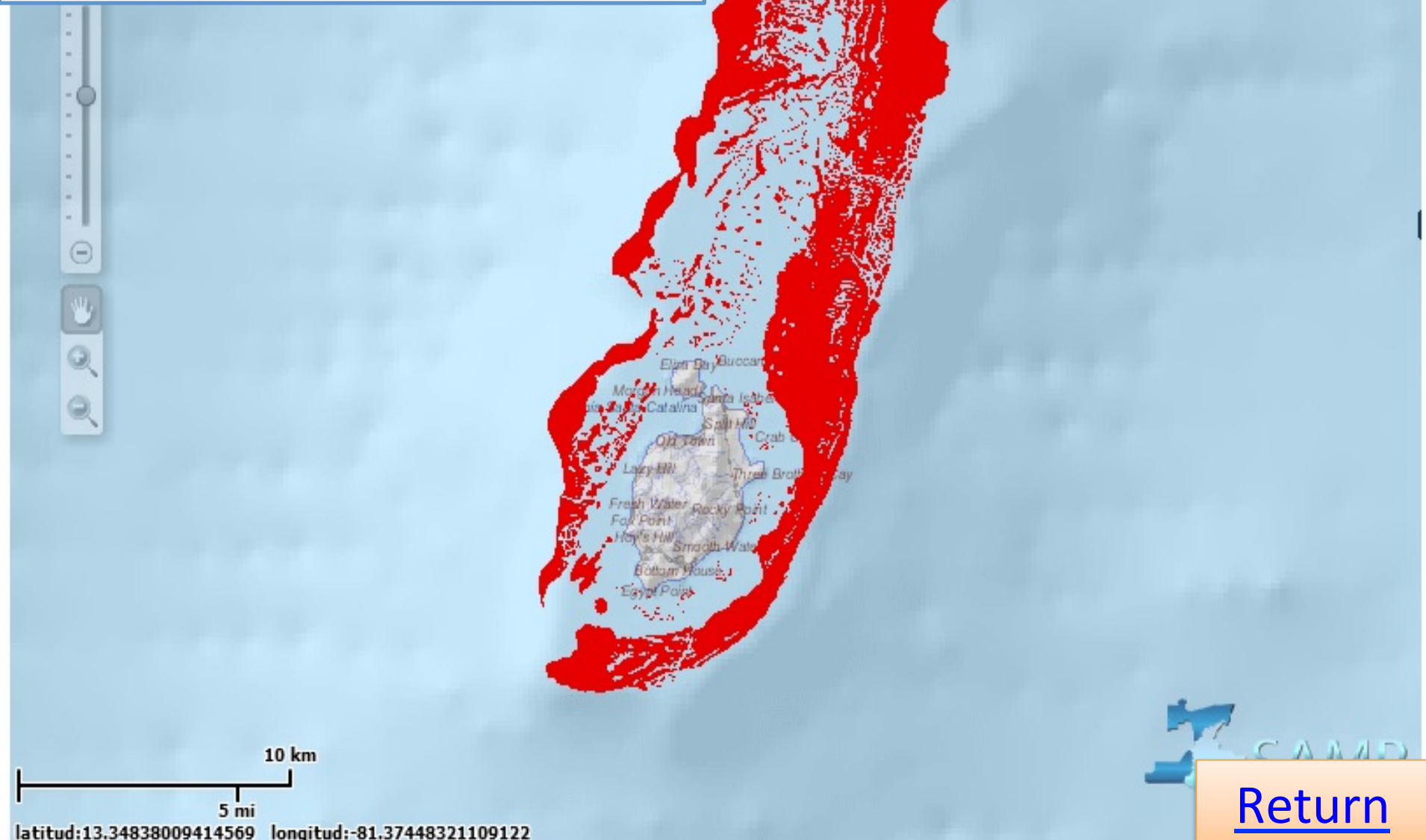


5 km
3 mi
latitud:13.526202932738467 longitud:-80.06711916655371

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Providencia and Santa Catalina Islands

(Coral Coverage = 124.9 km²)





San Andrés Island

(Coral Coverage = 44.7 km²)



