



Convention on
Biological Diversity



Aichi Biodiversity Target 11 Country Dossier: BELIZE

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GLOSSARY

AZEs	Alliance for Zero Extinction sites
CEPF	Critical Ecosystem Partnership Fund
EBSA	Ecologically or Biologically Significant Marine Area
EEZ	Exclusive Economic Zone
GCF	Green Climate Fund
GD-PAME	Global Database on Protected Area Management Effectiveness
GEF	Global Environment Facility
IBA	Important Bird and Biodiversity Area
ICCAs	Indigenous and Community Conserved Area Area (may also be referred to as territories and areas conserved by Indigenous peoples and local communities or “territories of life”)
IPLC	Indigenous Peoples and Local Communities
KBA	Key Biodiversity Area
MEOW	Marine Ecosystems of the World
MPA	Marine Protected Area
NBSAP	National Biodiversity Strategy and Action Plan
OECD	Other Effective Area-Based Conservation Measures
PA	Protected Area
PAME	Protected Area Management Effectiveness
PPA	Privately Protected Area
PPOW	Pelagic Provinces of the World
ProtConn	Protected Connected land indicator
SOC	Soil Organic Carbon
TEOW	Terrestrial Ecosystems of the World
WDPA	World Database on Protected Areas
WD-OECD	World Database on Other Effective Area-Based Conservation Measures



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Disclaimer

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This country dossier is compiled by the UNDP and SCBD from publicly available information. It is prepared, within the overall work of the Global Partnership on Aichi Biodiversity Target 11, for the purpose of attracting the attention of the Party concerned and other national stakeholders to facilitate the verification, correcting, and updating of country data. The statistics might differ from those reported officially by the country due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Furthermore, the suggestions from the UNDP and SCBD are based on analyses of global datasets, which may not necessarily be representative of national policy or criteria used at the national level. The analyses are also subject to the limits inherent in global indicators (precision, reliability, underlying assumptions, etc.). Therefore, they provide useful information but cannot replace analyses at a national level nor constitute a future benchmark for national policy or decision-making.

The preparation of this dossier was generously supported by: the Government of the Federal Republic of Germany, *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH*; the European Commission; the Government of the United Kingdom of Great Britain and Northern Ireland; and the Government of Japan (Japan Biodiversity Fund). The dossier does not necessarily reflect their views.

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EXECUTIVE SUMMARY

This document provides information on the coverage of protected areas (PAs) and other effective area-based conservation measures (OECMs), as currently reported in global databases (the World Database on Protected Areas ([WDPA](#)) and World Database on Other Effective Area-Based Conservation Measures ([WD-OECM](#))). It also includes details on the status of the other qualifying elements of Aichi Biodiversity Target 11 based on this data. These statistics might differ from those reported officially by countries due to difference in methodologies and datasets used to assess protected area coverage, differences in the base maps used to measure terrestrial and marine area of a country or territory, or if global datasets differ from the criteria and indicators used at the national level. This dossier also provides a summary of commitments made under Aichi Biodiversity Target 11, and a summary of potential opportunities regarding elements of the target for future planning.

The dossier has been developed in consultation with the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), which manages the WDPA, WD-OECM and Global Database on Protected Area Management Effectiveness ([GD-PAME](#)). Parties to the CBD are requested to contact protectedareas@unep-wcmc.org with any updates to the information in these databases.

Aichi Biodiversity Target 11 Elements: Current status and opportunities for action

Coverage - Terrestrial & Marine

- **Status:** as of May 2021 (per the WDPA), terrestrial coverage in Belize is 8,372.0 km² (37.5%) and marine coverage is 3,994.4 km² (11.0%); national reporting in Belize shows terrestrial coverage of 35.8% and marine coverage of 28% (with 7.6% in replenishments zones or no take zones).
- **Opportunities for action:** opportunities for the near-term include updating the WDPA with any unreported PAs. In the future, focus on relatively intact areas, while addressing the elements in the following sections, could be considered when planning new PAs or OECMs.

Ecological Representativeness— Terrestrial & Marine

- **Status:** Belize contains 5 terrestrial ecoregions, 1 marine ecoregion, and 1 pelagic province: the mean coverage by reported PAs and OECMs is 36.4% (terrestrial), 30.0% (marine), and 0.6% (pelagic); 1 terrestrial ecoregion has no coverage from reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Belize to increase protection in terrestrial ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.



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Areas Important for Biodiversity

- **Status:** Belize has 6 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 43.6%; all KBAs have at least partial coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Belize to increase protection of KBAs that have lower levels of coverage by PAs and OECMs.

Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Belize, 46.1% of aboveground biomass carbon, 44.8% of belowground biomass carbon, 40.0% of soil organic carbon, 17.0% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Belize to increase PA and OECM coverage in marine areas with high carbon stocks, and to focus on effective management for PAs and OECMs in terrestrial areas with high carbon stocks. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.
- For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.

Connectivity and Integration

- **Status:** coverage of protected-connected lands is 32.4%. Belize currently has one legally established corridor, and two recognized, yet not legally established, corridors.
- **Opportunities for action:** there is opportunity to focus on PA and corridor management for enhancing and maintaining connectivity. Improving connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.
- As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).

Governance Diversity

- **Status:** the most common governance type for reported PAs in Belize is: 60.0% under Government (Federal or national ministry or agency). Overall, the National Protected Areas System of Belize rates as MODERATE for Governanc, with a mean score of 67.5% in 2009 and 64.3% in 2019.



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- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Belize this could relate to governance by Indigenous Peoples and/or local communities (IPLC), etc. Increase efforts to identify the governance types for the 10.8% of sites that do not have their governance type reported.
- There is also opportunity for Belize to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

Protected Area Management Effectiveness

- **Status:** 95.6% of terrestrial PAs and 69.7% of marine PAs have completed Protected Area Management Effectiveness (PAME) assessments reported. Overall, protected areas in Belize are considered to rate as MODERATE in their level of management effectiveness, averaging a score of 59.4%, with management effectiveness per protected area category ranging from 52.1% to 76.6%.
- **Opportunities for action:** the 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs and **has** been met for marine PAs. Further increasing this percentage for marine PAs could be beneficial overall for understanding how well protected areas are being managed.
- There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.



INTRODUCTION

The Strategic Plan for Biodiversity 2011-2020 was adopted at the tenth meeting of the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) held in Nagoya, Aichi Prefecture, Japan from 18-29 October 2010. The vision of the Strategic Plan is one of “Living in harmony with nature” where *“By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people”* (CBD, 2010). In addition to this vision, the Strategic Plan is composed of 20 targets, under five strategic goals. Aichi Biodiversity Target 11 states that *“By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.”*

With the conclusion of the Aichi Biodiversity Targets in 2020, Target 11 on area-based conservation has seen success in the expansion of the global network of protected areas (PA) and other effective area-based conservation measures (OECMs). The negotiation of the post-2020 Global Biodiversity Framework (GBF) and its future targets provide an essential opportunity to further improve the coverage of PAs and OECMs, to improve other aspects of area-based conservation, to accelerate progress on biodiversity conservation more broadly, while also addressing climate change, and the Sustainable Development Goals. This next set of global biodiversity targets are to be adopted at the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity. These new targets must aim to build upon lessons learned from the last decade of progress to deliver transformative change for the benefit of nature and people, to realize the 2050 Vision for biodiversity.

The United Nations Development Programme (UNDP) and the Secretariat of the Convention on Biological Diversity have developed the Aichi Biodiversity Target 11 Country Dossiers, which provide countries with an overview of the status of Target 11 elements, opportunities for action, and a summary of commitments made by Parties over the last decade. Each dossier can support countries in assessing their progress on key elements of Aichi Biodiversity Target 11 and identifying opportunities to prioritize new protected areas and OECMs.

This dossier provides an overview of area-based conservation in Belize. Section I of the dossier presents data on the current status of Belize’s PAs and OECMs. The data presented in Section I relates to each element of Target 11. Section I also presents the PA and OECM coverage for two critical ecosystem services: water security and carbon stocks. In addition, the dossier presents potential opportunities for action for Belize, in relation to each Target 11 element. The analyses present options for improving Belize’s area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Belize’s existing PA and OECM commitments as a summary of existing efforts towards achieving Target 11. This gives focus not only to national policy and actions but also voluntary commitments to the UN. Furthermore, where data is

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available, this dossier provides information on potential OECMs, Indigenous and Community Conserved Areas (ICCAs; also, often referred to as territories and areas conserved by Indigenous peoples and local communities or “territories of life”) and Privately Protected Areas (PPAs) and the potential contribution they will have in achieving the post-2020 targets.

The information on PAs and OECMs presented here is derived from the World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM). These databases are joint products of UNEP and IUCN, managed by UNEP-WCMC, and can be viewed and downloaded at www.protectedplanet.net. Parties are encouraged to provide data on their PAs and OECMs to UNEP-WCMC for incorporation into the databases (see e.g., Decisions 10/31 and 14/8). The significant efforts of Parties in updating their data in the build up to the publication of the Protected Planet Report 2020 (UNEP-WCMC and IUCN, 2021) were greatly appreciated. UNEP-WCMC welcomes further updates, following the data standards described here (www.wcmc.io/WDPA_Manual), and these should be directed to protectedareas@unep-wcmc.org. The statistics presented in this dossier are derived from the May 2021 WDPA and WD-OECM releases, unless explicitly stated otherwise. Readers should consult www.protectedplanet.net for the latest coverage statistics (updated monthly).

Some data from the WDPA and WD-OECM are not made publicly available at the request of the data-provider. This affects some statistics, maps, and figures presented in this dossier. Statistics provided by UNEP-WCMC (terrestrial and marine coverage) are based upon the full dataset, including restricted data. All other statistics, maps, and figures are based upon the subset of the data that is publicly available.

