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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
OECM 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-OECM World Database on Other Effective Area-Based Conservation Measures

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, terrestrial coverage in Tuvalu is 5.5 km² (13.2%) and marine coverage is 213.9 km² (0.03%).
- Opportunities for action: opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. 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:** Tuvalu contains 1 terrestrial ecoregion, 1 marine ecoregion, and 1 pelagic province: coverage by reported PAs and OECMs is 0.7% (terrestrial), 4.4% (marine), and 0.0% (pelagic); all ecoregions have at least some coverage (1 pelagic province has <0.01% coverage).
- **Opportunities for action:** there is opportunity for Tuvalu to increase protection in terrestrial and marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs.

Areas Important for Biodiversity

• **Status:** Tuvalu has **0** Key Biodiversity Areas (KBAs).

• **Opportunities for action:** there is opportunity for the identification of areas important for biodiversity, and their subsequent protection by PAs or OECMs.

Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Tuvalu, 8.0% of aboveground biomass carbon, 8.0% of belowground biomass carbon, 22.5% of soil organic carbon, 0.0% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Tuvalu to increase PA and OECM coverage in both marine and 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 36.8%.
- Opportunities for action: there is opportunity to focus on PA and OECM 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(s) for reported PAs in Tuvalu is: 100.0% under IPLCs (local communities).
- **Opportunities for action:** there is opportunity 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:** 0.0% of terrestrial PAs and 0.0% of marine PAs have completed Protected Area Management Effectiveness (PAME) assessments reported.

- **Opportunities for action:** the 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs. Therefore, there is opportunity to increase protected area management effectiveness (PAME) evaluations for both terrestrial and marine PAs to achieve the target.
- 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 Tuvalu. Section I of the dossier presents data on the current status of Tuvalu'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 Tuvalu, in relation to each Target 11 element. The analyses present options for improving Tuvalu's area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Tuvalu'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

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 areabased 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.

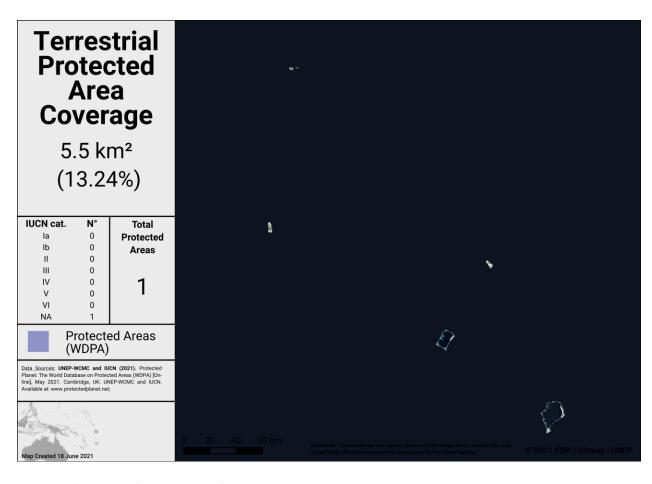
COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Tuvalu has **9** protected areas reported in the World Database on Protected Areas (WDPA).

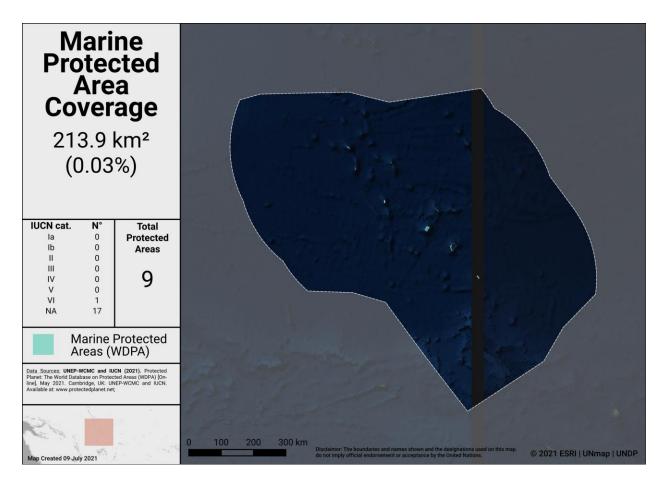
As of May 2021, Tuvalu has **0** OECMs reported in the world database on OECMs (WD-OECM).

