



Convention on
Biological Diversity



Aichi Biodiversity Target 11 Country Dossier: ESTONIA

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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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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.

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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 Estonia is 9,633.0 km² (21.2%) and marine coverage is 6,825.4 km² (18.8%).
- **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:** Estonia contains 1 terrestrial ecoregion, 1 marine ecoregion, and 0 pelagic provinces: coverage by reported PAs and OECMs is 19.8% (terrestrial), and 18.8% (marine).
- **Opportunities for action:** there is opportunity for Estonia to increase protection and/or focus on effective management for PAs and OECMs in terrestrial and marine ecoregions.

Areas Important for Biodiversity

- **Status:** Estonia has 64 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 94.9%; all KBAs have at least partial coverage by reported PAs and OECMs.



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- **Opportunities for action:** there is opportunity for Estonia to focus on effective management for KBAs that already have adequate levels of coverage by PAs and OECMs.

Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Estonia, 21.4% of aboveground biomass carbon, 24.0% of belowground biomass carbon, 21.4% of soil organic carbon, 20.1% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Estonia 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 9.51%.
- **Opportunities for action:** there is opportunity for the targeted designation of connecting PAs or OECMs and 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 Estonia is: 99.9% under Government (Federal or national ministry or agency).
- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Estonia this could relate to shared governance, etc.
- There is also opportunity for Estonia 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).



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Protected Area Management Effectiveness

- **Status:** 33.6% of terrestrial PAs and 17.0% 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 Estonia. Section I of the dossier presents data on the current status of Estonia’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 Estonia, in relation to each Target 11 element. The analyses present options for improving Estonia’s area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Estonia’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

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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 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.



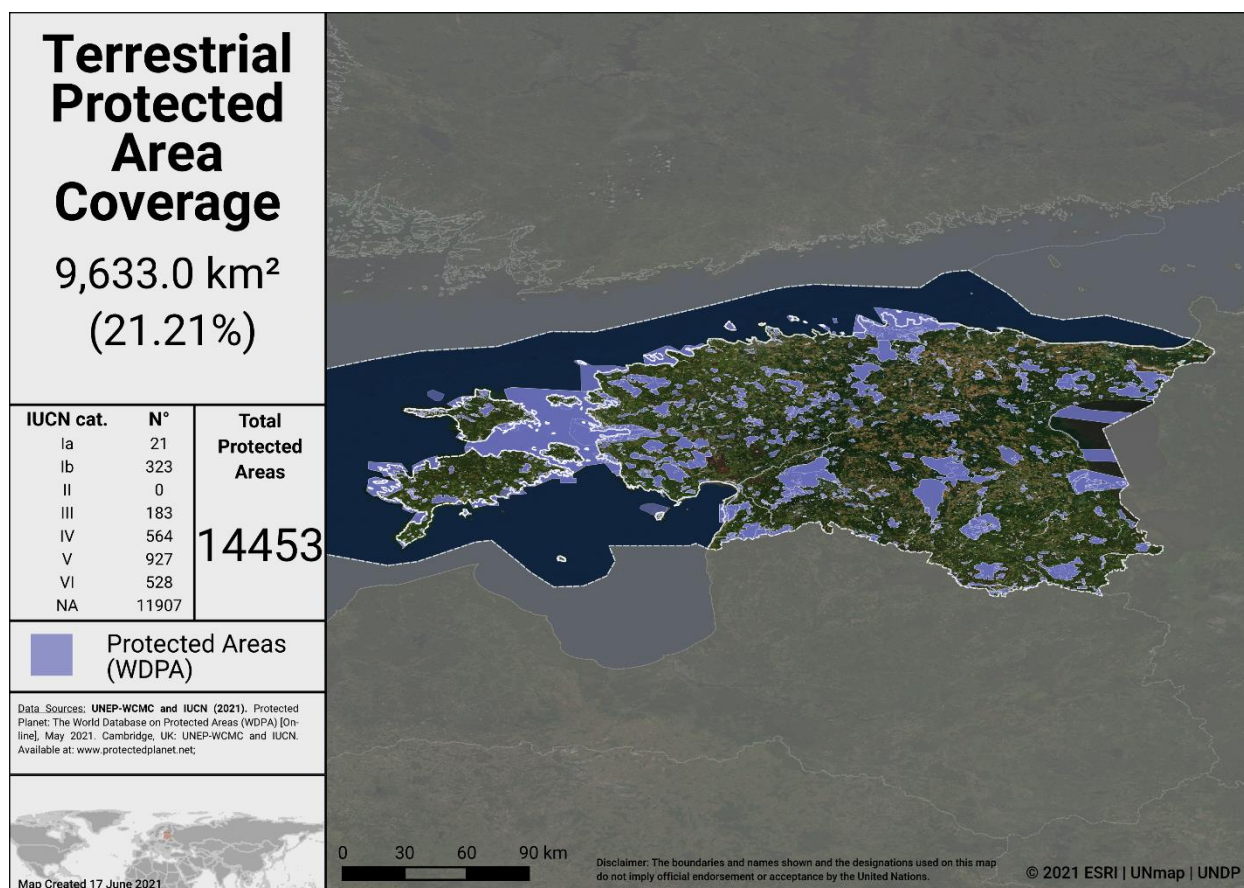
COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Estonia has **15,403** protected areas¹ reported in the World Database on Protected Areas (WDPA). 873 PAs that have no spatial boundary and no area listed in the WDPA, and 1 UNESCO-MAB Biosphere Reserve, are not included in the following statistics (see details on UNWFP-WCMC's methods for calculating PA and OECM coverage [here](#)).

