

# BELIZE BARRIER REEF RESERVE SYSTEM- MODEL TO COPE WITH CLIMATE CHANGE

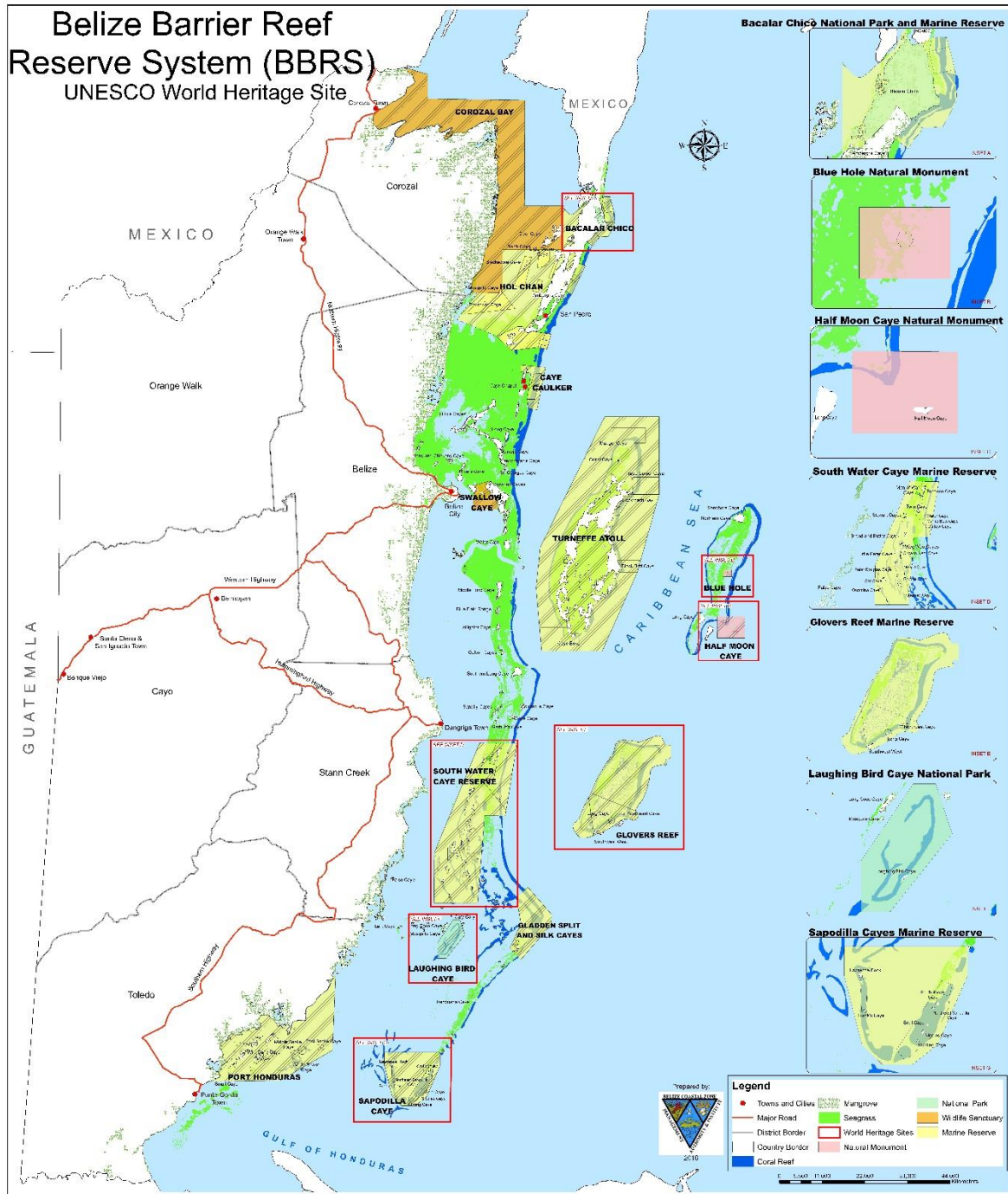


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Ministry of Blue Economy and Civil Aviation- BELIZE

