



Convention on  
Biological Diversity



# Aichi Biodiversity Target 11 Country Dossier: BOSNIA AND HERZEGOVINA

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# TABLE OF CONTENTS

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<b>GLOSSARY</b> .....	<b>3</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>5</b>
<i>Aichi Biodiversity Target 11 Elements: Current status and opportunities for action</i> .....	5
<b>INTRODUCTION</b> .....	<b>8</b>
<b>SECTION I: CURRENT STATUS</b> .....	<b>10</b>
<i>COVERAGE - TERRESTRIAL &amp; MARINE</i> .....	11
<i>ECOLOGICAL REPRESENTATIVENESS – TERRESTRIAL &amp; MARINE</i> .....	15
<i>AREAS IMPORTANT FOR BIODIVERSITY</i> .....	18
<i>AREAS IMPORTANT FOR ECOSYSTEM SERVICES</i> .....	21
<i>CONNECTIVITY &amp; INTEGRATION</i> .....	22
<i>GOVERNANCE DIVERSITY</i> .....	23
<i>PROTECTED AREA MANAGEMENT EFFECTIVENESS</i> .....	24
<b>SECTION II: EXISTING PROTECTED AREA AND OECM COMMITMENTS</b> .....	<b>25</b>
<i>PRIORITY ACTIONS FROM 2015-2016 REGIONAL WORKSHOPS</i> .....	25
<i>NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)</i> .....	27
<i>APPROVED GEF-5 &amp; GEF-6 PROTECTED AREA PROJECTS</i> .....	28
<i>OTHER ACTIONS/COMMITMENTS</i> .....	29
<b>ANNEX I</b> .....	<b>31</b>
<i>FULL LIST OF TERRESTRIAL ECOREGIONS</i> .....	31
<b>REFERENCES</b> .....	<b>32</b>



## GLOSSARY

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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.

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

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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. Where available, data from national statistics for the elements of Target 11 are included alongside records from these global databases. 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](mailto: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 Bosnia and Herzegovina is 1,857.8 km<sup>2</sup> (3.6%) and marine coverage is 0.0 km<sup>2</sup> (0.0%); national reporting shows terrestrial coverage of 2,061.2 km<sup>2</sup> (4.03%).
- **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:** Bosnia and Herzegovina contains 4 terrestrial ecoregions, 1 marine ecoregion, and 0 pelagic provinces: the mean coverage by reported PAs and OECMs is 4% (terrestrial), and 0% (marine); 1 marine ecoregion has no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Bosnia and Herzegovina to increase protection in terrestrial and marine ecoregions 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.



## 6 | Aichi Biodiversity Target 11 Country Dossier: BOSNIA AND HERZEGOVINA

### Areas Important for Biodiversity

- **Status:** Bosnia and Herzegovina has 11 Key Biodiversity Areas (KBAs): the mean coverage of KBAs by reported PAs and OECMs is 30.0%, while 5 KBAs have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Bosnia and Herzegovina to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current coverage.

### Areas Important for Ecosystem Services

- **Status:** coverage of areas important for ecosystem services: In Bosnia and Herzegovina, approximately 4.0% of biomass carbon is covered by PAs and OECMs, and 0.0% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Bosnia and Herzegovina to increase PA and OECM coverage in both marine and terrestrial areas with high carbon stock. 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 2.0%.
- **Opportunities for action:** there is for a general increase of 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 Bosnia and Herzegovina is: 97% under Government (Federal or national ministry or agency).
- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Bosnia and Herzegovina this could relate to shared governance, etc.
- There is also opportunity for Bosnia and Herzegovina 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:** 37.3% 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

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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 Bosnia and Herzegovina. Section I of the dossier presents data on the current status of Bosnia and Herzegovina’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 Bosnia and Herzegovina, in relation to each Target 11 element. The analyses present options for improving Bosnia and Herzegovina’s area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Bosnia and Herzegovina’s existing PA and OECM commitments as a summary of existing efforts towards achieving Target 11. This gives focus not only to



## 9 | Aichi Biodiversity Target 11 Country Dossier: BOSNIA AND HERZEGOVINA

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](http://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](http://www.wcmc.io/WDPA_Manual)), and these should be directed to [protectedareas@unep-wcmc.org](mailto: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](http://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

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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. Where available, results from national reporting are also included.



## COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Bosnia and Herzegovina has **60** protected areas<sup>1</sup> reported in the World Database on Protected Areas (WDPA).

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

Current coverage for Bosnia and Herzegovina (per the WDPA):

- 3.6% terrestrial (60 protected areas, 1,857.8 km<sup>2</sup>)
- 0.0% marine (0 protected areas, 0.0 km<sup>2</sup>)

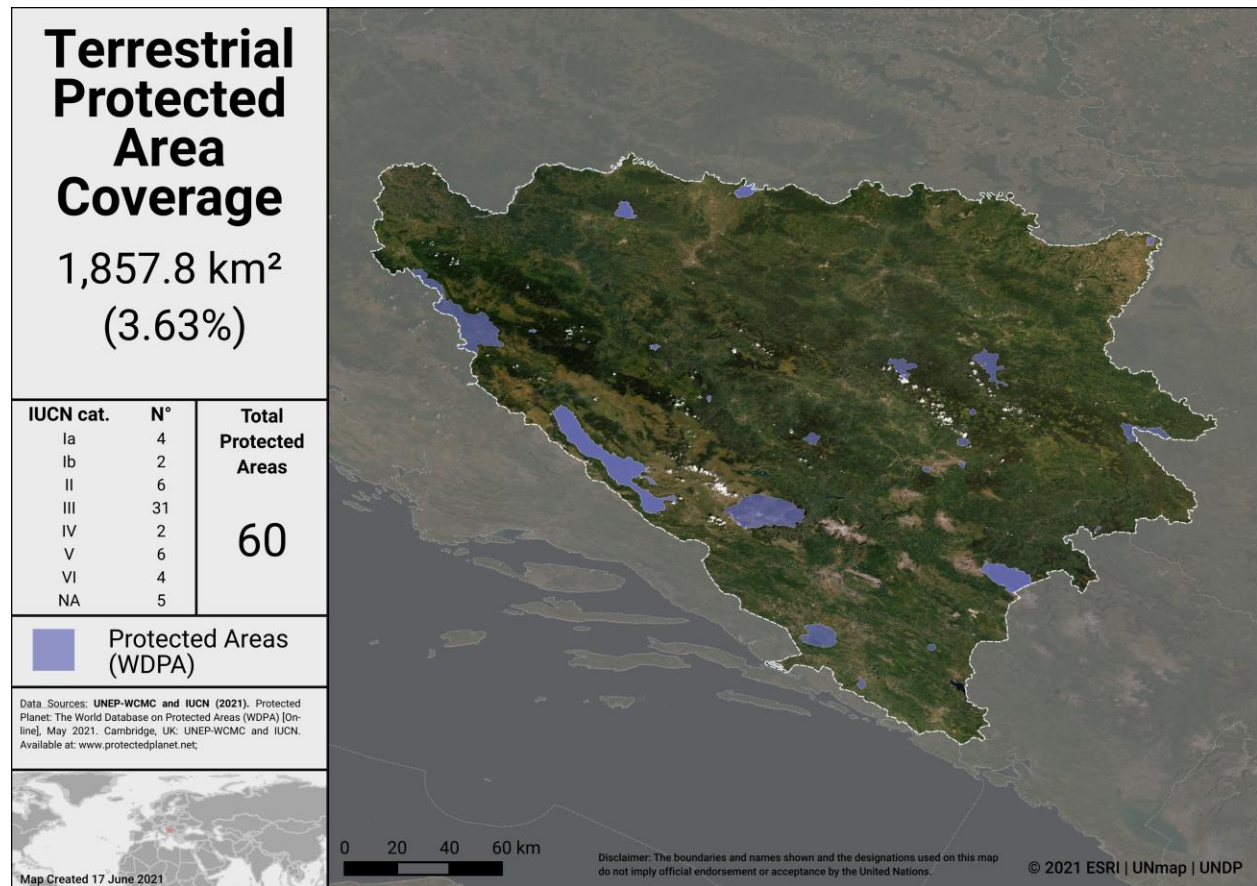
National reporting in Bosnia and Herzegovina indicates a total terrestrial coverage of 2,061.2 km<sup>2</sup> (4.03%).