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

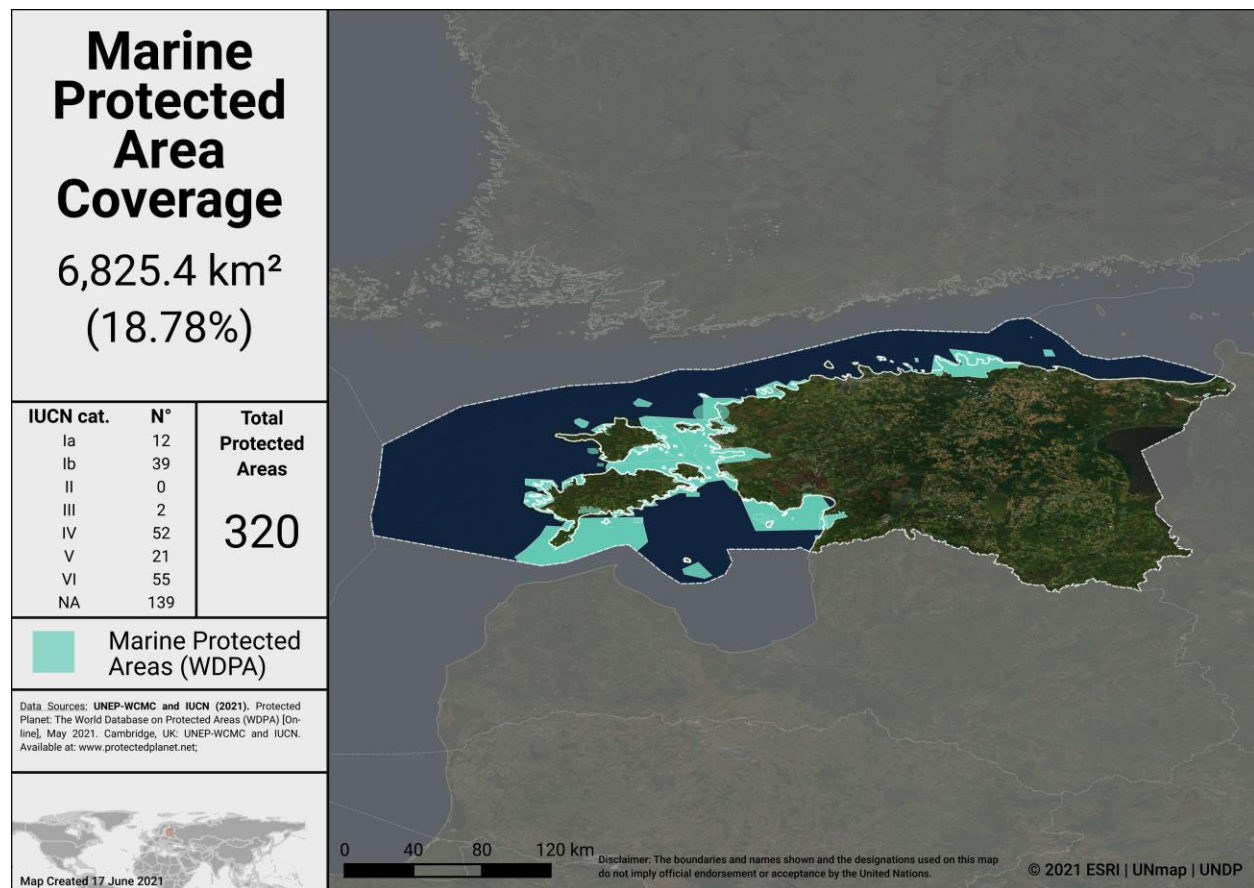
Current coverage for Estonia:

- 21.2% terrestrial (14453 protected areas, 9,633.0 km²)
- 18.8% marine (320 protected areas, 6,825.4 km²)



Terrestrial Protected Areas in Estonia

¹ Estonia restricts some of its PA data (e.g., species' protection sites). As a result, data on 3,589 PAs is not publicly-available. While all sites are included in the coverage statistics presented above, all other statistics in this dossier (e.g., total # of PAs, governance types, ecoregion and KBA coverage, connectivity, etc.) are based on the publicly-available data only.



Marine Protected Areas in Estonia

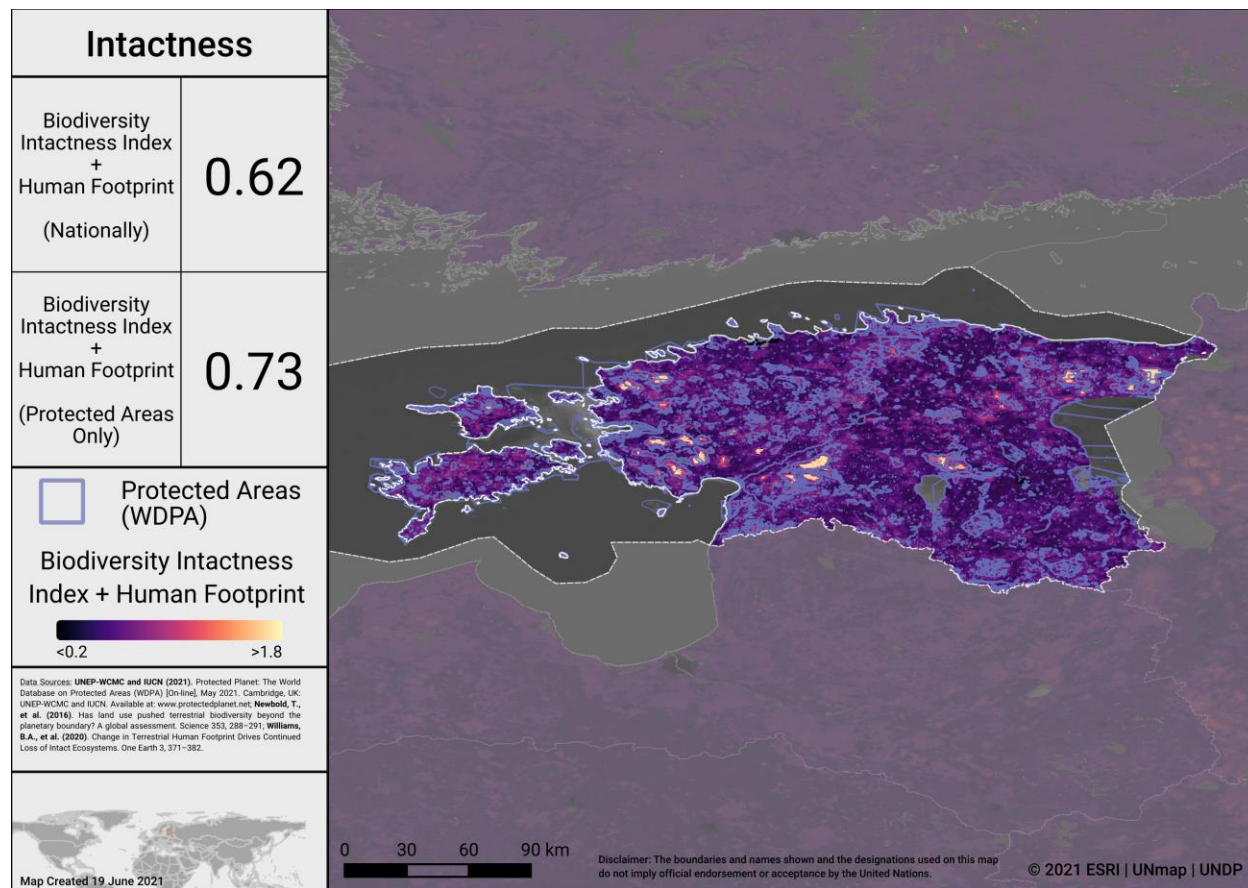
Potential OECMs

There are currently no potential OECM examples for Estonia.