Current coverage for Tuvalu:

- 13.2% terrestrial (1 protected areas, 5.5 km²)
- 0.03% marine (9 protected areas, 213.9 km²)



Terrestrial Protected Areas in Tuvalu



Marine Protected Areas in Tuvalu

Potential OECMs

There are currently no potential OECM examples available for Tuvalu.

Opportunities for action

Opportunities for the near-term include updating the WDPA with any unreported PAs, and the recognizing and reporting OECMs to the WD-OECM. 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.

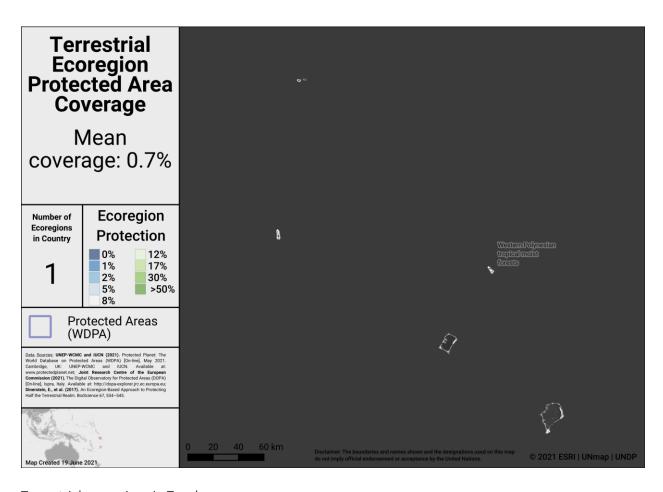
ECOLOGICAL REPRESENTATIVENESS - TERRESTRIAL & MARINE

Ecological representativeness is assessed based on the PAs and OECMs coverage of broadscale 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).

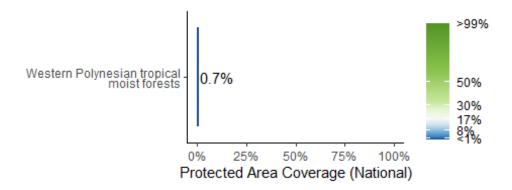
Tuvalu has 1 **terrestrial** ecoregion: coverage from PAs and OECMs is 0.7%.

Tuvalu has 1 **marine** ecoregion and 1 **pelagic province**. Out of these:

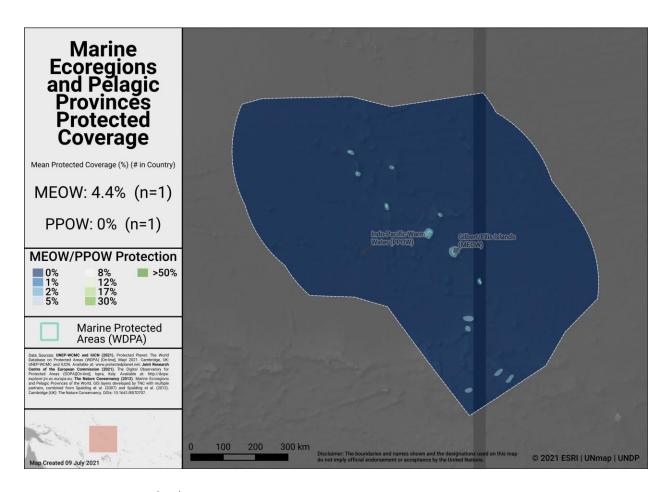
• Coverage from reported PAs and OECMs is 4.4% (marine ecoregion) and <0.01% (pelagic province).