*Updates to the WDPA are ongoing, this difference in coverage will possibly impact elements in the following sections.*

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<sup>1</sup> Several PAs are listed twice in the WDPA (though this does not impact calculation of total coverage (see details on UNWP-WCMC's methods for calculating PA and OECM coverage [here](#)). There are currently 42 PAs in Bosnia and Herzegovina, with the following IUCN management categories: 2 PAs (Ia), 4 PA (II), 20 PAs (III), 2 PAs (IV), 9 PAs (V), 3 PAs (VI), and 2 Ramsar sites.

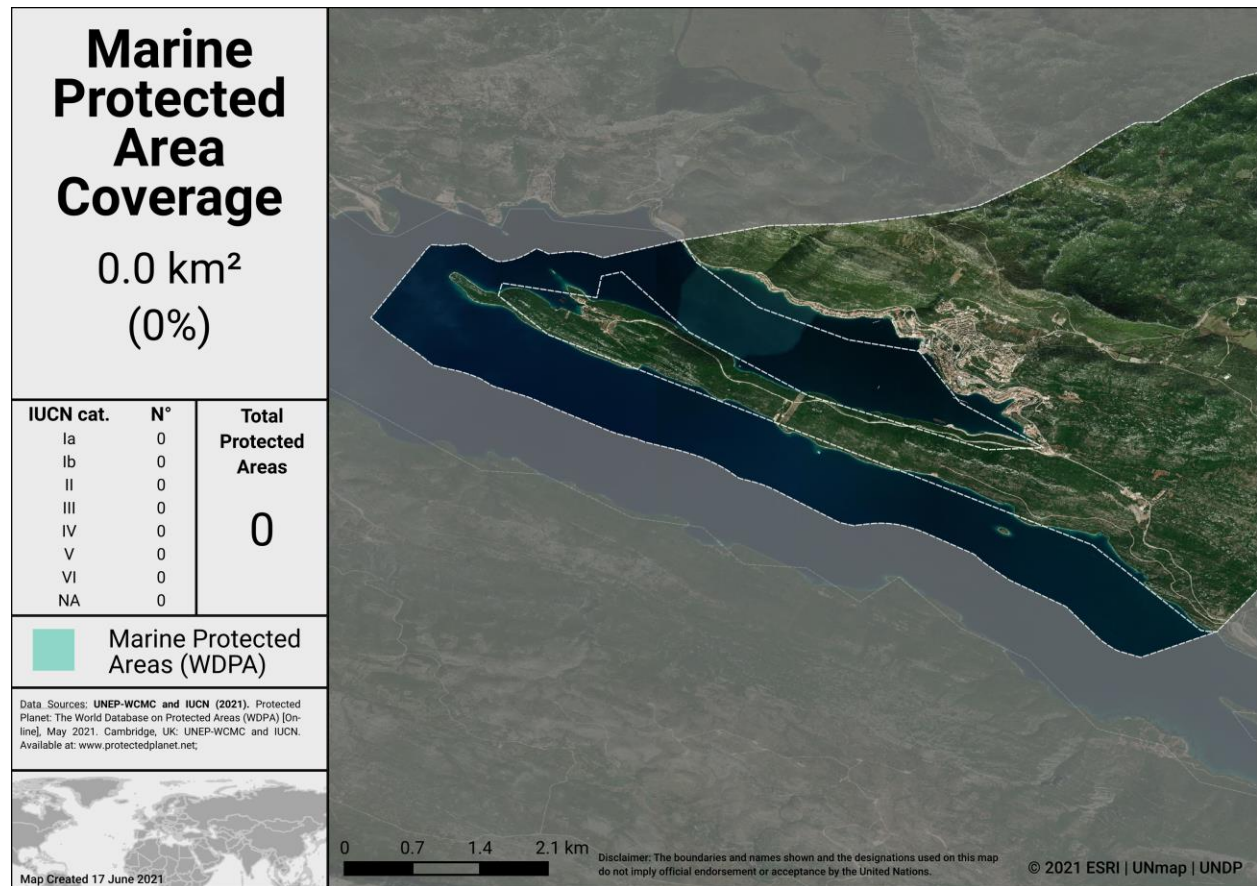




Terrestrial Protected Areas in Bosnia and Herzegovina (total PAs should be 42<sup>2</sup>)