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, as Estonia considers where to add new PAs and OECMs, the map below identifies areas in Estonia where intact 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 Estonia

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

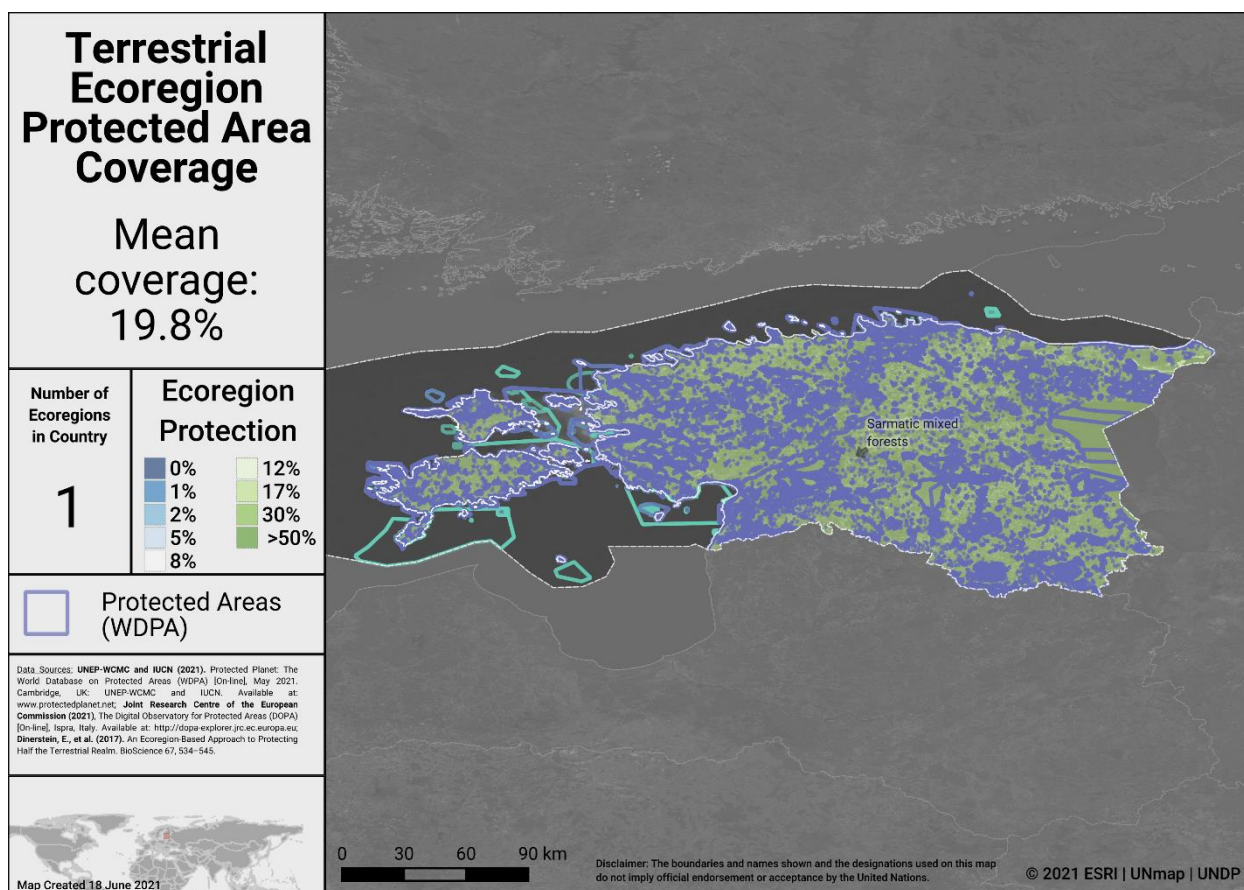
ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL & MARINE

Data is based on the public version of the WDPA, actual values likely to be higher.

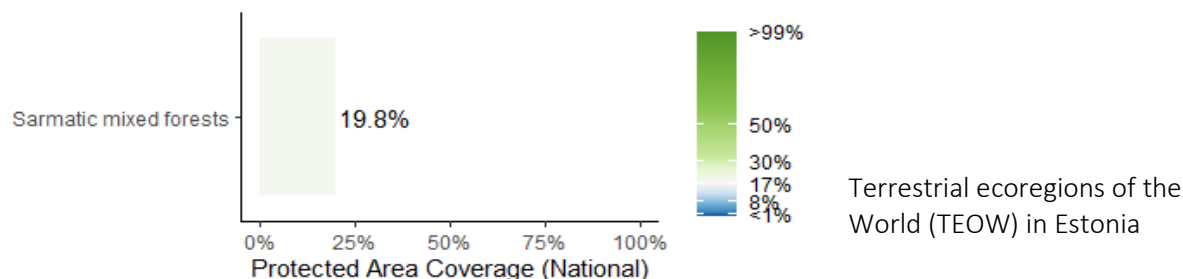
Ecological representativeness is assessed, globally, based on the PAs and OECMs coverage of broad-scale biogeographic units. Globally, ecoregions have been described for terrestrial areas (Dinerstein et al, 2017), marine coastal and shelf ecosystems (to a depth of 200m; Spalding et al 2007) and surface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

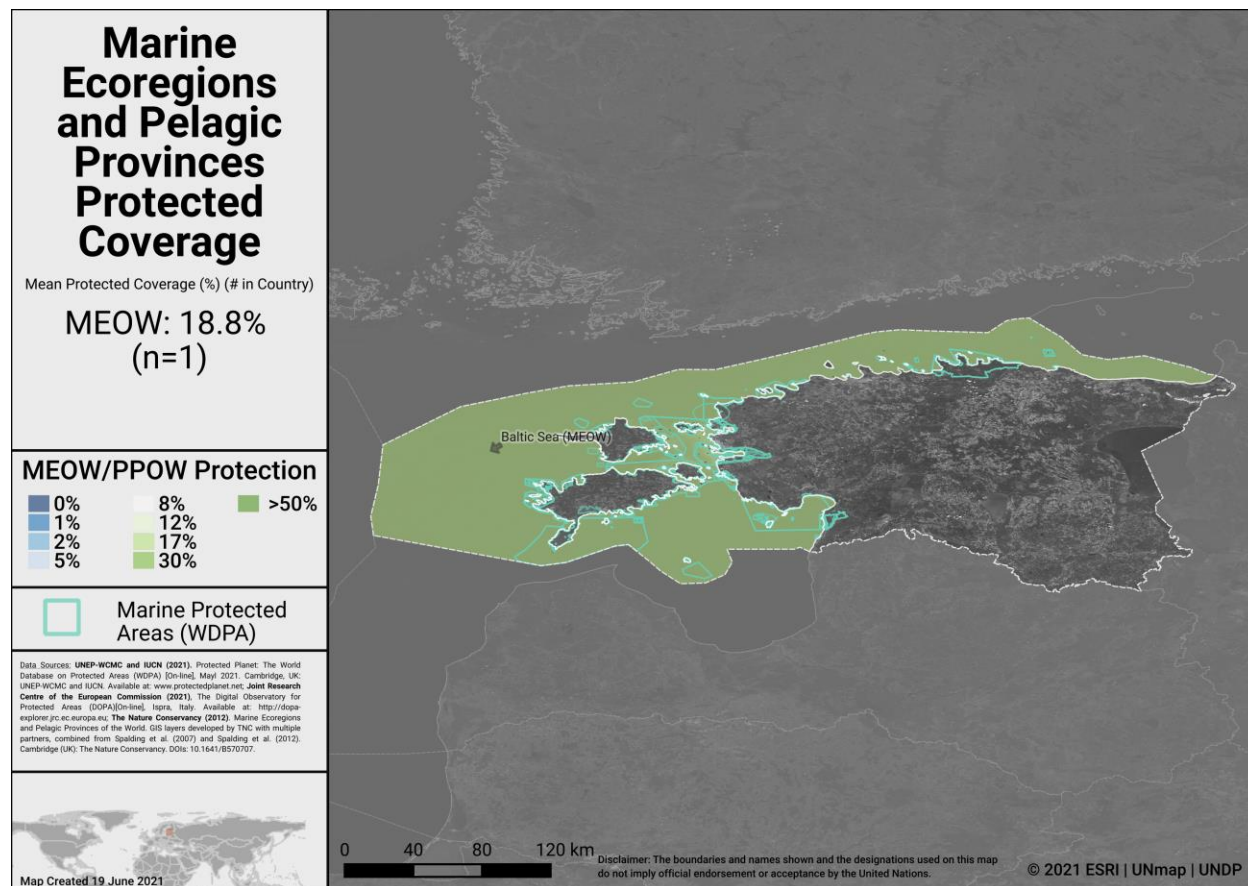
Estonia has 1 **terrestrial** ecoregion, 1 **marine** ecoregion, and 0 **pelagic provinces**:

- Coverage from reported PAs and OECMs coverage is 19.8% (terrestrial) and is 18.8% (marine).

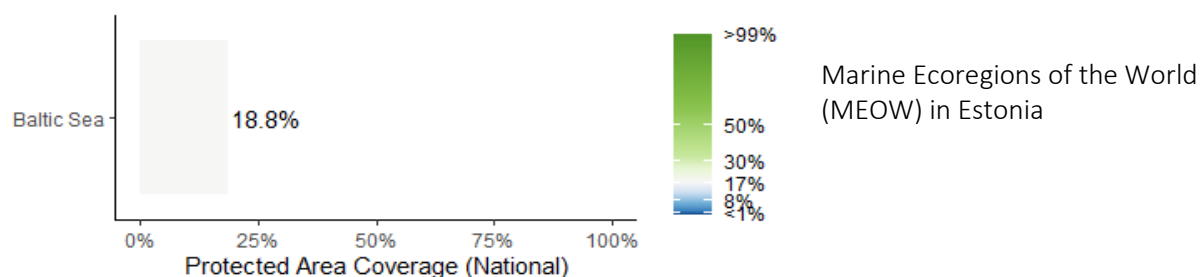


Terrestrial ecoregions in Estonia





Marine ecoregions and pelagic provinces



Opportunities for action

There is opportunity for Estonia to increase protection and/or focus on effective management for PAs and OECMs in terrestrial and marine ecoregions.

AREAS IMPORTANT FOR BIODIVERSITY

Data is based on the public version of the WDPA, actual values likely to be higher.

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.

Estonia has **64** Key Biodiversity Areas (KBAs).

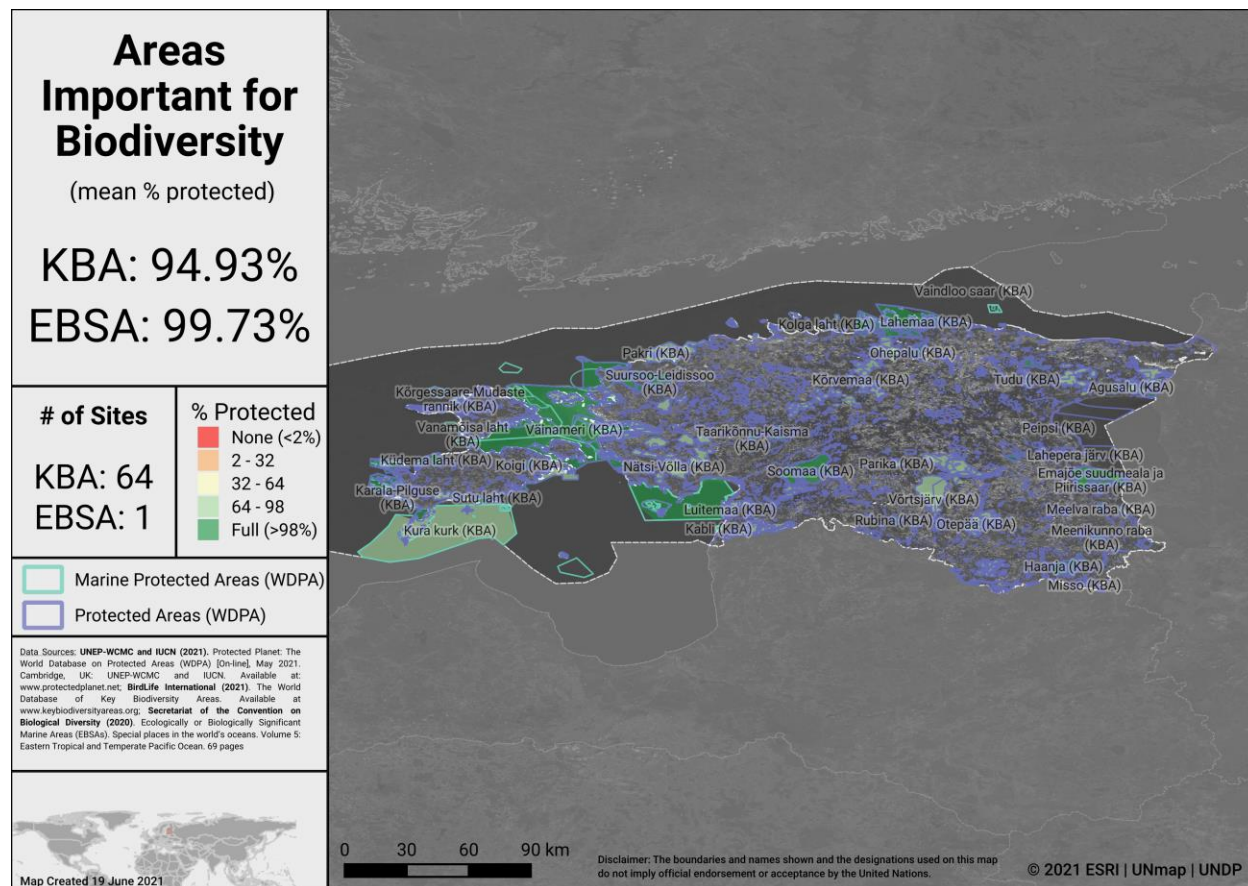
- Mean percent coverage of all KBAs by PAs and OECMs in Estonia is **94.9%**.
- **28** KBAs have full (>98%) coverage by PAs and OECMs.
- **36** KBAs have partial coverage by PAs and OECMs.
- **0** KBAs have no (<2%) coverage by PAs and OECMs.