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5 km
3 mi
latitud:12.555247462716007 longitud:-81.71795772165558



Courtown Cay

(Coral Coverage = 25.6 km²)



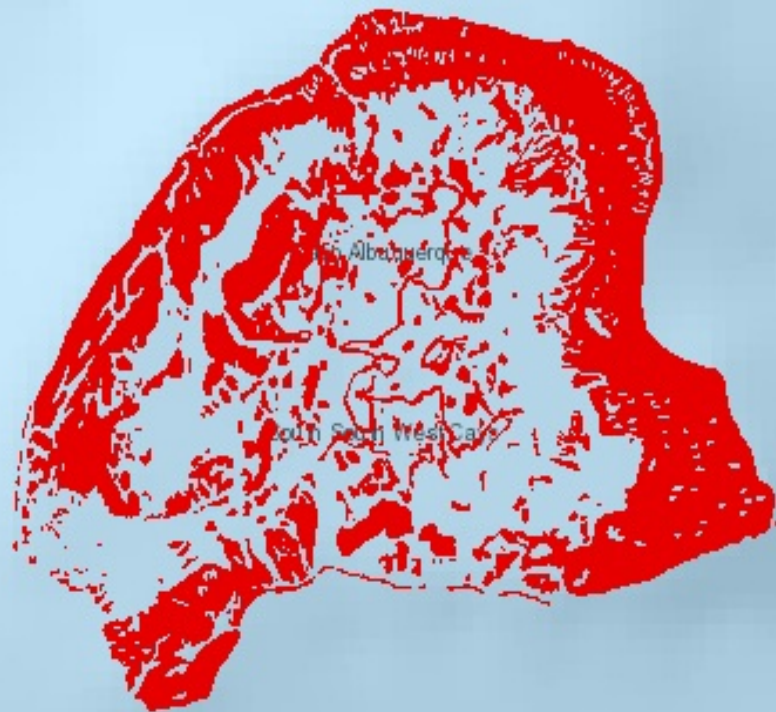
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5 km
3 mi

latitud:12.421223862264698 longitud:-81.47193472696314

Albuquerque Cays

(Coral Coverage = 30.2 km²)