<sup>2</sup> Several PAs are listed twice in the WDPA (though this does not impact calculation of total coverage (see details on UNWP-WCMC’s methods for calculating PA and OECM coverage [here](#)). There are currently 42 PAs in Bosnia and Herzegovina, with the following IUCN management categories: 2 PAs (Ia), 4 PA (II), 20 PAs (III), 2 PAs (IV), 9 PAs (V), 3 PAs (VI), and 2 Ramsar sites.





Marine Protected Areas in Bosnia and Herzegovina

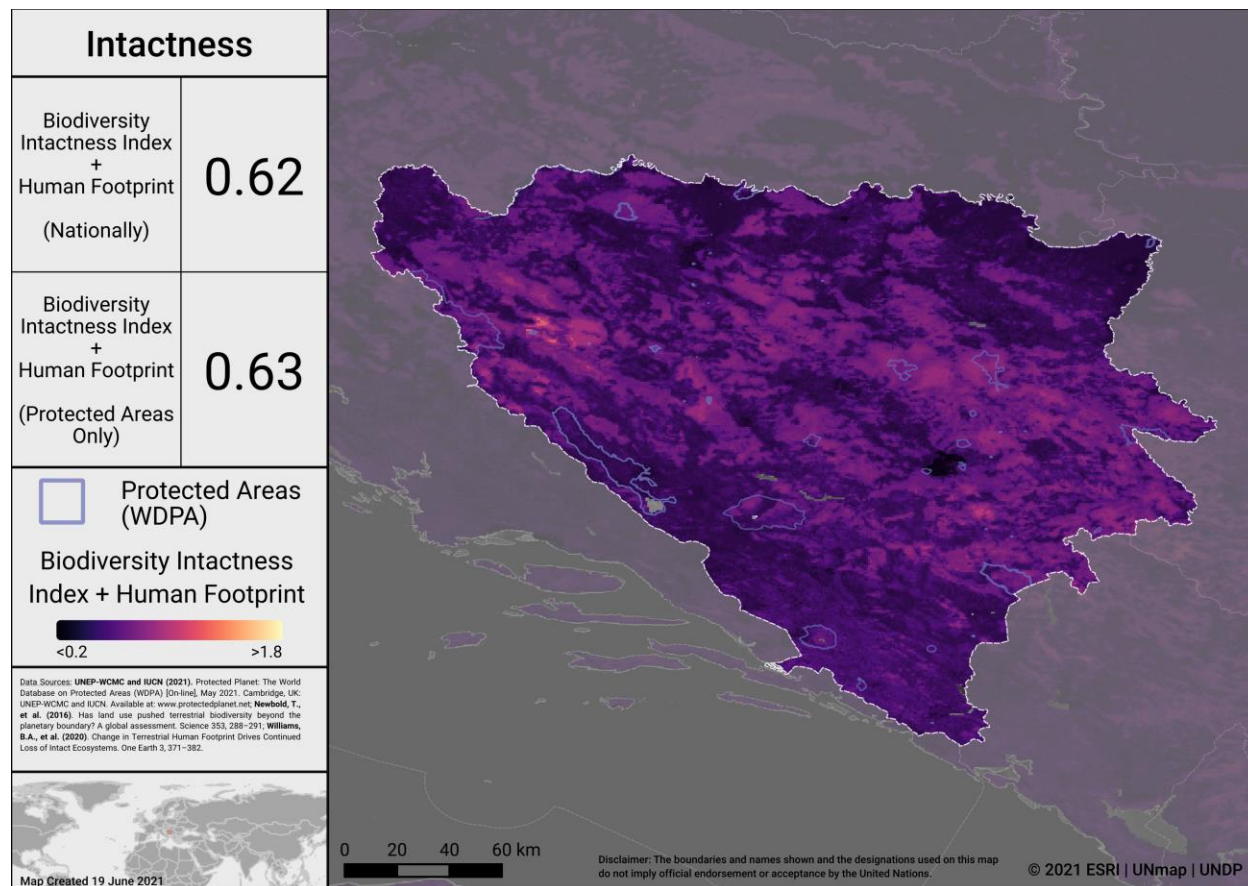
### Potential OECMs

There are currently no potential OECM examples for Bosnia and Herzegovina.