Ecologically or Biologically Significant Marine Areas (EBSAs)

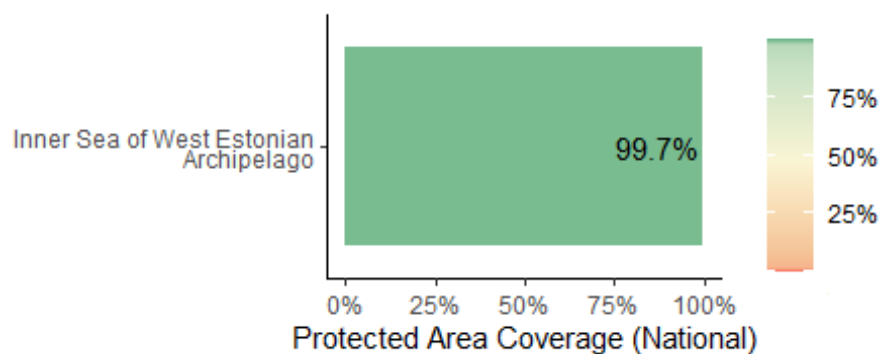
Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: <https://www.cbd.int/ebsa/>). Sites that meet the EBSA criteria may require enhanced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

There is 1 EBSA with some portion of its extent within Estonia's EEZ, which have full (>98%) coverage by PAs and OECMs.





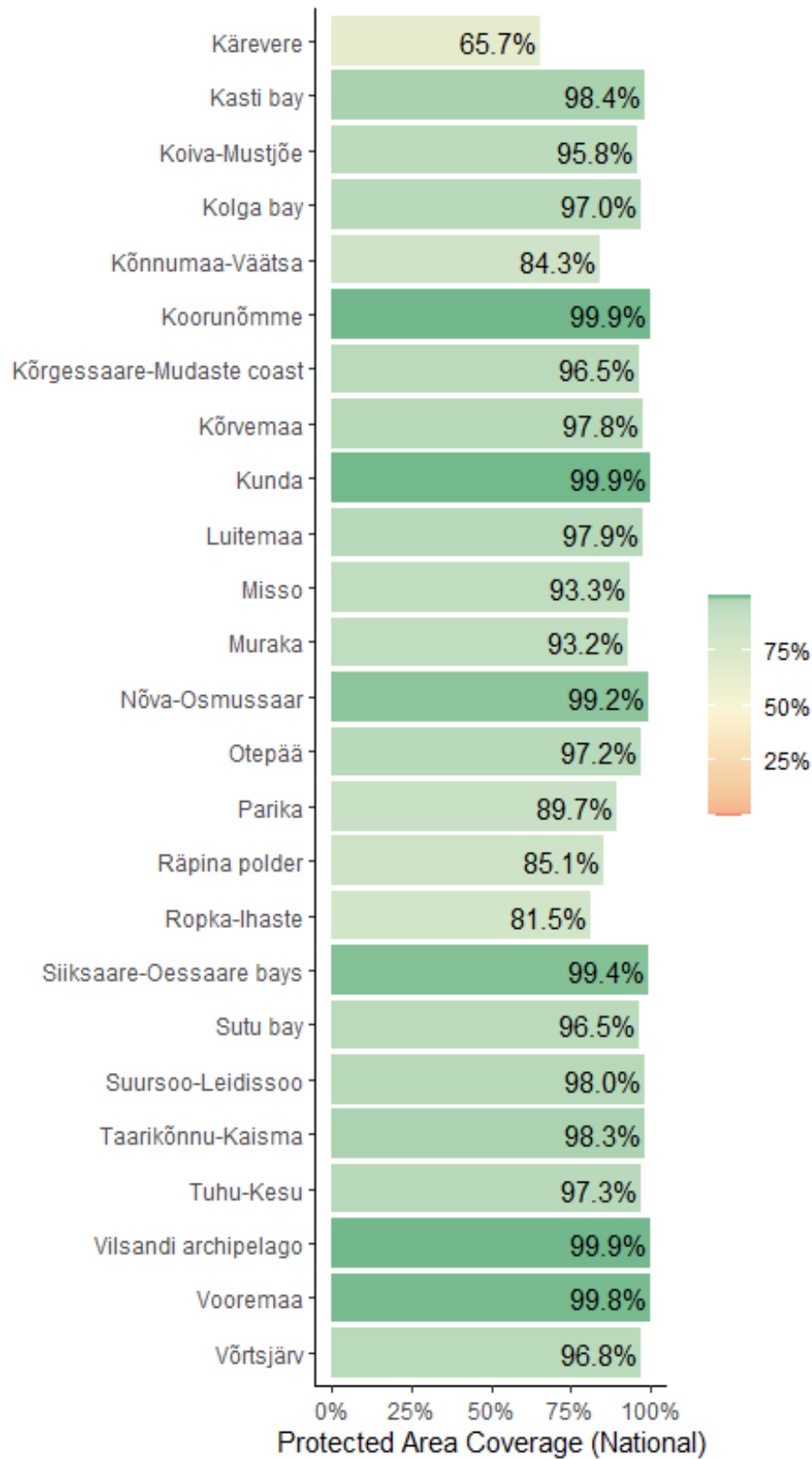
Areas Important for Biodiversity in Estonia