Where data is less readily available, such as for potential OECMs, ICCAs and PPAs, data has also been compiled from published reports and scientific literature to provide greater awareness of these less commonly recorded aspects. These data are provided to highlight the need for comprehensive reporting on these areas to the WDPA and/or WD-OECM. Parties are invited to work with indigenous peoples, local communities and private actors to submit data under the governance of these actors, with their consent, to the WDPA and/or WD-OECM.

Overall, PAs and OECMs are essential instruments for biodiversity conservation and to sustain essential ecosystem services that support human well-being and sustainable development, including food, medicine, and water security, as well as climate change mitigation and adaptation and disaster risk reduction. The data in this dossier, therefore, aims to celebrate the current contributions of PAs and OECMs, whilst the gaps presented hope to encourage greater progress, not just for the benefit of biodiversity and the post-2020 GBF, but also to recognize the essential role of PAs and OECMs to the Sustainable Development Goals and for addressing the climate crisis.



SECTION I: CURRENT STATUS

Aichi Biodiversity Target 11 refers to both protected areas (PAs) and other effective area-based conservation measures (OECMs). This section provides the current status for all elements of Aichi Biodiversity Target 11 where indicators with global data are available. Statistics for all elements are presented using data on both PAs and OECMs (where this data is available and reported in global databases like the WDPA and WD-OECM). It is recognized that statistics reported in the WPDA and WD-OECM might differ from those reported officially by countries due to differences in methodologies and datasets used to assess protected area coverage and differences in the base maps used to measure terrestrial and marine area of a country or territory. Details on UNEP-WCMC's methods for calculating PA and OECM coverage area available [here](#). The global indicators adopted here for presenting the status of other elements of Target 11 may also differ from those in use nationally.



COVERAGE - TERRESTRIAL & MARINE

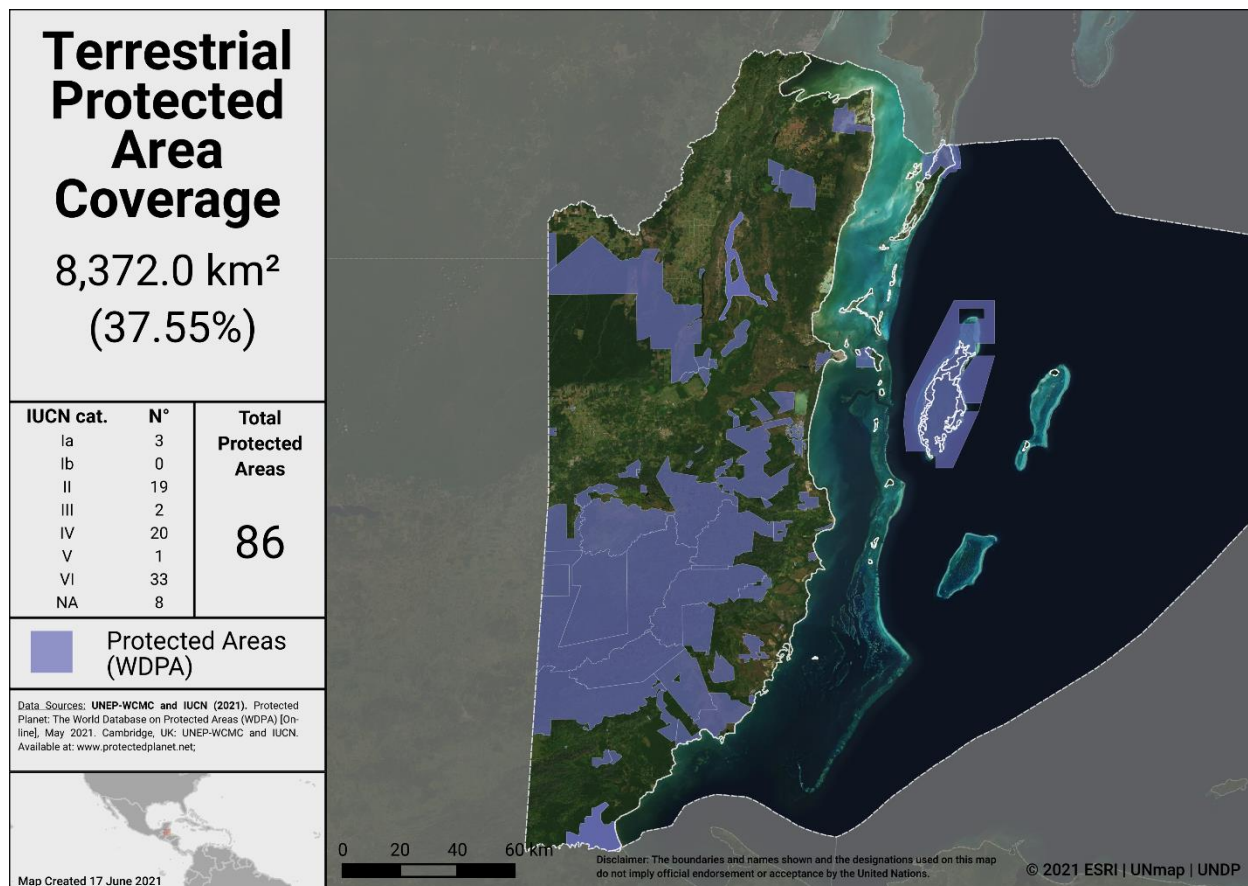
As of May 2021, Belize has **120** protected areas reported in the World Database on Protected Areas (WDPA). 1 PA that has a status of ‘not reported’ is not included in the following statistics (see details on UNWP-WCMC’s methods for calculating PA and OECM coverage [here](#)).

As of May 2021, Belize has **0** OECMs reported in the world database on OECMs (WD-OECM).

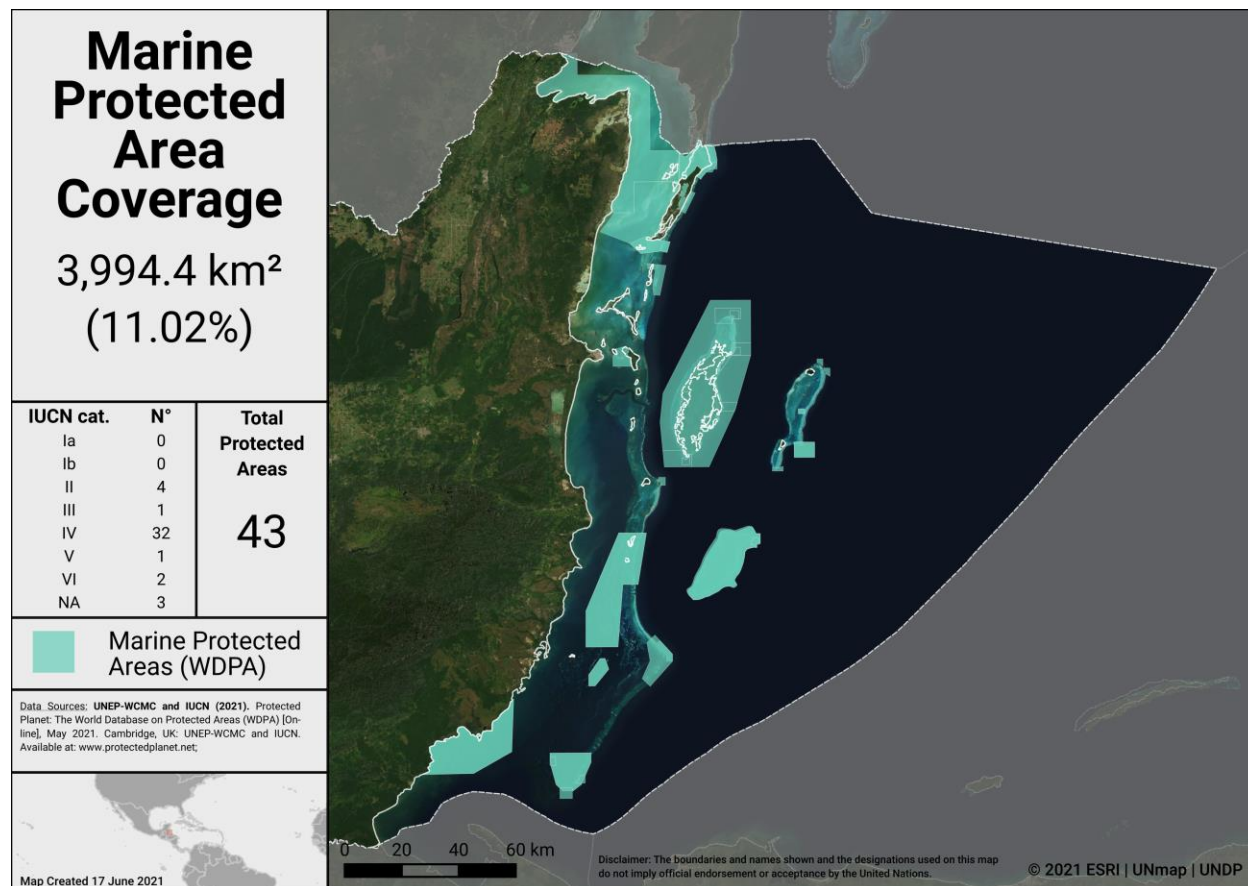
Current coverage for Belize (per the WDPA):

- 37.5% terrestrial (86 protected areas, 8,372.0 km²)
- 11.0% marine (43 protected areas, 3,994.4 km²)

National reporting in Belize shows **terrestrial** coverage of **35.8%** and **marine** coverage of **28%** (although 28% is protected there is only 7.6% in replenishments zones or no take zones); see further details in *The Status of Protected Areas in Belize 2019* (Walker, 2020).