5 km
3 mi

Latitude: 12.16670615072790 Longitude: -81.9572550691007

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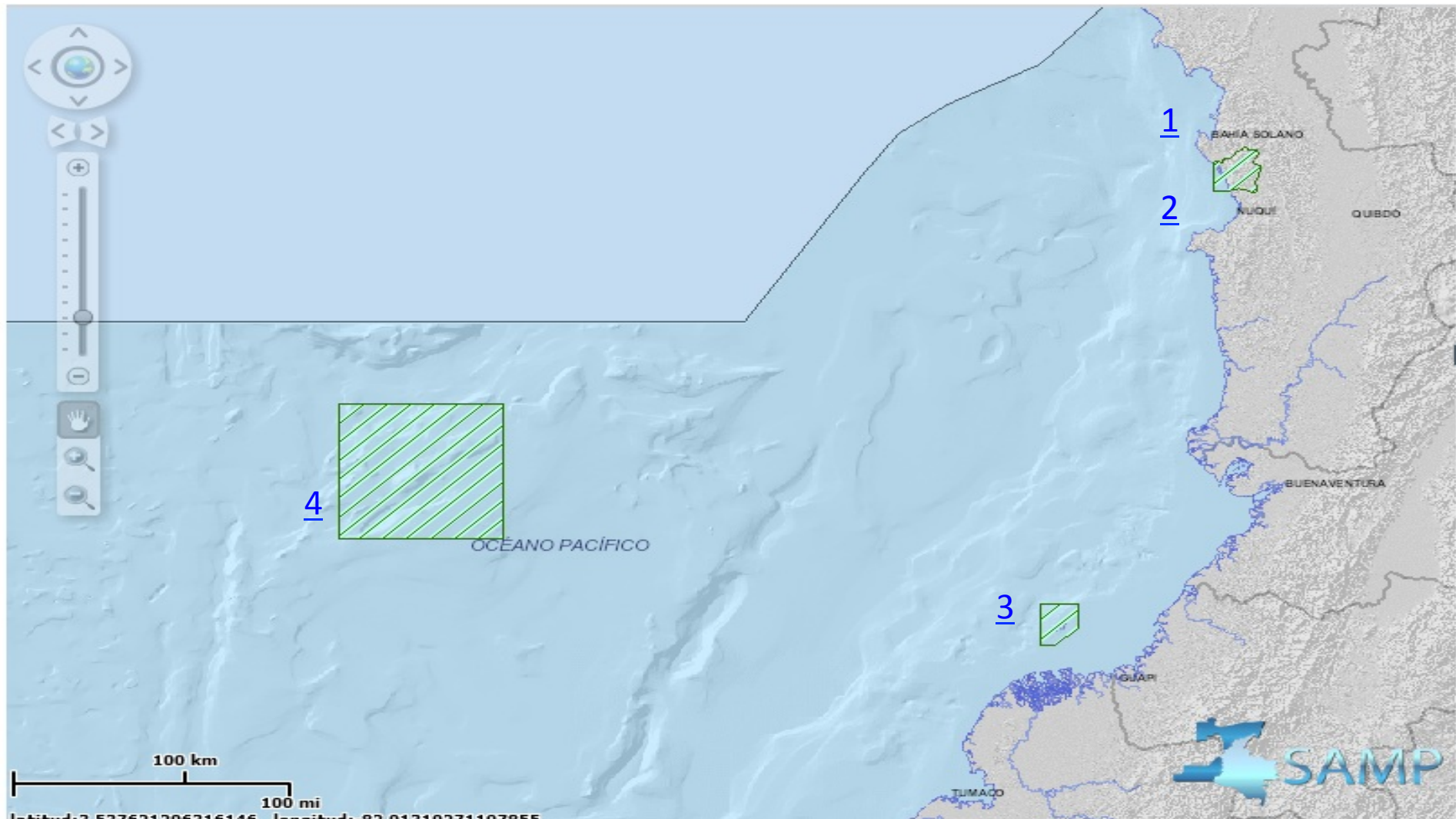