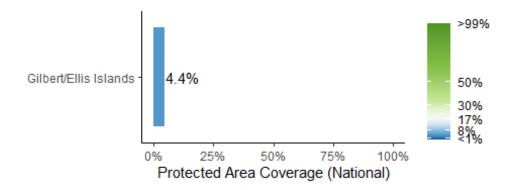
Terrestrial ecoregions in Tuvalu



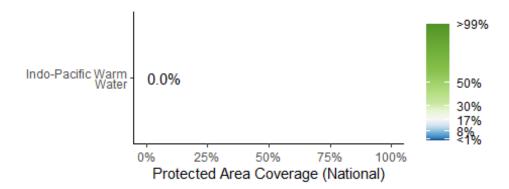
Terrestrial ecoregions of the World (TEOW) in Tuvalu



Marine ecoregions and pelagic provinces



Marine Ecoregions of the World (MEOW) in Tuvalu



Pelagic Provinces of the World (PPOW) in Tuvalu

Opportunities for action

There is opportunity for Tuvalu to increase protection in terrestrial and marine ecoregions and pelagic provinces that have lower levels of coverage by PAs or OECMs.

AREAS IMPORTANT FOR BIODIVERSITY

Key Biodiversity Areas (KBAs)

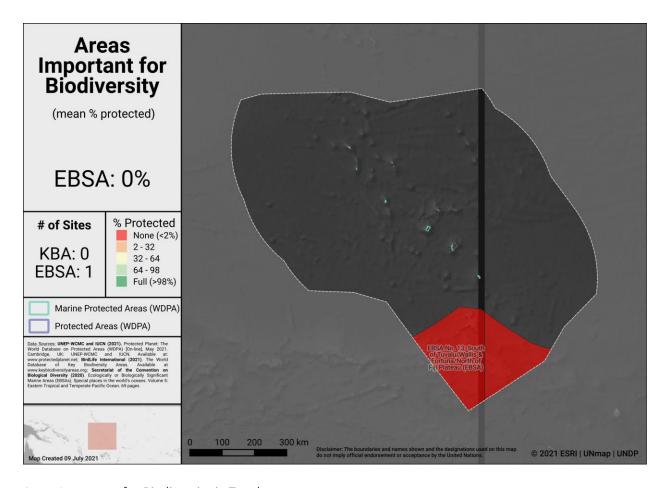
Protected area and OECM coverage of Key Biodiversity Areas (KBAs) provide one proxy for assessing the conservation of areas important for biodiversity at national, regional and global scales. KBAs are sites that make significant contributions to the global persistence of biodiversity (IUCN, 2016). The 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.

There are currently no reported Key Biodiversity Areas in Tuvalu

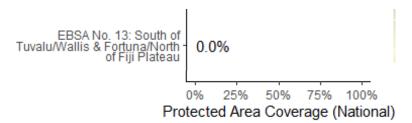
Ecologically or Biologically Significant Marine Areas (EBSAs)

Other important areas for biodiversity 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.

There is 1 EBSA with some portion of its within Tuvalu's EEZ.



Areas Important for Biodiversity in Tuvalu



Ecologically or Biologically Significant Marine Areas (EBSAs) in Tuvalu

Opportunities for action

There is opportunity for the identification of areas important for biodiversity in Tuvalu, and to increase their coverage by PAs and OECMs.