Terrestrial Protected Areas in Belize (per WDPA)



Marine Protected Areas in Belize (per WDPA)

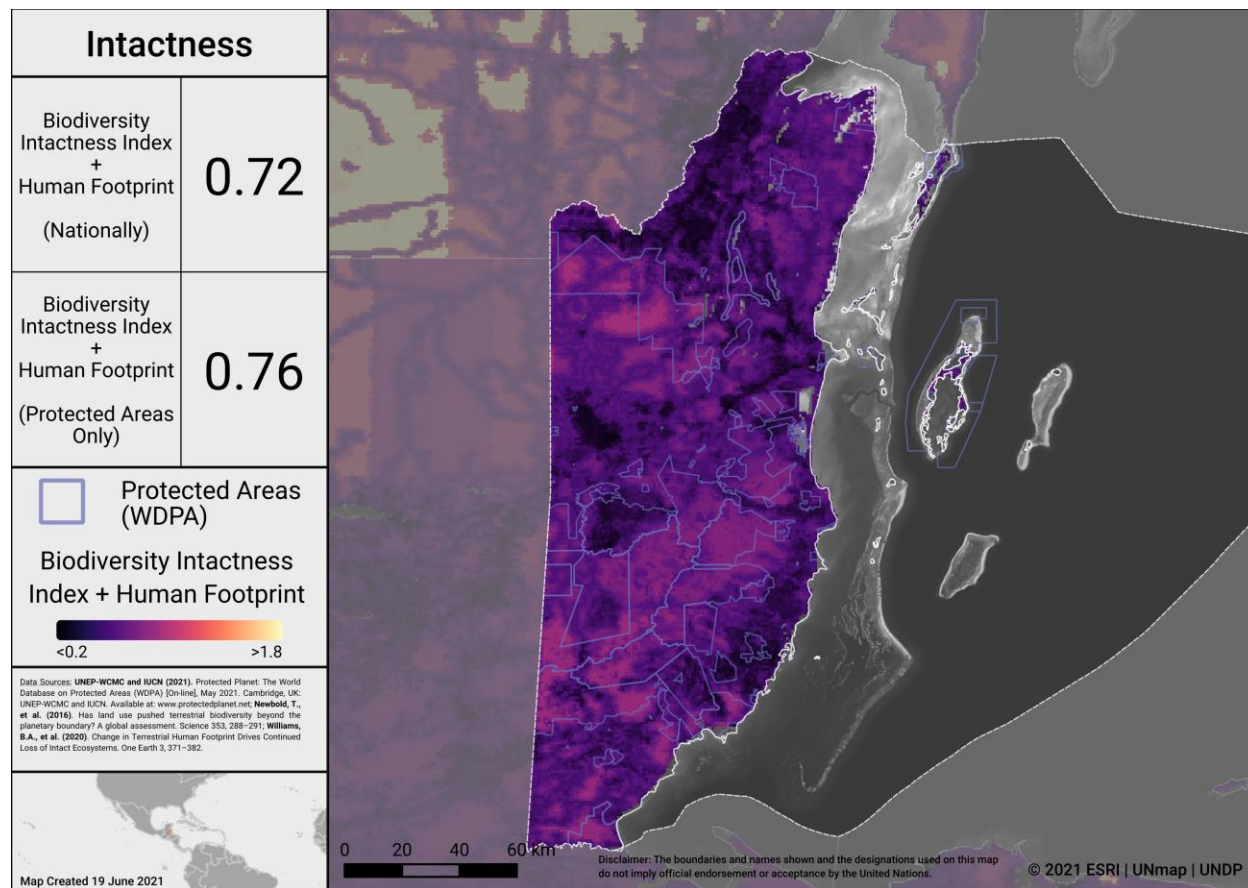
Potential OECMs

At this time, Belize has not endorsed, nationally, the formal establishment or designation of Other Effective area-based Conservation Measures (OECMs). It continues to utilize other categories adopted to the IUCN global categories. Notwithstanding, it intends to undertake national consultation to socialize on the OECMs and receive feedback on how receptive Belize is for formal recognition of OECMs.

Opportunities for action

Opportunities for the near-term include updating the WDPA with any unreported PAs. In the future, as Belize considers where to add new PAs and OECMs, the map below identifies areas in Belize where intact terrestrial areas are not currently protected. Focus on relatively intact areas, while addressing the elements in the following sections, could be considered when planning new PAs or OECMs.

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Intactness in Belize

To explore more on intactness visit the UN Biodiversity Lab: map.unbiodiversitylab.org.

ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL & MARINE

Ecological representativeness is assessed based on the PAs and OECMs coverage of broad-scale biogeographic units. Globally, ecoregions have been described for terrestrial areas (Dinerstein et al, 2017), marine coastal and shelf ecosystems (to a depth of 200m; Spalding et al 2007) and surface pelagic waters (Spalding et al 2012).

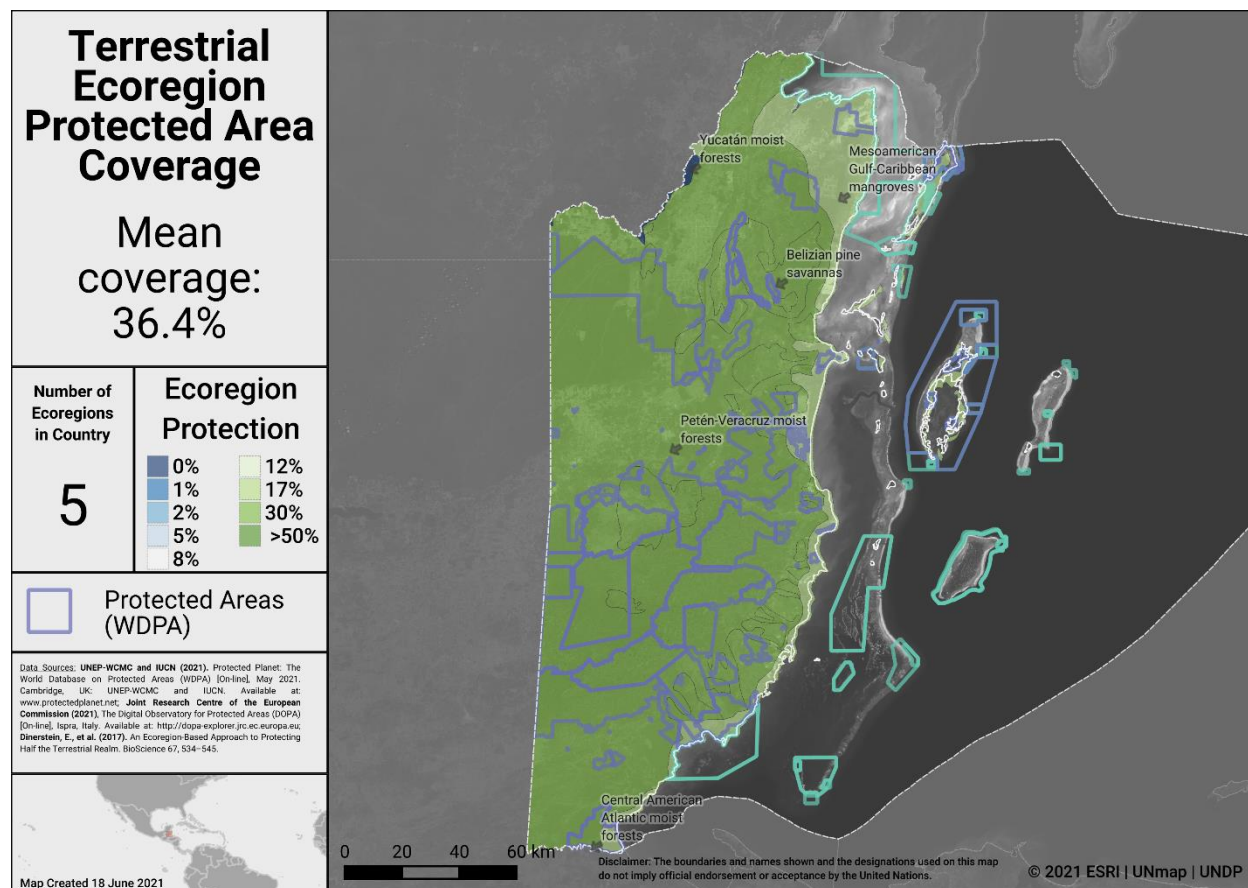
Belize has 5 **terrestrial** ecoregions. Out of these:

- 4 ecoregions have at least 17% protected within the country.
- 1 ecoregion has no coverage from PAs and OECMs.
- The average terrestrial coverage of ecoregions is 36.4%.

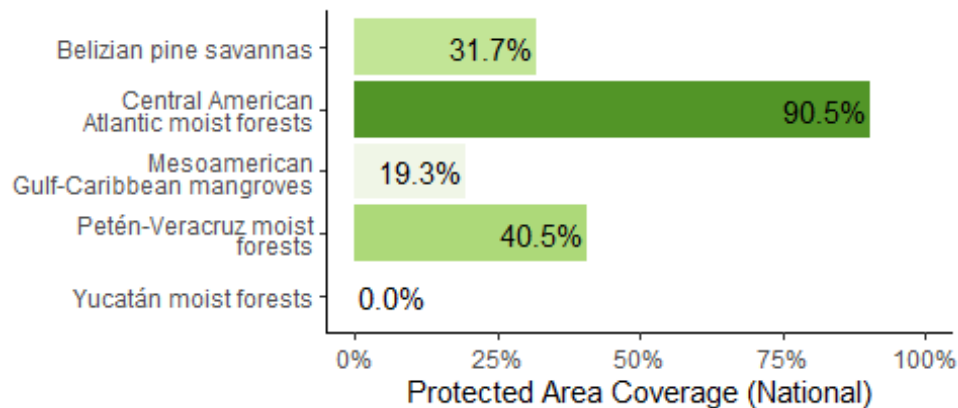
Belize has 1 **marine** ecoregion and 1 **pelagic province**:

- Coverage from reported PAs and OECMs is 30.0% (marine ecoregion) and 0.6% (pelagic province).