Ecologically or Biologically Significant Marine Areas (EBSAs) in Estonia

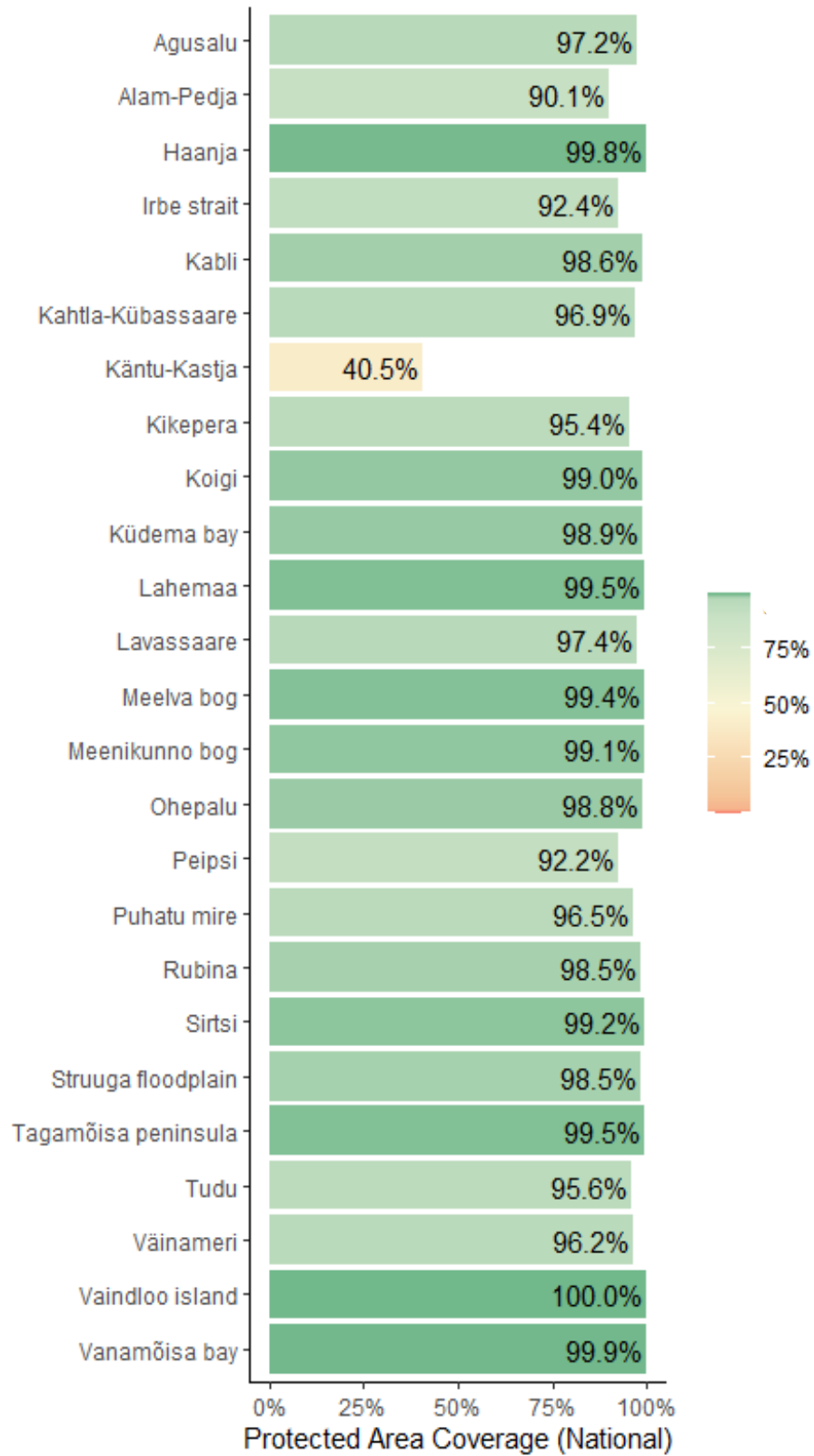


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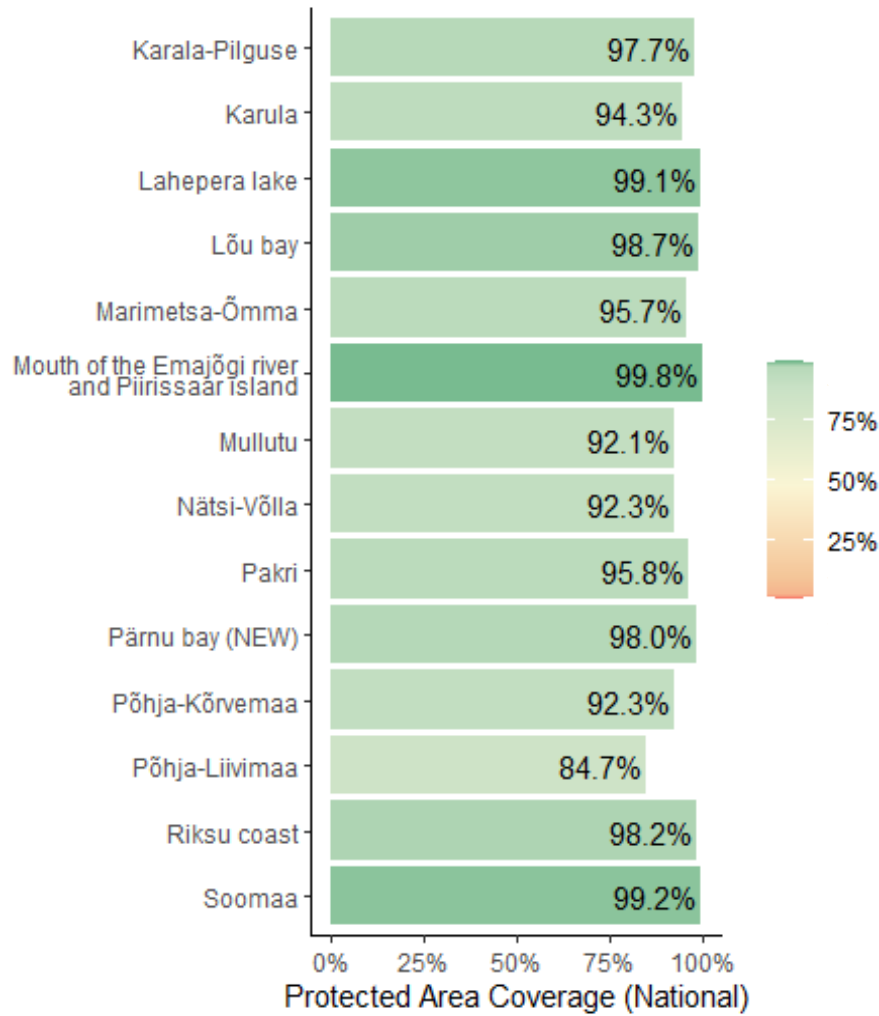


Key Biodiversity Area Coverage (KBA) in Estonia

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Key Biodiversity Area Coverage (KBA) in Estonia (continued)



Key Biodiversity Area Coverage (KBA) in Estonia (continued)

Opportunities for action

There is opportunity for Estonia to focus on effective management for KBAs that already have adequate levels of 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 is based on the public version of the WDPA, actual values likely to be higher.

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).