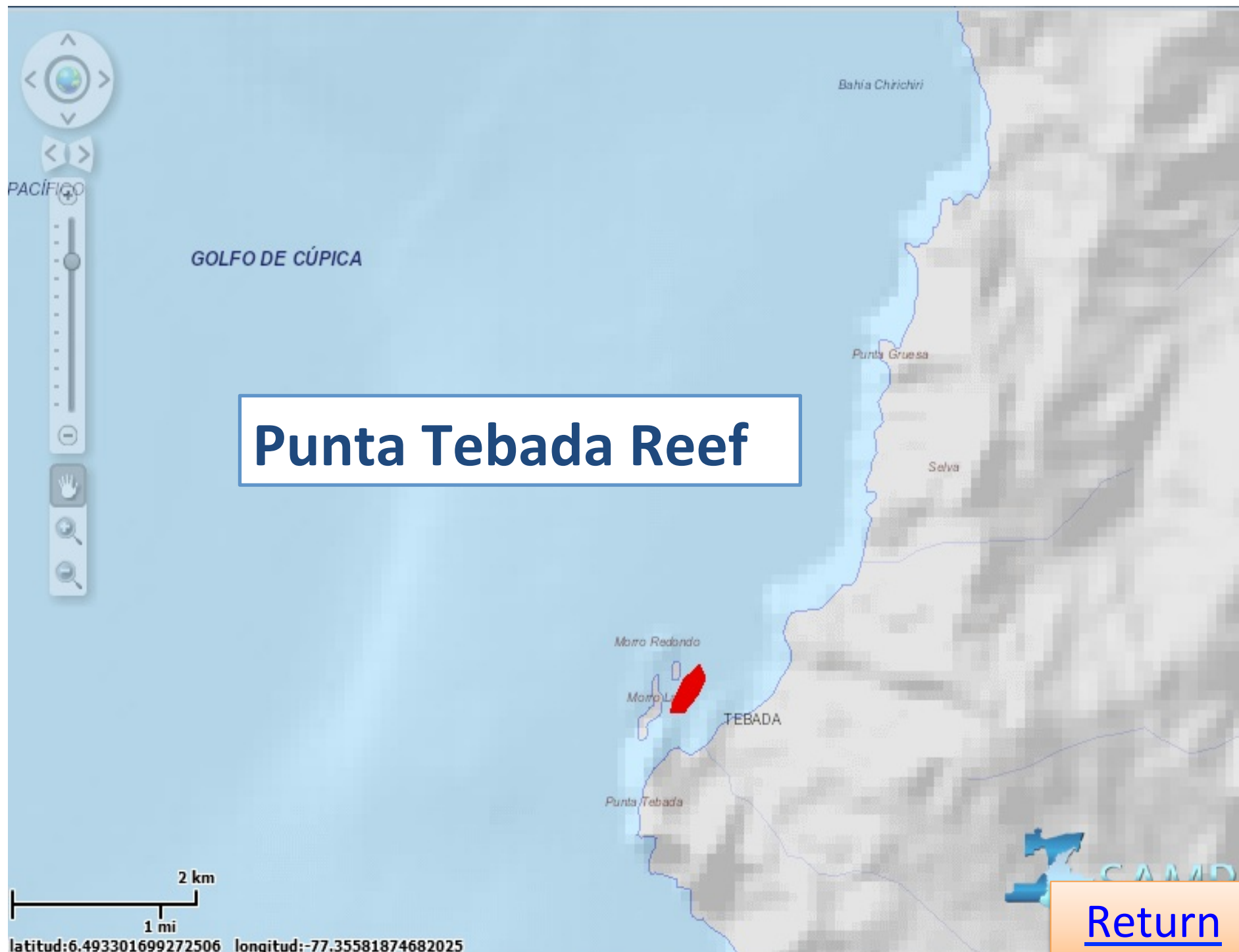
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Maps of Coral Reef Locations