A full list of terrestrial ecoregions in Belize is available in Annex I.



Terrestrial ecoregions in Belize



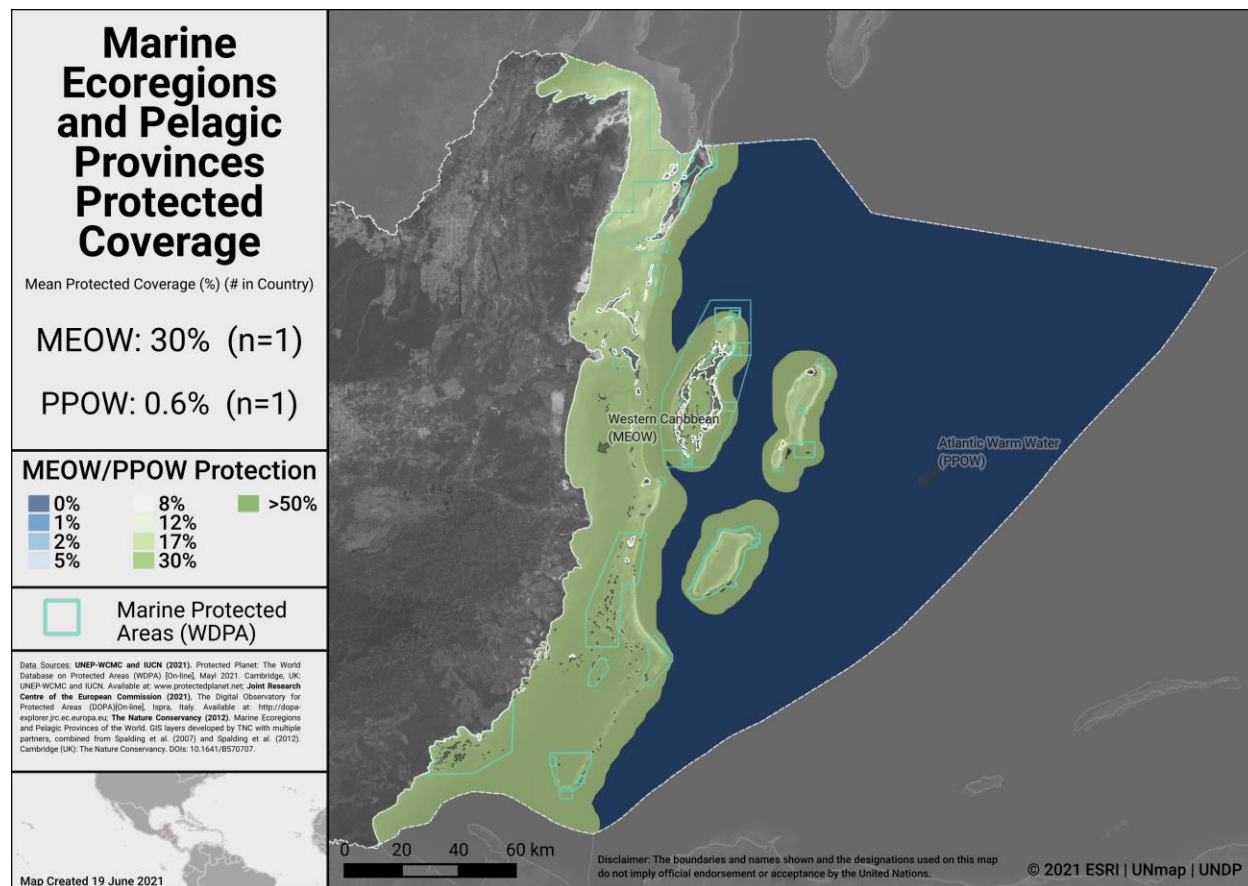
Terrestrial ecoregions of the World (TEOW) in Belize

According to Belize's [National Biodiversity Strategy and Action Plan \(2016-2020\)](#), the 5 global ecoregions present in the country include:

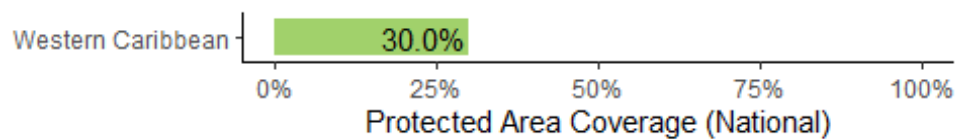
- Belizean Pine Forest Ecoregion
- Peten-Veracruz Moist Forest Ecoregion
- Yucatan Moist Forest Ecoregion
- Belizean Mangrove Forest Ecoregion
- Belize Reef and Mangrove Ecoregion

The first three align with three global ecoregions, as defined by Dinerstein et al 2017, and used in the dossier calculations; the Mesoamerican Gulf-Caribbean mangrove ecoregion (per Dinerstein et al 2017) encompasses both mainland mangrove ecosystems (Belizean Mangrove Forest Ecoregion) and offshore mangroves (captured in the Belize Reef and Mangrove Ecoregion per Belize's NBSAP, which also includes extensive seagrass beds and coral reef); while the Central American Atlantic moist forests covers <1 km² in Belize and was not included in Belize's NBSAP.

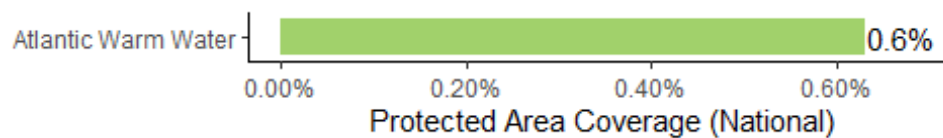
These 5 global ecoregions are further broken down into 68 ecosystems, and according to Belize's NBSAP, over 90% of these recognized ecosystems had greater than 10% representation within the national protected area system.



Marine ecoregions and pelagic provinces



Marine Ecoregions of the World (MEOW) in Belize



Pelagic Provinces of the World (PPOW) in Belize



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According to Belize's [National Biodiversity Strategy and Action Plan \(2016-2020\)](#), there are 11 marine ecosystems in the country,¹ of which 8 ecosystems had >10% representation within the national protected area system.

For complete details on this and other indicators, refer to Belize's [NBSAP](#).

Opportunities for action

There is opportunity for Belize to increase protection in terrestrial ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs. Ecoregions which currently have no coverage by PAs or OECMs are key areas for action.

¹ Caribbean open sea abyssal, Caribbean open sea bathyal, Caribbean open sea mesopelagic, Coastal Shelf, Coral Reef, Deep Patch Reef and Seagrass, Deep Water Mud, Littoral Forest, Mangrove, Seagrass, Sparse Algae and Sea Grass (see full details, including protected area coverage in 2014 in Belize's [NBSAP \(2016-2020\)](#)).



AREAS IMPORTANT FOR BIODIVERSITY

Key Biodiversity Areas (KBAs)

Protected area and OECM coverage of Key Biodiversity Areas (KBAs) provide one proxy for assessing the conservation of areas important for biodiversity at national, regional and global scales. KBAs are sites that make significant contributions to the global persistence of biodiversity (IUCN, 2016). The KBA concept builds on four decades of efforts to identify important sites for biodiversity, including Important Bird and Biodiversity Areas, Alliance for Zero Extinction sites, and KBAs identified through Hotspot ecosystem profiles supported by the Critical Ecosystem Partnership Fund. Incorporating these sites, the dataset of internationally significant KBAs includes Global KBAs (sites shown to meet one or more of 11 criteria in the Global Standard for the Identification of KBAs, clustered into five categories: threatened biodiversity; geographically restricted biodiversity; ecological integrity; biological processes; and irreplaceability), Regional KBAs (sites identified using pre-existing criteria and thresholds, that do not meet the Global KBA criteria based on existing information), and KBAs whose Global/Regional status is Not yet determined, but which will be assessed against the global KBA criteria within 8-12 years. Regional KBAs are often of critical international policy relevance (e.g., in EU legislation and under the Ramsar Convention on Wetlands), and many are likely to qualify as Global KBAs in future once assessed for their biodiversity importance for other taxonomic groups and ecosystems. To date, nearly 16,000 KBAs have identified globally, and information on each of these is presented in the World Database of Key Biodiversity Areas: www.keybiodiversityareas.org.

Belize has **6** Key Biodiversity Areas (KBAs).

- Mean percent coverage of all KBAs by PAs and OECMs in Belize is **43.6%**.
- **0** KBAs have full (>98%) coverage by PAs and OECMs.
- **6** KBAs have partial coverage by PAs and OECMs.
- **0** KBAs have no (<2%) coverage by PAs and OECMs.