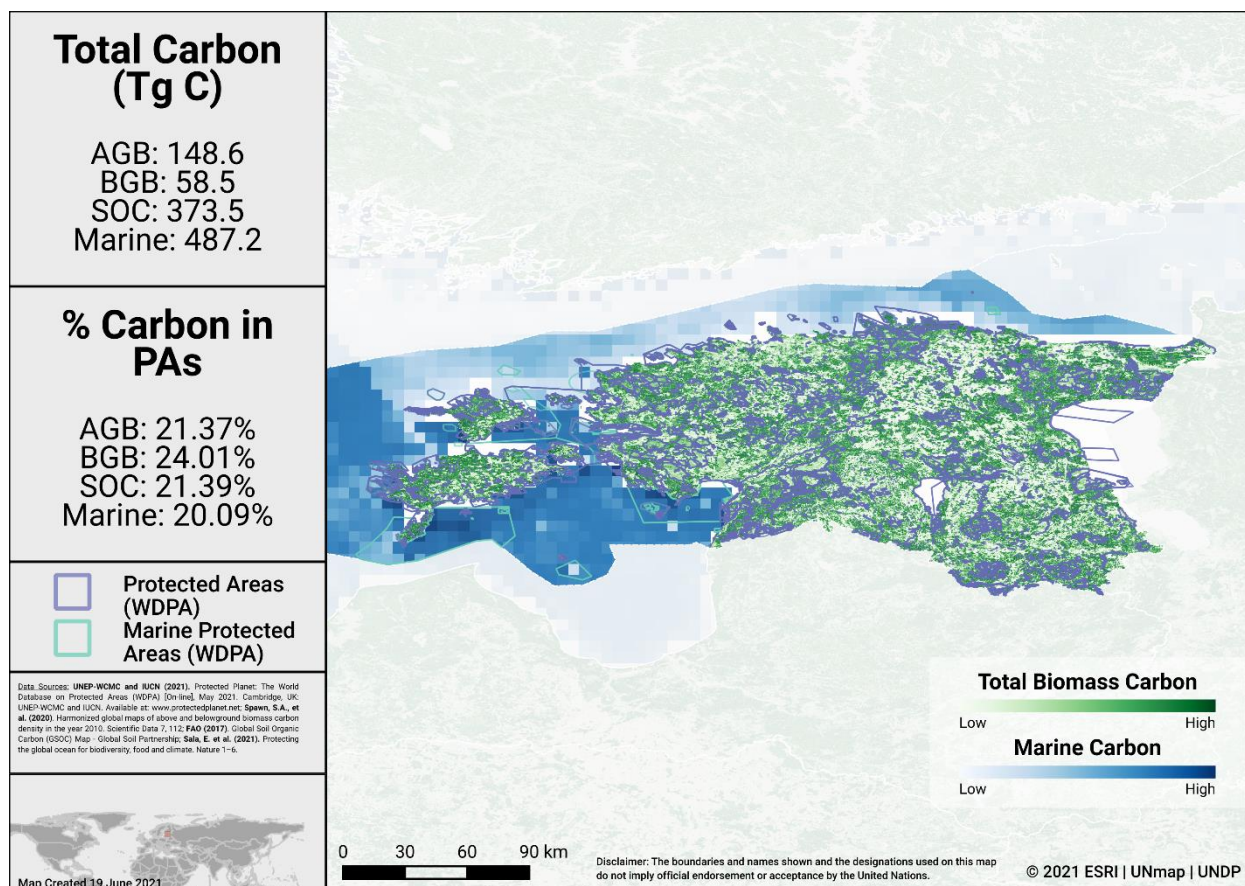
The map on the following page presents the total carbon stocks in Estonia and the percent of carbon in protected areas. The total carbon stocks is 148.6 Tg C from aboveground biomass (AGB), with 21.4% in protected areas; 58.5 Tg C from below ground biomass (BGB), with 24.0% in protected areas; 373.5 Tg C from soil organic carbon (SOC), with 21.4% in protected areas; and 487.2 Tg C from marine sediment carbon, with 20.1% in protected areas.

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 Estonia may similarly depend on protected forest areas within and around water catchments. Intact catchments can support more consistent water supply and improved water quality.





Carbon Stocks in Estonia

Opportunities for action

For carbon, there is opportunity for Estonia 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).

Data is based on the public version of the WDPA, actual values likely to be higher.

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 Estonia was 9.5%.

PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Estonia is 0.26. This represents no significant change since 2010.

Corridor case studies

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

Opportunities for action

There is opportunity for a targeted designation of PAs or OECMs in strategic locations for connectivity and 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 Estonia reported in the WDPA have the following governance types:

- 99.9% are governed by **governments** (by federal or national ministry or agency)
- 0.0% are under **shared** governance
- 0.0% are under **private** governance
- 0.0% are under **IPLC** governance
- 0.1% **do not** report a governance type
 - (All of which are international or regional designations)

OECMs

As of May 2021, there are **0** OECMs in Estonia 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 Estonia (see Gloss et al., 2019, and Stolton et al., 2014 for details).

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

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

Other Indigenous lands

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

Opportunities for action

Explore opportunities for governance types that have lower representation, for Estonia this could include shared governance, etc.

There is also opportunity for Estonia 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. Information is also included regarding changes in forest cover nationally within PAs and OECMs.

Protected area management effectiveness (PAME) assessments

As of May 2021, Estonia has 15,403 PAs reported in the WDPA; of these PAs, 37 (0.2%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 7.1% (3,236 km²) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
 - 33.6% of the area of terrestrial PAs have completed evaluations.
- 3.2% (1,158 km²) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
 - 17.0% of the area of marine PAs have completed evaluations.