# Belize Barrier Reef Reserve System (BBRS)

UNESCO World Heritage Site



# Belize Barrier Reef Reserve System

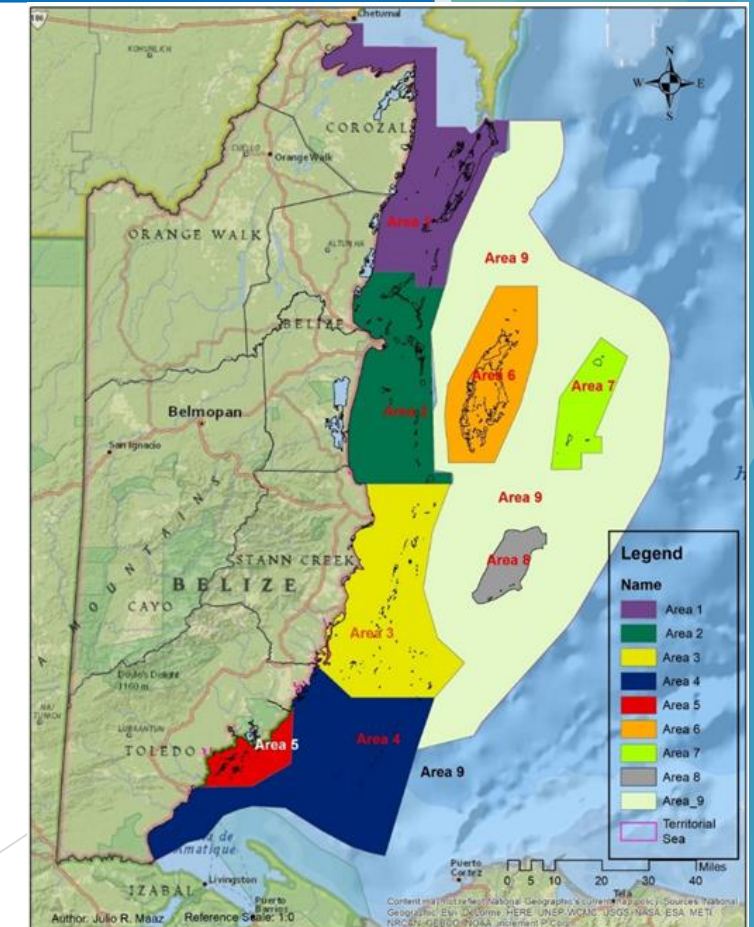
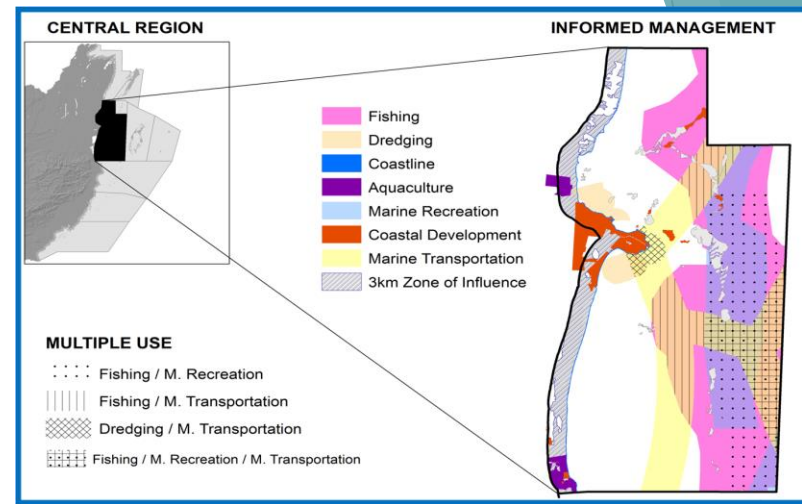
## Cluster Site:

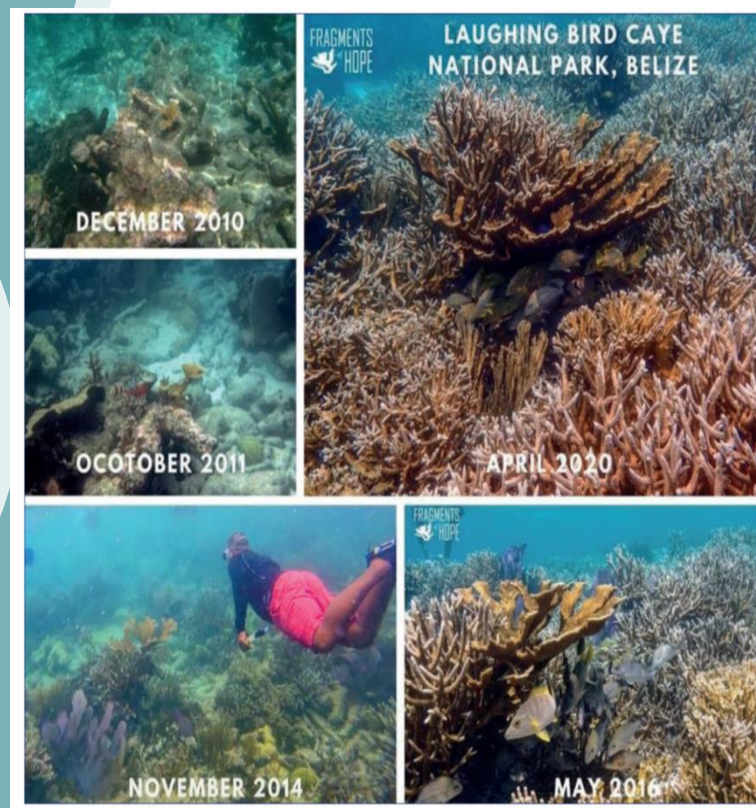
- ▶ Bacalar Chico National Park and Marine Reserve- 11,399 ha
- ▶ Glover’s Reef Marine Reserve- 35,067 ha
- ▶ South Water Caye Marine Reserve- 47,700 ha
- ▶ Sapodilla Cayes Marine Reserve- 15,619 ha
- ▶ Laughing Bird Caye National Park- 4,095 ha
- ▶ Blue Hole Natural Monument- 414 ha
- ▶ Halfmoon Caye National Monument- 3,954 ha