Management and Protection of Key Biodiversity Areas in Belize is covered by the project: *Livelihood Restoration Process Framework, 2014*

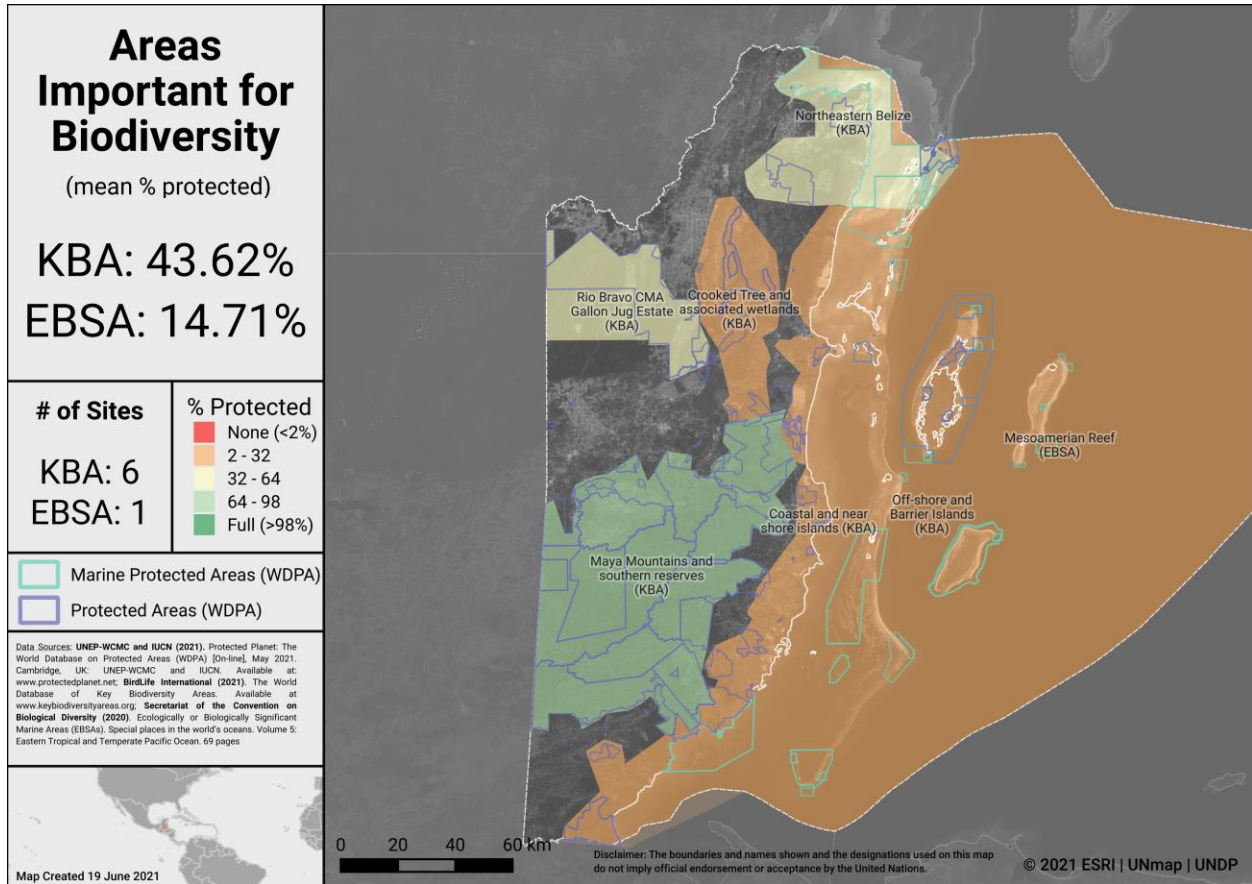
Additional information on KBAs can be found on page 80 of Belize's 6th National Report (with summary details in Annex 1 of this dossier).

Ecologically or Biologically Significant Marine Areas (EBSAs)

Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: <https://www.cbd.int/ebsa/>). Sites that meet the EBSA criteria may require enhanced conservation and management measures; this could be achieved through means including MPAs, OECMs, marine spatial planning, and impact assessment.

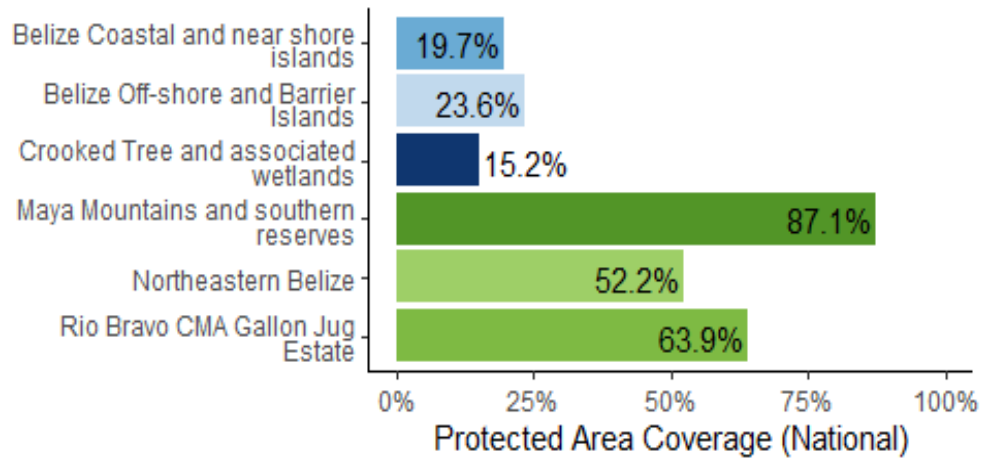
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There is 1 EBSA with some portion of its extent within Belize’s EEZ; current coverage from PAs and OECCMs is >10%.

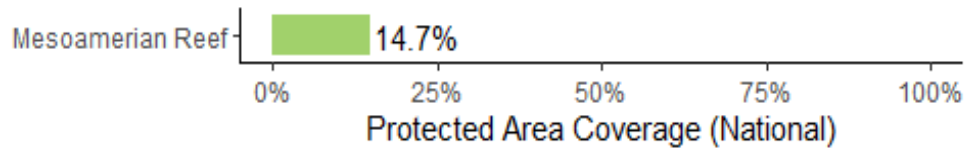


Areas Important for Biodiversity in Belize





Key Biodiversity Area Coverage (KBA) in Belize



Ecologically or Biologically Significant Marine Areas (EBSAs) in Belize

Opportunities for action

There is opportunity for Belize to increase protection of KBAs that have lower levels of coverage by PAs and OECMs, and to focus on effective management for those that already have adequate coverage.



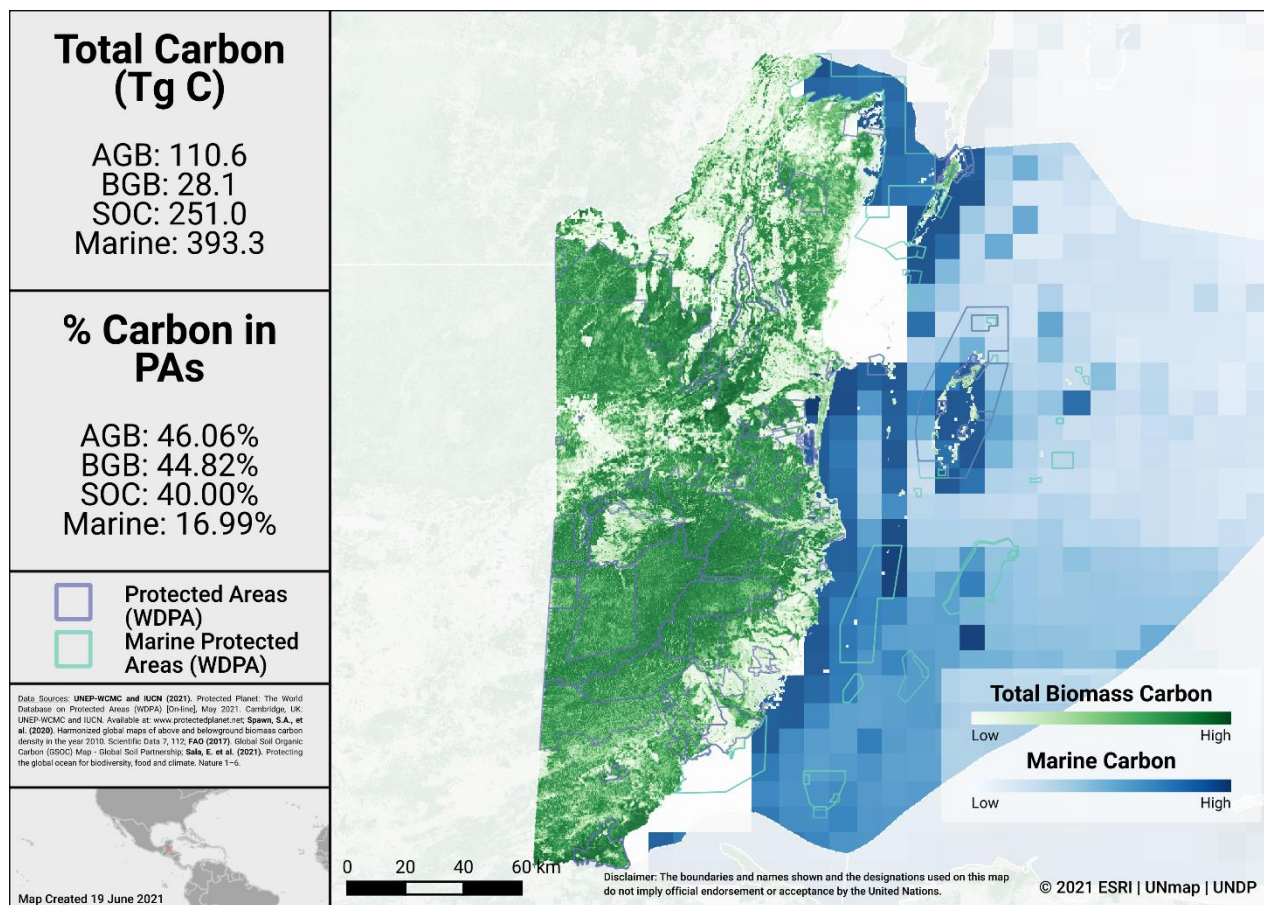
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

There is no single indicator identified for assessing the conservation of areas important for ecosystem services. For simplicity, two services with available global datasets are assessed here (carbon and water). In future, other critical ecosystem services could be explored.