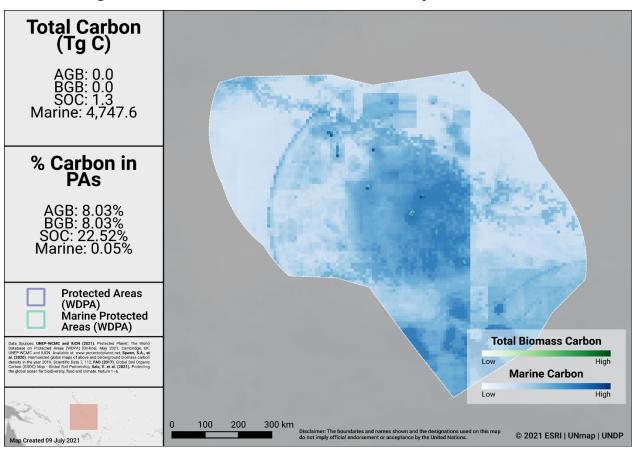
AREAS IMPORTANT FOR ECOSYSTEM SERVICES

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 Tuvalu and the percent of carbon in protected areas. The total carbon stocks is 0.4 Gg C from aboveground biomass (AGB), with 8.0% in protected areas; 0.8 Gg C from below ground biomass (BGB), with 8.0% in protected areas; 1.3 Tg C from soil organic carbon (SOC), with 22.5% in protected areas; and 4,747.6 Tg C from marine sediment carbon, with 0.0% in protected areas.



Carbon Stocks in Tuvalu

Water

Forests and intact ecosystems 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 Tuvalu 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 Tuvalu to increase PA and OECM coverage in both marine and 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 Tuvalu was 36.8%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Tuvalu is 0.15. This represents no change from 2010.

Corridor case studies

There are no corridor cases studies available for Tuvalu (but see general details on conserving connectivity through ecological networks and corridors in Hilty et al 2020).

Opportunities for action

There is opportunity to focus on PA and OECM 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 Tuvalu reported in the WDPA have the following governance types:

- 0.0% are governed by **governments**
- 0.0% are under **shared** governance
- 0.0% are under **private** governance
- 100.0% are under IPLC governance
 - 0.0% by Indigenous Peoples
 - 100.0% by local communities
- 0.0% **do not** report a governance type

OECMs

As of May 2021, there are **0** OECMs in Tuvalu reported in the WD-OECM, therefore there is no data available on OECM governance types.

Privately Protected Areas (PPAs)

There is currently no data available on PPAs for Tuvalu (see Gloss et al., 2019, and Stolton et al., 2014 for details).

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

From Kothari et al. (2012), potential ICCAs (or similar designations) in Tuvalu include:

- 10 community conserved areas (CCAs) (total coverage is not indicated)
- 10 locally managed marine areas (LMMAs) covering **76 km**².
 - o 1 CCA and 8 LMMAs currently listed in the WDPA

Other Indigenous lands

There is currently no data available on the total area of lands managed and/or controlled by Indigenous Peoples in Tuvalu (see Garnett et al 2018 for details).

Opportunities for action

There is also opportunity for Tuvalu 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).

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.

Protected area management effectiveness (PAME) assessments

As of May 2021, Tuvalu has 9 PAs reported in the WDPA; of these PAs, 0 (0.0%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 0.0% (0.0 km²) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
 - 0.0% of the area of terrestrial PAs have completed evaluations.
- 0.0% (0.0 km²) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
 - 0.0% of the area of marine PAs have completed evaluations.

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs.

As of May 2021, there are 0 OECMs in Tuvalu reported in the WD-OECM and no information available on the management effectiveness of potential OECMs.

Opportunities for action

The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs. Therefore, there is opportunity to increase protected area management effectiveness (PAME) evaluations for both terrestrial and marine PAs to achieve the target.

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 Pacific on achieving Aichi Biodiversity Targets 11 and 12 took place 11 - 13 July 2016 in Nadi, Fiji. 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/

Summary from the workshop:

The following actions were identified during the workshops:

Terrestrial coverage:

- 1) To carry out the demarcation of the remaining 4 islands next month at the least.
- 2) To establish clearing house mechanism for data storage and sharing purposes.

Marine coverage: The demarcation of marine areas under the IIB project is a good opportunity to verify the information of % coverage for both terrestrial and marine area.

Ecological representation: To include more land and sea areas and fish spawning aggregation sites on the existing marine conservation area.

Areas Important for biodiversity and ecosystem services:

- 1) Identify at least one or more island hotspots.
- 2) Identify the spawning aggregation site and to see whether it is inside the CA or not.

Connectivity: Improve understanding Funafuti area ecological connectivity and human impacts (ballast water from cargo ship, sewage runoff).

Management effectiveness:

- 1) Establish management plan for the 9 islands.
- 2) Enforce their management plan.
- 3) Improve Funafuti management.