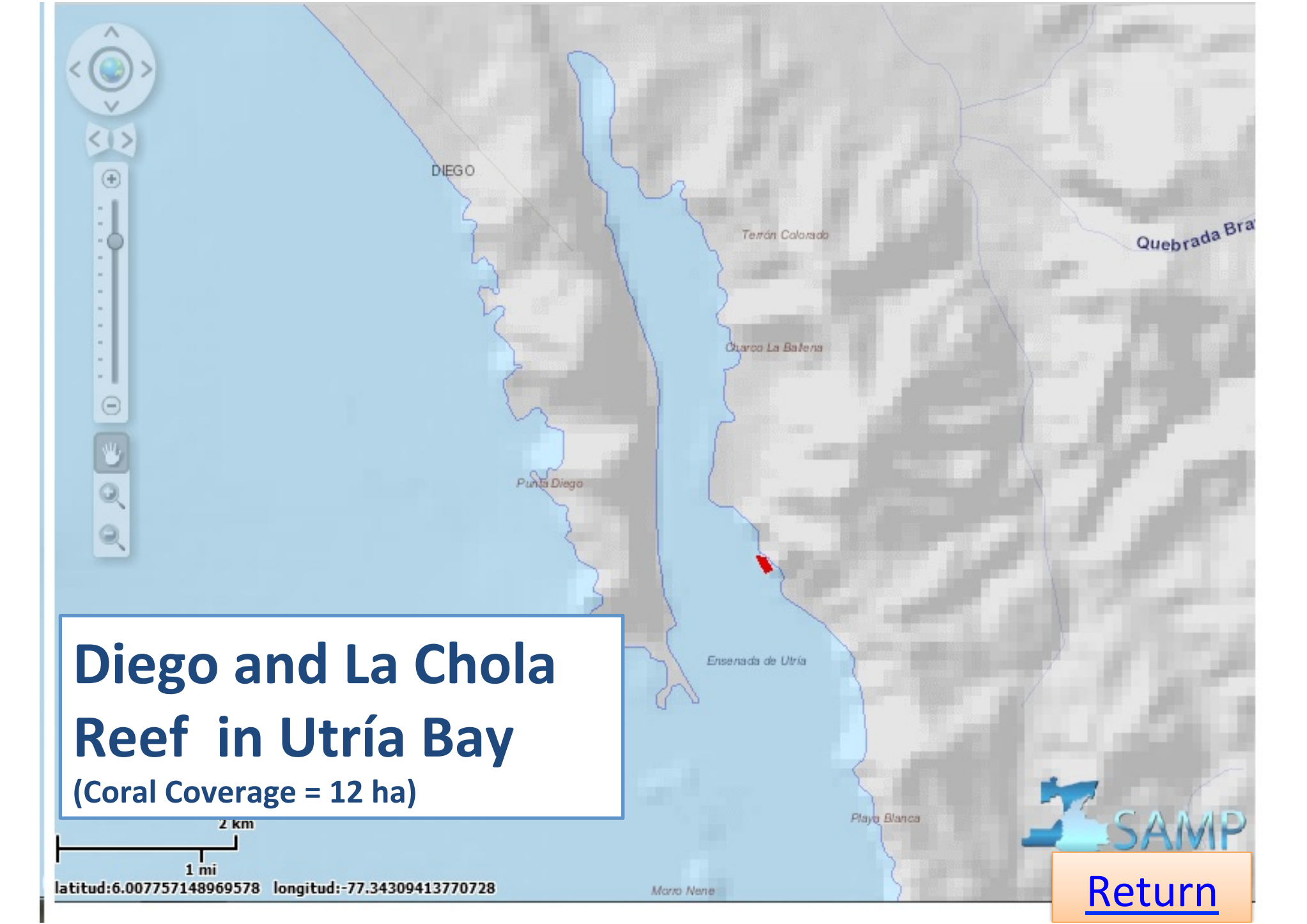
Pacific Region





Punta Tebada Reef

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A grayscale topographic map of a coastal region. The map shows a large body of water on the left, labeled 'DIEGO'. A narrow peninsula or bay area is labeled 'Ensenada de Utría'. To the right of the bay, there are labels for 'Terrón Colorado', 'Quebrada Bra', 'Charco La Balena', 'Punta Diego', 'Playa Blanca', and 'Morro Nene'. A small red rectangular area is marked on the eastern shore of the Ensenada de Utría. In the top left corner, there is a circular navigation control with a globe icon and a vertical zoom slider. A scale bar at the bottom left indicates 2 km and 1 mi. At the bottom, the coordinates 'latitud:6.007757148969578 longitud:-77.34309413770728' are displayed. In the bottom right corner, there is a logo for 'SAMP' with a map of Mexico and a 'Return' button.

Diego and La Chola Reef in Utría Bay

(Coral Coverage = 12 ha)