# Key Accomplishments:

- ▶ Fisheries Resources Act; National Fisheries Policy, Strategy and Action Plan
- ▶ Integrated Coastal Zone Management Plan and Regional guidelines; currently being updated.
- ▶ Parrotfish ban since 2009; improved coral health over last decade (currently highest reef health score in the region)
- ▶ National Rollout of Manage Access
- ▶ Adaptive Management Plans- Lobster and Conch
- ▶ Expansion of marine reserve network (increase areas under protective status; proposed expansion of replenishment zones up to 10% of territorial waters
- ▶ Update of the Mangrove regulations and the Environmental Impact Assessment regulations
- ▶ Moratorium- Offshore Oil Exploration
- ▶ Promoting value added products, improving efficiency within the supply and value chains and seeking higher value markets for the fisheries sector





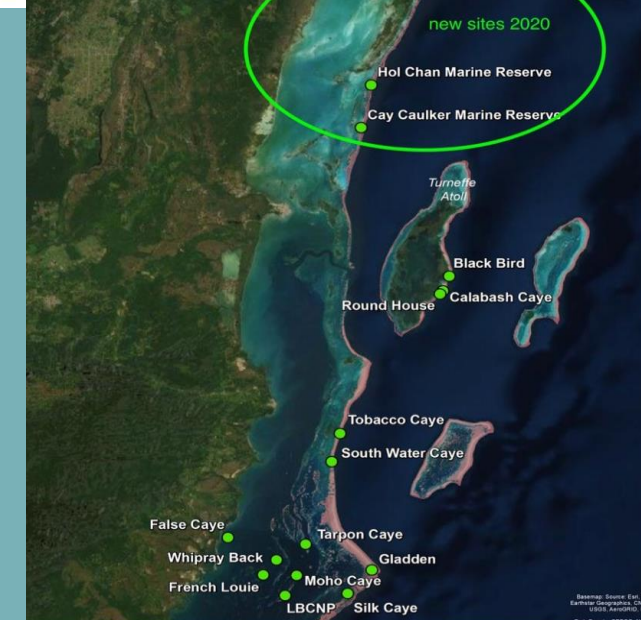
**Belize Lionfish Management Plan**  
An Overview of the Invasion, Mitigation Activities and Recommendations



Funded by COMPACT  
Community Management of Protected Areas Conservation Program

# Coral Restoration

## Addressing invasive species



Basemap: Google; Elevation: Sambaator Geographic, CHES; ©2016, American Topographic; ©2016, GEBCO; NOAA