Carbon

Data for biomass carbon comes from temporally consistent and harmonized global maps of aboveground biomass and belowground biomass carbon density (at a 300-m spatial resolution); the maps integrate land-cover specific, remotely sensed data, and land-cover specific empirical models (see Spawn et al., 2020 for details on methodology). The Global Soil Organic Carbon Map present an estimation of SOC stock from 0 to 30 cm (see FAO, 2017). Data is also presented from global maps of marine sedimentary carbon stocks, standardized to a 1-meter depth (see Sala et al., 2021, and Atwood et al., 2020).

The map below presents the total carbon stocks in Belize and the percent of carbon in protected areas. The total carbon stocks is 110.6 Tg C from aboveground biomass (AGB), with 46.1% in protected areas; 28.1 Tg C from below ground biomass (BGB), with 44.8% in protected areas; 251.0 Tg C from soil organic carbon (SOC), with 40.0% in protected areas; and 393.3 Tg C from marine sediment carbon, with 17.0% in protected areas.



Carbon Stocks in Belize

NATIONAL DATA FOR CARBON CONTENT

Ecosystem	Aboveground Biomass Carbon as a Percentage	Belowground Biomass Carbon as a Percentage	Percentage Carbon in Dead Matter	Soil organic carbon
Broadleaf	74.2	74.2	Na	Na
Mangrove	18.7	18.7	Na	Na
Pine	79.7	79.7	Na	Na
Wetlands	28.3	28.3	Na	Na

See also: Forest Department. 2020. *Belize Forest Reference Level, 2001 - 2015*. Belmopan City: Government of Belize.

Water

Forests support stormwater management and clean water availability, especially for large urban populations. Research that has examined the role of forests for city drinking water supplies shows that of the world's 105 largest cities, more than 30% (33 cities) rely heavily on the local protected forests, which provide ecosystem services that underpin local drinking water availability and quality (Dudley & Stolton, 2003).

Drinking water supplies for cities in Belize may similarly depend on protected forest areas within and around water catchments. Intact catchments can support more consistent water supply and improved water quality.

Opportunities for action

For carbon, there is opportunity for Belize to increase PA and OECM coverage in marine areas with high carbon stocks, and to focus on effective management for PAs and OECMs in terrestrial areas with high carbon stocks, as identified in the map above. Protecting areas with high carbon stocks secures the benefits of carbon sequestration in the area.

For water, there is opportunity to increase the area of the water catchment under protection by PAs and OECMs, or in cases where there is high levels of protection, focus on effective management for these areas. Protecting the current area of forested land and potentially reforesting would have benefits for improving water security.



CONNECTIVITY & INTEGRATION

Two global indicators, the Protected Connected land indicator (ProtConn; EC-JRC, 2021; Saura et al., 2018) and the PARC-Connectedness indicator (CSIRO, 2019), have been proposed for assessing the terrestrial connectivity of PA and OECM networks. To date there is no global indicator for assessing marine connectivity, though some recent developments include proposed guidance for the treatment of connectivity in the planning and management of MPAs (see Lausche et al., 2021).

Protected Connected Land Indicator (Prot-Conn)

As of January 2021, as reported in the Joint Research Centre of the European Commission's Digital Observatory for Protected Areas (DOPA) (JRC, 2021), the coverage of protected-connected lands (a measure of the connectivity of terrestrial protected area networks, assessed using the ProtConn indicator) in Belize was 32.4%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Belize is 0.51. This represents an increase from 0.5 in 2010.

Corridor case studies

There is one legally established corridor in Belize (the North-Eastern Biological Corridor) which covers an area of 69,122.71 acres (27,972.97 ha). There are two recognized, yet not legally established, corridors: the Maya Forest Corridor and Southern Biological Corridor.

Further information on these corridors, specifically the management effectiveness of protected areas that form a part of these corridors is included in the Status of Protected Areas in Belize report (Walker, 2020).

Below are details from a case study on corridors and connectivity in Belize:

Case study title	Type of study region	Greatest threat to connectivity	Approaches to conserving ecological corridors
The Jaguar Corridor Initiative: A rangewide species conservation strategy	terrestrial, rural	human land-use changes	<ul style="list-style-type: none"> • modelled ecological corridors • prioritised populations and ecological corridors • validated modelled corridors using a rapid assessment interview-based methodology • varied implementation action at local level

Further details are available in Hilty et al., 2020.



Integration into the wider landscape

Action C1.2: Identify and implement improved adaptive management regimes for critical landscape / seascape ecosystems based on anthropogenic threats and climate change vulnerability.

Activities include:

- Socialise and implement the National Climate Change Policy, Strategy and Action Plan
- Promote the development of institutional mechanisms that enhance Belize's planning and response capacity to climate change
- Ensure close collaboration between the NCCO, NPAS and BiO offices
- Integrate recommendations for planning for future ecosystem functionality and climate change resilience into NPAS and key national development plans strategies, laws, regulations and budgeting
- Collaborative broad stakeholder implementation of landscape / seascape climate change adaptation measures

For full details, please refer to page 79 of Belize's 6th National Report.

Opportunities for action

There is opportunity to focus on PA and corridor management for enhancing and maintaining connectivity. Improving connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.

As well, a range of suggested steps for enhancing and supporting integration are included in the voluntary guidance on the integration of PAs and OECMs into the wider land- and seascapes and mainstreaming across sectors to contribute, inter alia, to the SDGs (Annex I of COP Decision 14/8).



GOVERNANCE DIVERSITY

There is a lack of comprehensive global data on governance quality and equity in PAs and OECMs. Here, we provide data on the diversity of governance types for reported PAs and OECMs.

As of May 2021, PAs in Belize reported in the WDPA have the following governance types:

- 60.0% are governed by **governments** (by federal or national ministry or agency)
- 20.8% are under **shared** governance (by collaborative governance)
- 1.7% are under **private** governance
 - 0.85% by individual landowners
 - 0.85% by for-profit organisations
- 6.7% are under **IPLC** governance
 - 0.0% by Indigenous Peoples
 - 6.7% by local communities
- 10.8% **do not** report a governance type

Overall, the National Protected Areas System of Belize rates as MODERATE for Section Five: Governance² in both 2009 and 2019, with a mean score of 67.5% in 2009 and 64.3% in 2019, a decrease of 3.2% (Walker, 2020).

For full details on the recent national assessment of PA governance (and other indicators) see *The Status of Protected Areas in Belize 2019* (Walker, 2020).

Privately Protected Areas (PPAs)

From Gloss et al. (2019), a UNDP study on PPA data for Belize:

- PPAs **are** formally defined in PA legislation.
- PPAs **are** directly identified in Belize's recent NBSAP.
- PPAs **are** included as part of the current PA network.
- There are **8** private reserves, covering **131,663 ha** in Belize

See full details in Belize's [country profile](#) and summarized in Annex II.

² Indicators in this section focus on the governance of the protected areas – on whether essential governance structures and supporting processes are in place, well designed and implemented, and the level of management authority, responsibility, and accountability at site level. The indicators also assess the effectiveness of relations, communication and collaboration between partners, and the extent to which stakeholders are involved in the management decisions making processes (see Walker, 2020).

Territories and areas conserved by Indigenous Peoples and local communities (ICCAs)

There is currently no data available on ICCAs for Belize (see Kothari et al., 2012 and the [ICCA Registry](#) for further details).

Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of 7,648.0 km², of which 5,624.0 km² falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of 4,040.0 km² (for details on analysis see Garnett et al., 2018).

For Belize, evidence for the presence of Indigenous Peoples comes from: Indigenous Work Group on Indigenous Affairs. Indigenous World 2017 (Indigenous Working Group on Indigenous Affairs, 2017).

Boundaries of the lands Indigenous Peoples manage or have tenure rights over come from: International Union for Conservation of Nature. Map of Indigenous Peoples, protected areas and natural ecosystems of Central America. <http://www.burness.com/pressrooms/iucn-map-briefing/> (2015).

Opportunities for action

Explore opportunities for governance types that have lower representation, for Belize this could relate to governance by Indigenous Peoples and/or local communities (IPLC), etc. Increase efforts to identify the governance types for the 10.8% of sites that do not have their governance type reported.

There is also opportunity for Belize to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement. Examples of existing tools and methodologies include: Governance Assessment for Protected and Conserved Areas (Franks & Brooker, 2018), Social Assessment of Protected Areas (Franks et al 2018), and Site-level assessment of governance and equity (IIED, 2020). As well, a range of suggested actions are included in the voluntary guidance on effective governance models for management of protected areas, including equity (Annex II of COP Decision 14/8).

Equator Prize Projects

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities.