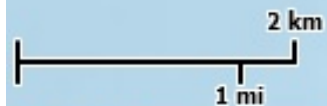
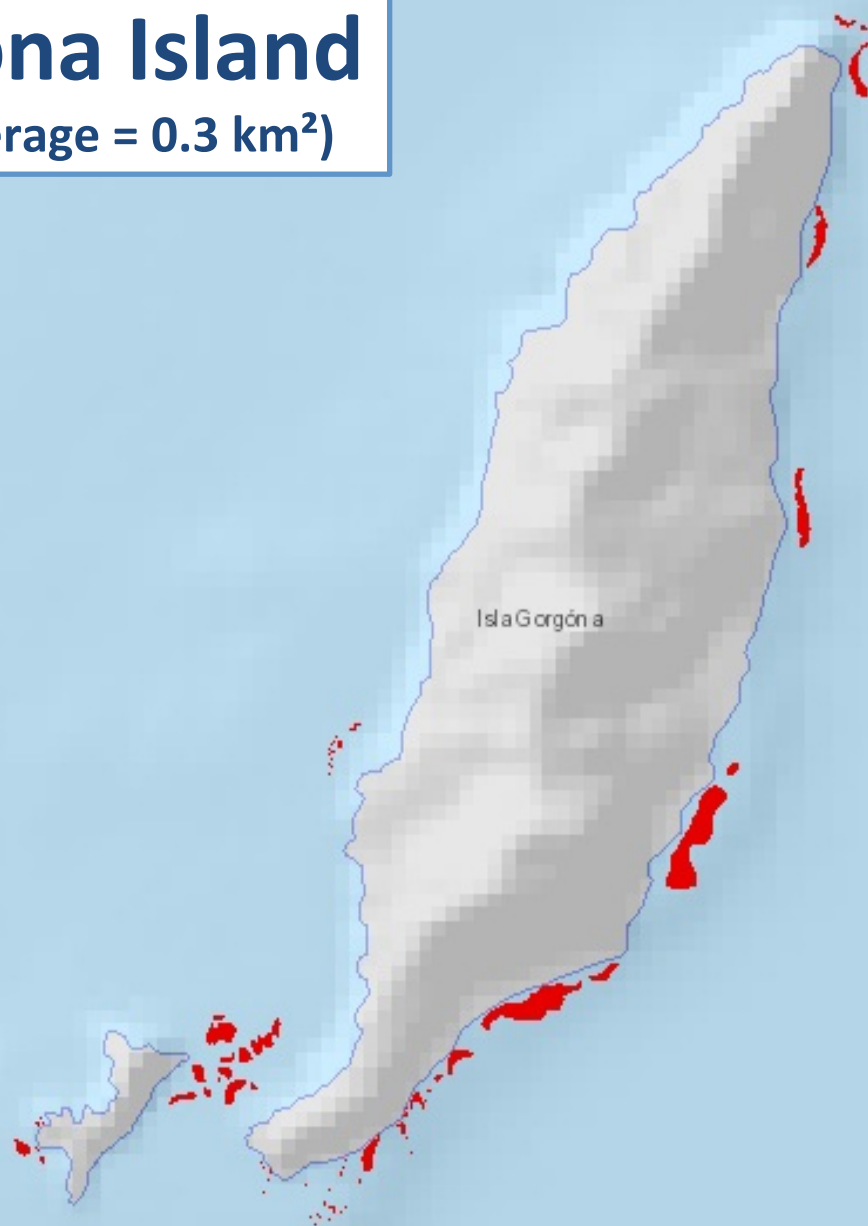
2 km
1 mi
latitud:6.007757148969578 longitud:-77.34309413770728



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Gorgona Island

(coral coverage = 0.3 km²)



latitud:2.971509545484332 longitud:-78.18293711667884



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Malpelo Island

(Coral Coverage = 0.01 km²)



Malpelo Ridge

322

394

Yaquina Trough

Colombian Trench

4304

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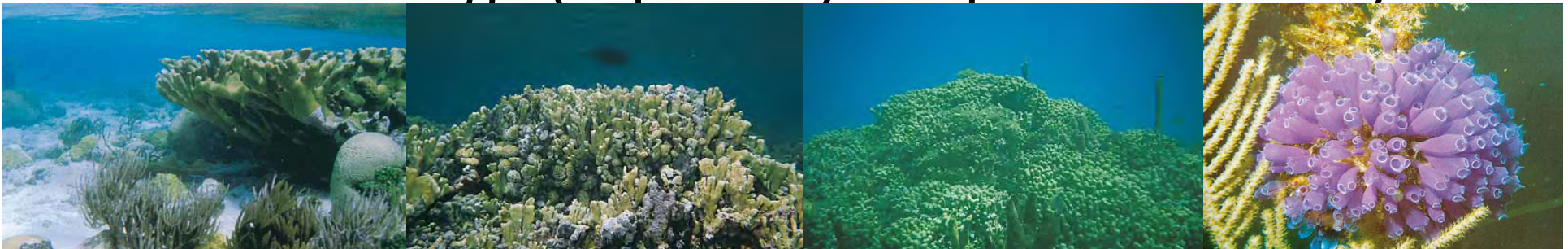


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Challenges

- Reduce land based sources of pollution
- Reduce impact from invasive species
- Ensure financial sustainability for coral reef conservation and restoration
- Increase the protection of coral reefs through the expansion of MPA network
- Increase scientific and technical information on coral coverage (especially deep-water corals)



An aerial photograph of a tropical island, likely in the Maldives, featuring a dense forest of palm trees and a crescent-shaped white sand beach. The surrounding water is a vibrant blue, showing varying depths and textures. The text "Thank You!" is overlaid in white at the top.

Thank You!

Think Globally, Act Locally

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