Governance and Equity:

- 1) To collect information about existing by-laws and local agreements with respect to "no take zone" and "controlled catch" and the timing of enforcement and ongoing management practices.
- 2) The R2R project with the assistance from the Fisheries Dept to help communities and Kaupules by working with their existing governance structures to strengthen and formalize them, which could include reclassification of certain areas and redevelopment of the agreements previously made (if necessary).

Integration: To conduct a spatial assessment of these sectors (agriculture, waste pollution, sedimentation, tourism, etc) can help provide better understanding of the benefits and threats they pose to the sustainability of the land/seascapes.

OECMs: Communities need to clarify the language used regarding the different types of designated areas (conservation areas), clearly separating the roles of MPAs as no take zone from MMAs.

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

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

This NBSAP did include a quantitative target for terrestrial PAs or OECMs.

Theme 5 (Sustainable Use of Natural Resources)

Objective 2 (Increase the number of new conservation areas throughout the nation) - key performance indicator = By the year 2015, at least 15% of the area of Tuvalu would have been protected and conserved

- As of May 2021 (based on the WDPA/WD-OECM) has the target been met: NO
- Accounting for other projects, actions and commitments, if this target is met, coverage in the country will increase by 0.7 km².

Actions from the NBSAP will also address other elements of Aichi Biodiversity Target 11:

NBSAP Action number	Action (original language from NBSAP)
T5.1.1	Augment the management of existing conservation areas throughout the nation - Develop management plans for all existing conservation areas by 2012
T5.2.1	Increase the number of new conservation areas throughout the nation - Train more people in the management of conservation areas so that by the year 2013 all islands will have trained people
T5.2.2	Increase the number of new conservation areas throughout the nation - Establish necessary benchmarks whereby conservation areas are used and managed sustainably (for instance to know when to open them up for consumption and eco-tourism)
T5.2.3	Increase the number of new conservation areas throughout the nation - Establish protected areas throughout the nation to enhance biodiversity in Tuvalu
T5.2.4	Increase the number of new conservation areas throughout the nation - Empower Kaupule member/capacity on management plan
T5.2.5	Increase the number of new conservation areas throughout the nation - Establish baseline data survey

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). Where spatial data for the proposed PAs was available, further details (based on an analysis by UNDP) regarding their impacts for ecological representation, coverage of KBAs, and coverage of areas important for carbon storage is included.

GEF ID	PA increase?	Area to be added (km²)	Type of new protected area	Qualitative elements potentially benefitting (based on keyword search of PIFs)
5550	Yes	159	Marine	All except Areas important for biodiversity and Connectivity

Based on spatial data available for GEF project 5550, benefits will arise for several elements of Target 11:

Coverage of Terrestrial and Marine Ecoregions:

- 1 terrestrial ecoregion will have improved coverage (Western Polynesian tropical moist forests).
 - The increase in coverage of will be 1.95%.
- 1 marine ecoregion will have improved coverage (Gilbert/Ellis Islands).
 - The increase in coverage of will be 0.03%.

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:

#OceanAction21472: Establishing a network of MPA's and LMMA within Tuvalu Maritime Zoneby Office of the Prime Minister, Tuvalu (Government).

- Area to be added: **72,817 km**².
- Deliverables include: increase the total area designated for conservation to 10% of the islands in Tuvalu.
- Progress report: Yes (Oct 2018, Overall status = On track); 2019/2020 not submitted.
- Further details available at: https://oceanconference.un.org/commitments/?id=21472.

OTHER ACTIONS/COMMITMENTS

Tuvalu's statement at the 2020 UN Biodiversity Summit mentions PAs, OECMs or corridors:

Pacific Island forum members have demonstrated a long standing commitment to sustainable oceans, including through the 2002 Pacific Islands regional ocean policy, the 2010 framework for the Pacific Ocean scape, the regional roadmap for sustainable Pacific fisheries and the framework for natural conservation and protected areas in the Pacific Islands region.

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