The Equator Prize projects provide examples of unique and locally based governance of natural resources. Belize has the following Equator Prize winners that showcase examples of local, sustainable community action:



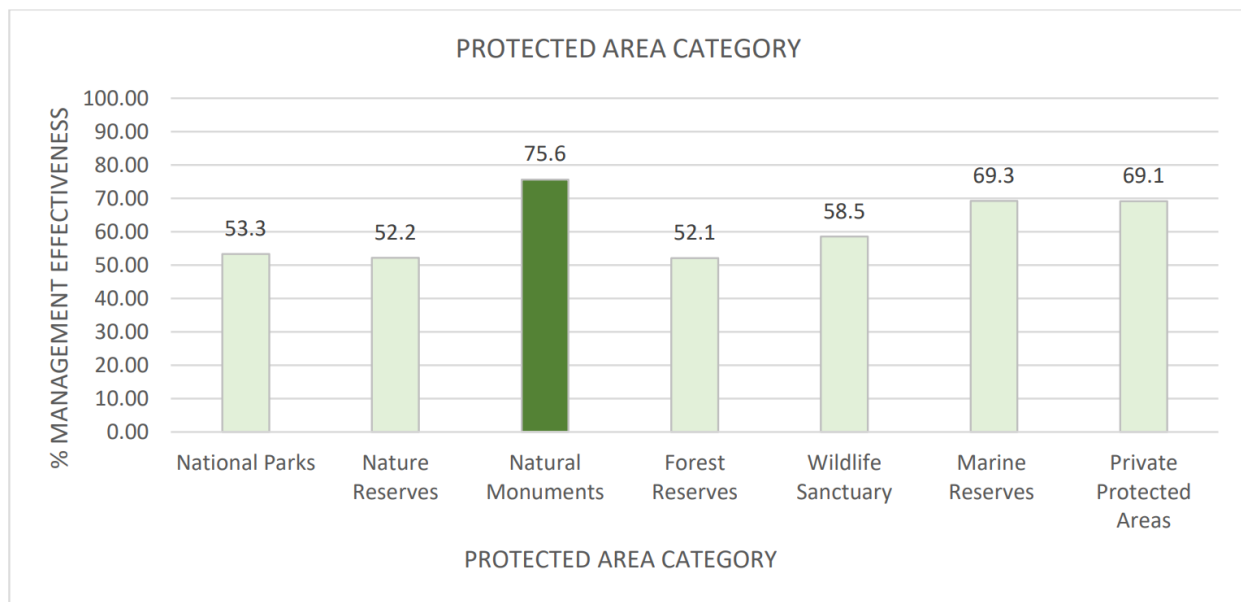
Organization	Year	Project Description
Community Baboon Sanctuary Women's Conservation Group	2017	<p>Led by women from seven communities in the northern coastal plain of Belize, the Community Baboon Sanctuary Women's Conservation Group (CBSWCG) supports the conservation of the black howler monkey, or baboons, in the 6,000-hectare Community Baboon Sanctuary. CBSWCG brings together 240 landowners, each of whom voluntarily participates in conservation efforts through a pledge system. The sanctuary has produced a sustainable land management plan that has environmental, economic and social benefits that extend well beyond the protected area and include maintaining interconnected wildlife corridor integrity and a comprehensive sustainable natural resource management strategy.</p> <p>A micro-credit fund has spawned projects in sustainable oil harvesting, tilapia farming, organic agriculture, and livestock rearing while the Bel-riv Commerce and Eco-Tourism Expo, created by the group in 2013, offers improved market access for farmers, small-scale entrepreneurs, and artisans. The successful protection of the sanctuary has led not only to an increase in the baboon population from 800 in 1985 to 6,000 in 2011, but also to the recovery of vulnerable populations of jaguar, ocelot, margay, puma and over 200 species of birds.</p>
Toledo Institute for Development and Environment (TIDE)	2002	<p>Toledo Institute for Development and Environment (TIDE) partners with local communities to promote sustainable income generation and co-management of both forest and marine resources in the Maya Mountain Marine Corridor, a conservation area covering approximately 739,650 acres of land and the equivalent of 100,000 acres of sea.</p> <p>From its volunteer-led beginning, TIDE has grown to include about 30 full-time staff members. The organization works with communities across three main program areas: education and outreach, resource protection, and research and monitoring. Additionally, TIDE has established an ecotourism venture to provide revenue for its work and to support the development of alternative livelihoods for community members. The group also organizes activities such as beach clean-ups and community fire management training, with a target audience comprising 12 coastal and inland communities, for a total of more than 10,000 people.</p>

PROTECTED AREA MANAGEMENT EFFECTIVENESS

This section provides information on the coverage of PAs and OECMs with completed protected area management effectiveness (PAME) assessments as reported in the global database (GD-PAME). The proportion of terrestrial and marine PAs with completed PAME assessments is also calculated and compared with the 60% target agreed to in COP-10 Decision X/31. Information is also included regarding changes in forest cover nationally within PAs and OECMs.

Overall, protected areas in Belize are considered to rate as MODERATE in their level of management effectiveness, averaging a score of 59.4%, with individual protected area scores ranging from 29.5% to 83.5%. Management effectiveness per protected area category ranges from 52.1% to 76.6% (see figure below), the majority of the categories rating as MODERATE. Natural Monuments, Marine Reserves, and Private Protected Areas are all identified as having stronger management effectiveness, with all protected areas rating as either MODERATE or VERY GOOD.

See full details on the recent national assessment of protected area management effectiveness (Walker Z. (2020). *The Status of Protected Areas in Belize – 2019. Management Effectiveness Evaluation*. Belize Forest Department)



Protected area management effectiveness (PAME) assessments

As of May 2021, Belize has 120 PAs reported in the WDPA; of these PAs, 65 (54.2%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 35.9% (8,003 km²) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
 - 95.6% of the area of terrestrial PAs have completed evaluations.

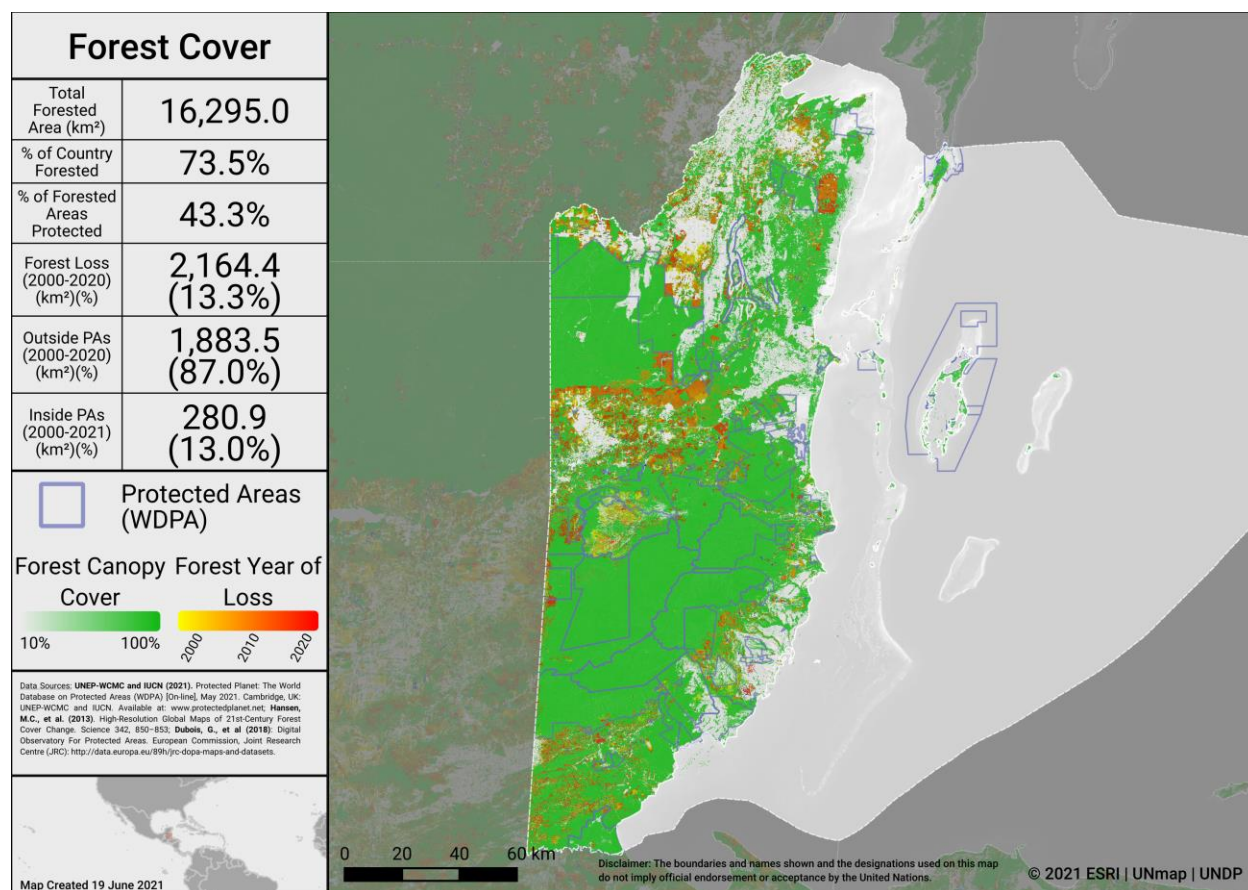
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- 7.7% (2,783 km²) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
 - 69.7% of the area of marine PAs have completed evaluations.

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs and **has** been met for marine PAs.

Changes in forest cover in protected areas and OECMs

Forested areas in Belize cover approximately 73.5% of the country, an area of 16,295.0 km². Approximately 43.3% (7,056.3 km²) of this is within the protected area estate of Belize. Over the period 2000-2020 loss of forest cover amounted to over 2,164.4 km², or 9.8% of the country (13.3% of forest area), of which 280.9 km² (13.0% of forest loss) occurred within protected areas. The map below shows how forest cover has changed in Belize from 2000-2020 both inside and outside of PAs. This can indicate how effective PAs are in reducing forest cover loss.



Forest Cover and Forest Loss in Belize

See also: Forest Department. 2020. *Belize Forest Reference Level, 2001 - 2015*. Belmopan City: Government of Belize.

Opportunities for action

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has** been met for terrestrial PAs and **has** been met for marine PAs. Further increasing this percentage for marine PAs could be beneficial overall for understanding how well protected areas are being managed.

There is also opportunity to implement the results of completed PAME evaluations, to improve the quality of management for existing PAs and OECMs (e.g. through adaptive management and information sharing, increasing the number of sites reporting 'sound management') and to increase reporting of biodiversity outcomes in PAs and OECMs.



SECTION II: EXISTING PROTECTED AREA AND OECM COMMITMENTS

PRIORITY ACTIONS FROM 2015-2016 REGIONAL WORKSHOPS

National priority actions for Aichi Biodiversity Target 11 were provided by Parties following a series of regional workshops in 2015 and 2016. The Capacity-building workshop for Latin America and the Caribbean on achieving Aichi Biodiversity Targets 11 and 12 took place 28 September - 1 October 2015 in Curitiba, Paraná, Brazil. Progress towards the quantitative targets for marine and terrestrial coverage has been assessed based on data reported in the WDPA and WD-OECM as of 2021. For more information, see the workshop report at: <https://www.cbd.int/meetings/>

The following actions were identified during the workshops:

Terrestrial coverage: To improve surveillance, enforcement and management of freshwater bodies and rivers identified as under-represented within the national protected areas system.