# Desired State of Conservation -2016

Indicators	Method of Verification	Timeframe	Progress
<p>The area of mangrove coverage in the property is maintained at least at the same level as when the property was inscribed on the List of World Heritage in Danger in 2009. There is no further loss of mangrove cover within the entire property, including all mangrove types that are unique and irreplaceable, measured against the 2009 baseline.</p>	<ul style="list-style-type: none"> <li>▪ Strengthening, adoption, implementation, and effective enforcement, of the currently proposed Mangrove Regulations</li> <li>▪ Satellite imagery/aerial photography of the property indicating the current mangrove coverage, measured against the 2009 baseline.</li> <li>▪ Maps showing the distribution of the different categories of land ownership within the property and cadastral data of land tenure compared against the 2009 base year (the date when the site was inscribed on the List of World Heritage in Danger)</li> <li>▪ Adoption by law of a permanent cessation of all sales and leases of state-owned land throughout the property, measured against the 2009 baseline</li> <li>▪ Adoption by law of a zoning plan covering the entire property that specifies clearly defined regulation for allowed development and use for each zone, based on scientific, ecological and biological information about the property's OUV and its attributes.</li> </ul>	<p>Completed by 31 December 2016</p>	<p>Revised Mangrove Regulations were adopted on June 23, 2018 by the Government of Belize.</p> <p>GEF-SGP project on mangrove coverage, measured against the 2009 baseline completed in 2018. The mangrove coverage is 95.3% of what it was in 1996 (year of inscription).</p> <p>The government maintains a voluntary moratorium on the sale of nationally held lands.</p> <p>The survey plans from the land tenure assessment were authenticated by the Land's Department in November 2020. Shapefiles and physical description for the national lands within the South Water Caye Marine Reserve and the Sapodilla Cayes Marine Reserve were completed by the end of February 2021. This information will be utilized for the drafting of the regulation to designate the mangrove reserve within these two sites.</p> <p>Adoption of Integrated Coastal Zone Management Plan in 2016. Area specific plans define what types of developments and standards are suitable for the various coastal areas.</p>

- Assistance from:
- UNESCO World Heritage Programme
  - IUCN
  - Key National Stakeholders

BRRS removed from WH “in Danger” List in 2018; mangrove reserves pending

# Desired State of Conservation -2016

<p>II. No areas within the property and in its immediate vicinity are developed in ways that affect the property's natural outstanding beauty and status as a globally significant natural phenomenon of Outstanding Universal Value</p>	<ul style="list-style-type: none"> <li>Adoption by law, implementation and adequate enforcement regulations that specify the type, scale and density of coastal development consistent with the requirements to maintain the property's natural outstanding beauty and that of its immediate surroundings, including establishment of areas where no development should be permitted.</li> </ul>	<p>Completed by 31 December 2016</p>	<p>The amendment of the EIA regulations was adopted on February 8, 2020.</p> <p>Area specific development guidelines were developed under the ICZMP.</p> <p>Mangrove regulations provide special protection/stricter measures to mangroves in "Priority Mangrove Areas".</p>
<p>All areas within the property and the surrounding areas that support the ecological functioning of the system are excluded from oil exploration and exploitation</p>	<ul style="list-style-type: none"> <li>A map that defines, on the basis of oceanographic, ecological and other scientific information, the property's surrounding areas where no oil exploration and exploitation can be permitted.</li> <li>Legal adoption of a permanent exclusion of the entire property and the defined surrounding areas from oil exploration and exploitation</li> </ul>	<p>Completed by 31 January 2016</p>	<p>The Parliament of Belize approved the Petroleum Operations (Maritime Zone Moratorium) Act No. 54 of 2017 in December 2017, which states that all oil exploration and exploitation is now prohibited in the entire maritime zone of Belize.</p>
<p>The property is managed effectively and in an integrated way that will ensure the protection of its Outstanding Universal Value, and appropriately allows for achieving both sustainable socio-economic and environmental goals</p>	<ul style="list-style-type: none"> <li>Adoption, implementation and effective enforcement of the Integrated Coastal Zone Management Plan, reflecting the World Heritage status of the property and its conservation and sustainable use requirements and consistent with the plan's draft version of January 2015.</li> </ul>	<p>Completed by 31 December 2016</p>	<p>ICZM plan approved on Feb. 9<sup>th</sup>, 2016.</p> <p>The ICZM plan was being implemented through funding under the Marine Conservation and Climate Adaptation Project (MCCAP).</p> <p>Area specific development guidelines were developed under the ICZMP.</p> <p>Currently, the process to update the ICZM Plan and its regional guidelines has begun.</p>

# Resilient Reefs Initiative

The Resilient Reefs Initiative is committed to working with each site to develop a resilience strategy that directly responds to the site's core challenges, and integrates resilience into the site's management processes.



United Nations  
Educational, Scientific and  
Cultural Organization



World  
Heritage  
Convention



Great Barrier  
Reef Foundation



Australian Government  
Great Barrier Reef  
Marine Park Authority



RESILIENT CITIES CATALYST

COLUMBIA  
Center for  
Resilient Cities  
and Landscapes



Department of Biodiversity,  
Conservation and Attractions



# Developing a Resilience Strategy for the BBRS

- ▶ Belize is one of five World Heritage coral reef sites selected
- ▶ The resilience strategy will set a **bold** vision for the future, be **innovative** and **integrated** in its thinking, and will prioritize implementing **local short and long-term solutions** that will **directly address** the reef and reef community's **vulnerabilities**.





Thank you!



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