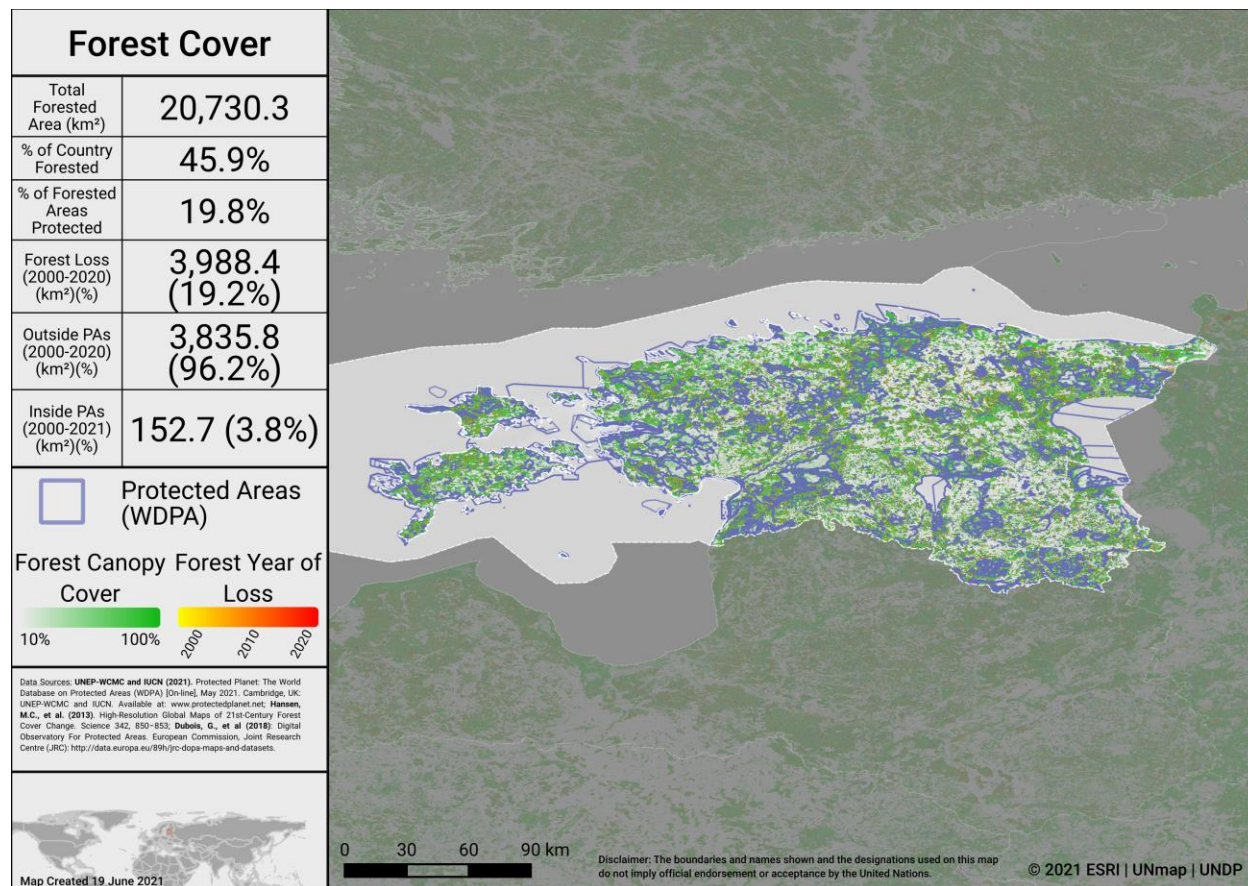
The 60% target for completed management effectiveness assessments (per COP Decision X/31) **has not** been met for terrestrial PAs and **has not** been met for marine PAs.

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

Changes in forest cover in protected areas and OECMs

Forested areas in Estonia cover approximately 45.9% of the country, an area of 20,730.3 km². Approximately 19.8% (4,103.1 km²) of this is within the protected area estate of Estonia. Over the period 2000-2020 loss of forest cover amounted to over 3,988.4 km², or 8.8% of the country (19.2% of forest area), of which 152.7 km² (3.8% of forest loss) occurred within protected areas. The map below shows how forest cover has changed in Estonia 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 Estonia

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 Central and Eastern Europe on achieving Aichi Biodiversity Targets 11 and 12 took place 14 - 17 June 2016 in Minsk, Belarus. Progress towards the quantitative targets for marine and terrestrial coverage has been assessed based on data reported in the WDPAs and WD-OECMs 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 and marine coverage: Revision of protection rules (incl. borders) to ensure the appropriate protection.

Ecological representation: Ensuring the quality of environmental impact assessments and comprehensive planning in and also outside of protected areas.

Areas Important for biodiversity and ecosystem services:

- 1) Implementation of management plans.
- 2) Quantitative targets are set for achieving favourable conservation status of different habitats, e.g. managing and restoration of semi-natural habitats, granting the protection of typologically representative forest habitats, restoration of threatened mires, restoration of natural river habitats and spawning grounds.
- 3) Finalise the study of ecosystem services on state level (2016-2023).

Connectivity: Awareness raising of the local governments, developers and communities on functioning and importance of GN (green network).

Management effectiveness: Implementation of management plans. Improve processes, prioritization of management activities.

Governance and Equity: Update legislation and enlarge the compensation and supporting possibilities.

Integration: Awareness raising of business sector; good guidelines for environmentally friendly planning and management; campaigns to raise the awareness of public as well as decision makers.

OECMs: Restoration of habitats (mires, spawning grounds of fish). E.g. management and restoration of semi-natural habitats is one of the priority action.



NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

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

The target by 2020: the conservation status of at least 14 habitat types in Estonia will have been improved thanks to the applied protection measures.

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

NBSAP Action number	Action (original language from NBSAP)
1.4.4	Marking of protected areas
2.2.1	Restoring and maintaining semi- natural communities (45 000 ha of semi-natural communities restored and maintained (maintainers have the necessary equipment, access to maintained areas is ensured))
2.2.2	Ensuring the conservation of forest habitats (incl. further clarifying the typological representativeness of strictly protected forests, assessing and resolving deficiencies, research into the habitat requirements of old-growth forest species) (Due protection is ensured for a typologically representative set of forests (10%), the habitat requirements of old-growth forest species are known)
2.2.3	Restoring threatened mire habitats in protected areas (10 000 ha of fen and transition mire habitats and raised bog margins (lagg-zones, mixotrophic and ombrotrophic forests, degraded raised bogs still capable of natural regeneration) in protected areas)
2.2.5	Mapping threatened marine habitat types and ensuring their protection (Threatened marine habitat types have been mapped and conservation of valuable marine areas is ensured)
2.2.6	Determining the conservation status of little-studied habitat types (karst lakes, heaths, petrifying springs, alluvial forests, etc.) and threatened habitat type
2.3.2	Ensuring the preservation of protected landscapes, incl. parks
2.3.4	Analysing the functioning of the green network and planning additional measures as necessary (e.g. landscape maintenance plans, the concept of areas of high nature value, developing planning guidelines taking account of biodiversity, including urban biodiversity, etc.). Implementing the EU concept of green infrastructure

NBSAP Action number	Action (original language from NBSAP)
2.4.1	Ensuring appropriate protection of all protected nature values (analyses of the efficiency of conservation, adjusting the protection regime, as appropriate, incl. ensuring a protection regime for Natura 2000 sites)
2.4.2	Ensuring the protection of areas of high nature value (inventories, designating areas or objects for conservation)
2.4.3	Selecting additional Natura 2000 sites and submitting them to the European Commission together with the relevant set of data
2.4.4	Improving the impact assessment system for Natura 2000, drawing up additional guidelines and organising training
2.6.4	Developing and implementing the West Estonian Archipelago Biosphere Reserve Programme
2.7.5	Public purchase of protected land whose intended use is significantly limited by the protection regime of the area

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:

#OceanAction17570: Establishing marine protected areas in Estonian EEZ, by Ministry of the Environment (Government).

- Area to be added: **No area given.**
- Progress report: No progress report submitted (as of March 2021).
- Further details available at:
<https://oceanconference.un.org/commitments/?id=17570>.



OTHER ACTIONS/COMMITMENTS

Leaders' Pledge for Nature

Estonia **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.

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

Also, we have to accept that protected areas are still impacted by global warming, which unavoidably limits the effects of conventional biodiversity preservation tools We know that resilience depends on genetic diversity of a population. To avoid isolated and therefore inbred colonies we need to establish a coherent network of ecosystems and habitats that will allow species to move between reserves.



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