Marine coverage:

- 1) Improve management of marine resources and strengthening resilience to climate change. This is being done through the implementation of a National Replenishment Zone Expansion Project.
- 2) The Government of Belize through the Belize Fisheries Department is focusing on incorporating 10% of all marine and coastal habitats within Belize's territorial waters as functional and legally protected non-extractive replenishment zones (*there is now 7.6% in replenishment zones or no take zones*).

Ecological representation:

- 1) Through an ongoing Replenishment Zone Project, the opportunity exists to declare or expand particularly in the under-represented deep-sea areas to ensure that a minimum of 10% is protected as no take or replenishment zones.
- 2) Amend legislation to include rivers within the protected areas system.

Areas Important for biodiversity and ecosystem services: A key Biodiversity Areas project which is a \$6Million Dollar Project is currently being executed to strengthen and improve management within these areas and includes the development of management plans; funding for alternative livelihood projects in key buffering communities, capacity building and strengthening of management agencies among.



Connectivity:

- 1) Removal of negative incentive where higher land taxes are charged for landowners where development does not occur (because corridors are not legally protected)
- 2) A conservation action planning process was initiated and has resulted in a strategic plan for the management of the Central Belize Wildlife Corridor.
- 3) Discussions have begun to establish similar corridors in the northern part of the country as well as the south to ensure connectivity especially in light of the need and demand for development.

Management effectiveness:

- 1) Implement (or endorse) recently developed environmental resource management policies and plans (National Integrated Water Resources Management Policy (Endorsed 2009); National Policy on Responsible Tourism (2010); National Sustainable Tourism Master Plan of 2030 (Endorsed 2012); Revision of the outdated Fisheries Act as the Fisheries Resource Bill (Draft - awaiting endorsement; Integrated Coastal Zone Management Plan (Draft - awaiting endorsement; National Environmental Policy and Strategy (2014 – 2024) (Draft - awaiting endorsement)
- 2) Complete Legislation and policies currently in revision (Wildlife Protection Act; National Parks System Act; Forest Policy; National Protected Areas Policy and System Plan)
- 3) Using existing criteria and indicators the opportunity exists to increase consistency of management effectiveness exercises across the system which can be used to guide management decisions and actions.

Governance and Equity: Greater education and awareness of the National Protected Areas System Act for implementation (under which PA co-management is recognized).

Integration: Greater involvement of landowners and developers in conservation of biological corridors, explore possible incentives for securing biological corridors.

OECMs:

- 1) Conservation Action Plans have been done at a landscape and seascape level for a number of protected areas including the Maya Mountain Massif, Northern Coastal complex and Turneffe Atoll area.
- 2) Further roll out of agro-forestry activities.



NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

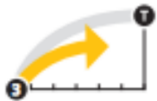
Belize has submitted an NBSAP during the Strategic Plan for Biodiversity 2011-2020 (most recent NBSAP is available at: <https://www.cbd.int/nbsap/search/>).

National Target C1: By 2030, Belize's natural landscapes and seascapes are all functional and build biodiversity resilience to climate change.



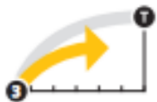
2018 - Progress towards target but at an insufficient rate

National Target C2: By 2020, three key corridors identified under the National Protected Areas Policy and System Plan are physically and legally established, and effectively managed.



2018 - Progress towards target but at an insufficient rate

National Target C3: Between 2016 and 2030, no species will become functionally extinct in Belize.



2018 - Progress towards target but at an insufficient rate

National Target C4: By 2020, average management effectiveness of the National Protected Areas System has increased to 80%.



2018 - Unknown

- Based on the most recent management effectiveness exercise conducted in 2019, this target has not been fully met. The average management effectiveness of the National Protected Areas System is 59.4% covering 64 protected areas. This places management effectiveness as moderate. The figures show a slight decrease of 1.7% from the 2009 management effectiveness exercise although the overall ranking of moderate remains the same

APPROVED GEF-5 & GEF-6 PROTECTED AREA PROJECTS

Approved GEF-5 and GEF-6 PA-related biodiversity projects

This includes biodiversity projects from the fifth and sixth replenishment of the Global Environment Facility (GEF-5 and GEF-6) with a clear impact of the quantity or quality of PAs; also including some projects occurring within the wider landscapes/seascapes around PAs. Only those with a status of ‘project approved’ or ‘concept approved’ as of June 2019 were considered. The qualifying elements likely benefiting from each GEF project is assessed based on a keyword search of Project Identification Forms (PIF).

GEF ID	PA increase?	Area to be added (km ²)	Qualitative elements potentially benefitting (based on keyword search of PIFs)
4605	No	N/A	All except Ecologically representative and Connectivity
9796	No	N/A	All except Ecologically representative



UN OCEAN CONFERENCE VOLUNTARY COMMITMENTS

Voluntary commitments for the UN Ocean Conference are initiatives voluntarily undertaken by governments, the UN system, non-governmental organizations, among other actors—individually or in partnership—that aim to contribute to the implementation of SDG 14 (here we focus in particular on SDG 14.5). The registry of commitments was opened in February 2017, in the lead up to the first UN Ocean Conference (5 to 9 June 2017).

Ocean Actions improving MPA or OECM coverage:

#OceanAction16178: Protecting 1 million sq kms through the \$15 million WCS Marine Protected Area Fund, by Wildlife Conservation Society (Non-governmental organization).

- Area to be added: up to **2737 km²**.
- Notes on area added: project aims to expand no-take areas (also known as replenishment zones) within existing MPAs to 15 percent of Belize's territorial sea (see country profile for WCS MPA project: <https://mpafund.wcs.org/>, see also details for recently expanded Sapodilla Cays [here](#)).
- Progress report: Yes (2019), status=On Track.
- Further details available at: <https://oceanconference.un.org/commitments/?id=16178>.

#OceanAction17863: Belize Model For Sustainable Small-Scale Fisheries Management, by Belize Fisheries Department (Government).

- Area to be added: **No area given**
- Deliverable: Replenishment Zones to comprise 10% of national waters
 - But see OA #16178.
- Progress report: No progress report submitted (as of March 2021).
- Further details available at: <https://oceanconference.un.org/commitments/?id=17863>.



OTHER ACTIONS/COMMITMENTS

Leaders' Pledge for Nature

Belize **has** signed onto the Leaders' Pledge for Nature.

Political leaders participating in the United Nations Summit on Biodiversity in September 2020, representing 84 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030. By doing so, these leaders are sending a united signal to step up global ambition and encourage others to match their collective ambition for nature, climate, and people with the scale of the crisis at hand.

Global Ocean Alliance

Belize **has** joined the Global Ocean Alliance: 30by30 initiative.

The Global Ocean Alliance 30by30 is a UK led initiative [currently containing 53 countries as signatories]. Its aim is to protect at least 30% of the global ocean as Marine Protected Areas (MPAs) and Other Effective area-based Conservation Measures (OECMs) by 2030.



ANNEX I

FULL LIST OF TERRESTRIAL ECOREGIONS

Ecoregion Name	Area (km ²)	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km ²)	% Protected in Country
Belizian pine savannas	2,822.0	100.0	12.7	893.7	31.7
Central American Atlantic moist forests	0.5	0.0	0.0	0.4	90.5
Mesoamerican Gulf-Caribbean mangroves	2,773.6	10.4	12.5	535.0	19.3
Petén-Veracruz moist forests	16,693.4	11.2	75.4	6,764.2	40.5
Yucatán moist forests	66.8	0.1	0.3	0.0	0.0

FULL LIST OF KBAs

Name	Category	KBA	Area (ha)
Freshwater Creek	Forest Reserve	Northern Lowlands	13,370
Spanish Creek	Wildlife Sanctuary	Northern Lowlands	2,387
Vaca	Forest Reserve	Maya Mountains Massif	16,367
Chiquibul	National Park	Maya Mountains Massif	106,785
Maya Mountain North	Forest Reserve	Maya Mountains Massif	16,847
Columbia River	Forest Reserve	Maya Mountains Massif	59,973

Additional information on KBAs can be found on page 80 of Belize's 6th National Report

ANNEX II

ADDITIONAL DETAILS ON PPAs

- Privately protected areas (PPAs) are formally defined by in the *National Protected Areas System Act* (2015)
- As of 2014, the National PA system includes 8 private reserves, covering 131,663 ha
 - 8 ‘private reserves’ are currently included in the WDPA (5 do not have their governance type reported; 1 is governed by local communities)
- There are several examples of conservation easements used for land conservation in Belize (e.g., Community Baboon Sanctuary, and Toledo Institute for Development and Environment conservation easements and trust deeds for private protected lands)
- Belize has also been involved in ‘debt-for-nature’ swaps, including agreements covering 20,000 acres of private protected lands in southern Belize.

Case studies/best practices:

- *Shipstern Conservation & Management Area*: under management of Corozal Sustainable Future Initiative (CSFI); in 2012 received permanent trust status
- *Rio Bravo Conservation & Management Area*: officially recognized private reserve, covers >105,000 ha (~4% Belize’s total land area); TNC recently piloted a carbon sequestration project in the area, in an effort to demonstrate new funding opportunities
- *Community Baboon Sanctuary*: covers 5,250ha; WWF provided landowners funding to help establish a formal community management area; landowners signed reciprocal easements on each other’s land to the agreed terms.

See additional info in country profile (<http://nbsapforum.net/knowledge-base/resource/belize-country-profile-international-outlook-privately-protected-areas>).



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