### 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 Bosnia and Herzegovina considers where to add new PAs and OECMs, the map below identifies areas in Bosnia and Herzegovina 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.





Intactness in Bosnia and Herzegovina

To explore more on intactness visit the UN Biodiversity Lab: [map.unbiodiversitylab.org](http://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).

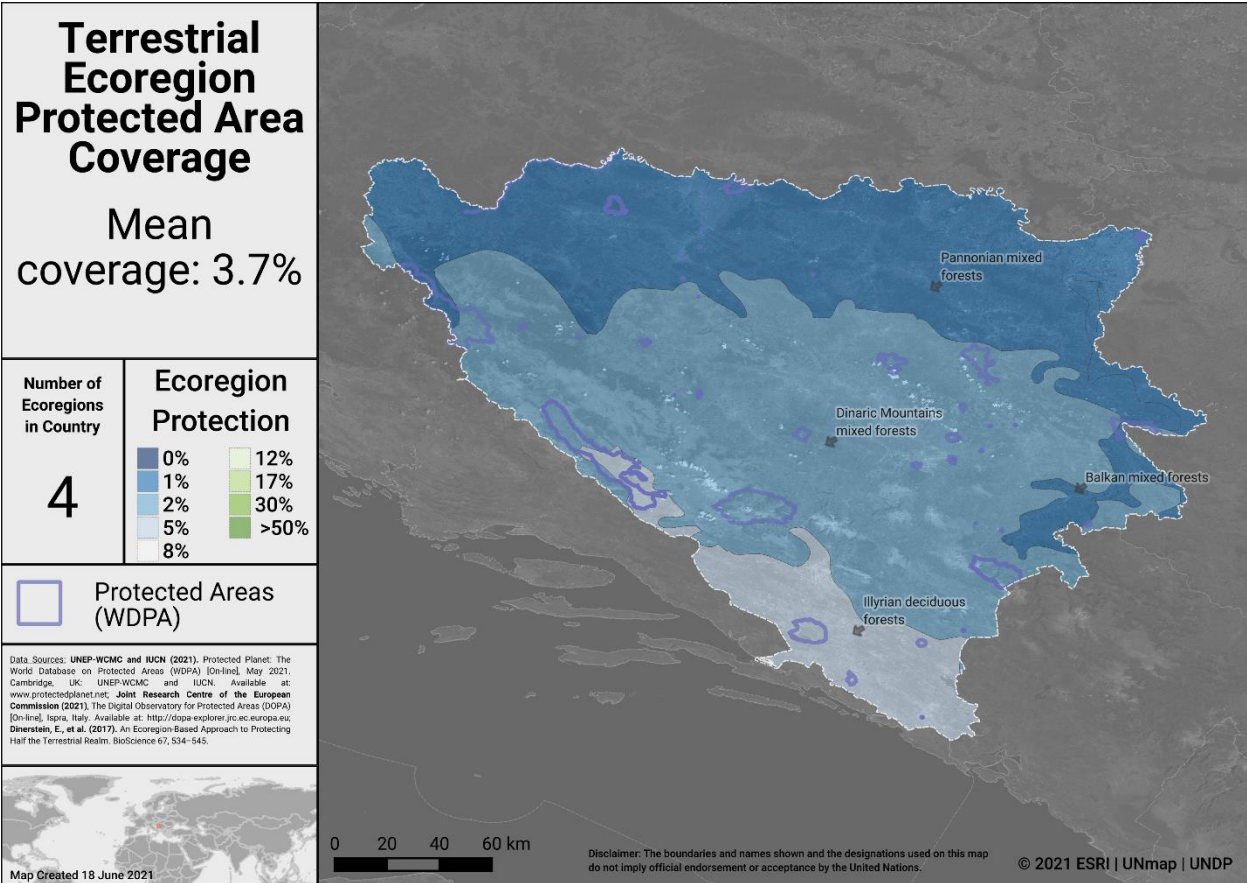
Bosnia and Herzegovina has 4 **terrestrial** ecoregions. Out of these:

- All 4 ecoregions have at least some coverage from PAs and OECMs.
- 0 ecoregions have at least 17% protected within the country.
- The average coverage of terrestrial ecoregions is 4%.
  - *With updated PA figures (see previous section), total coverage of terrestrial ecoregion will increase.*

Bosnia and Herzegovina has 1 **marine** ecoregions and 0 **pelagic provinces**:

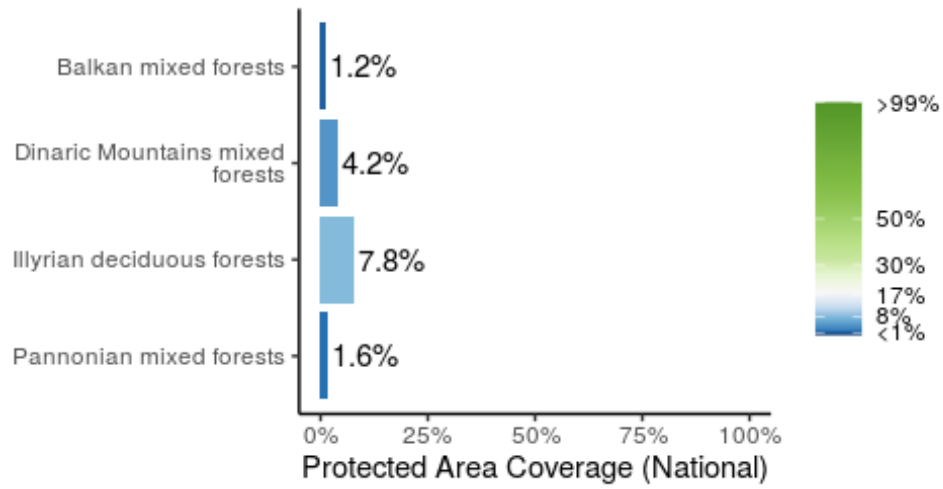
- Coverage from reported PAs and OECMs is 0%.

A full list of terrestrial ecoregions in Bosnia and Herzegovina is available in Annex I.

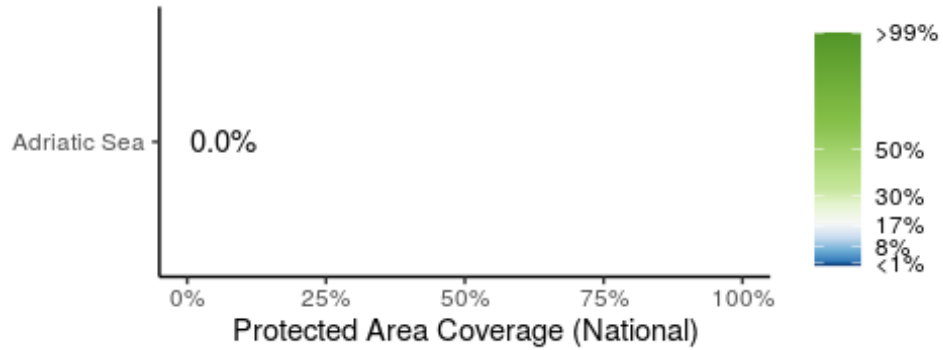


Terrestrial ecoregions in Bosnia and Herzegovina

# 16 | Aichi Biodiversity Target 11 Country Dossier: BOSNIA AND HERZEGOVINA



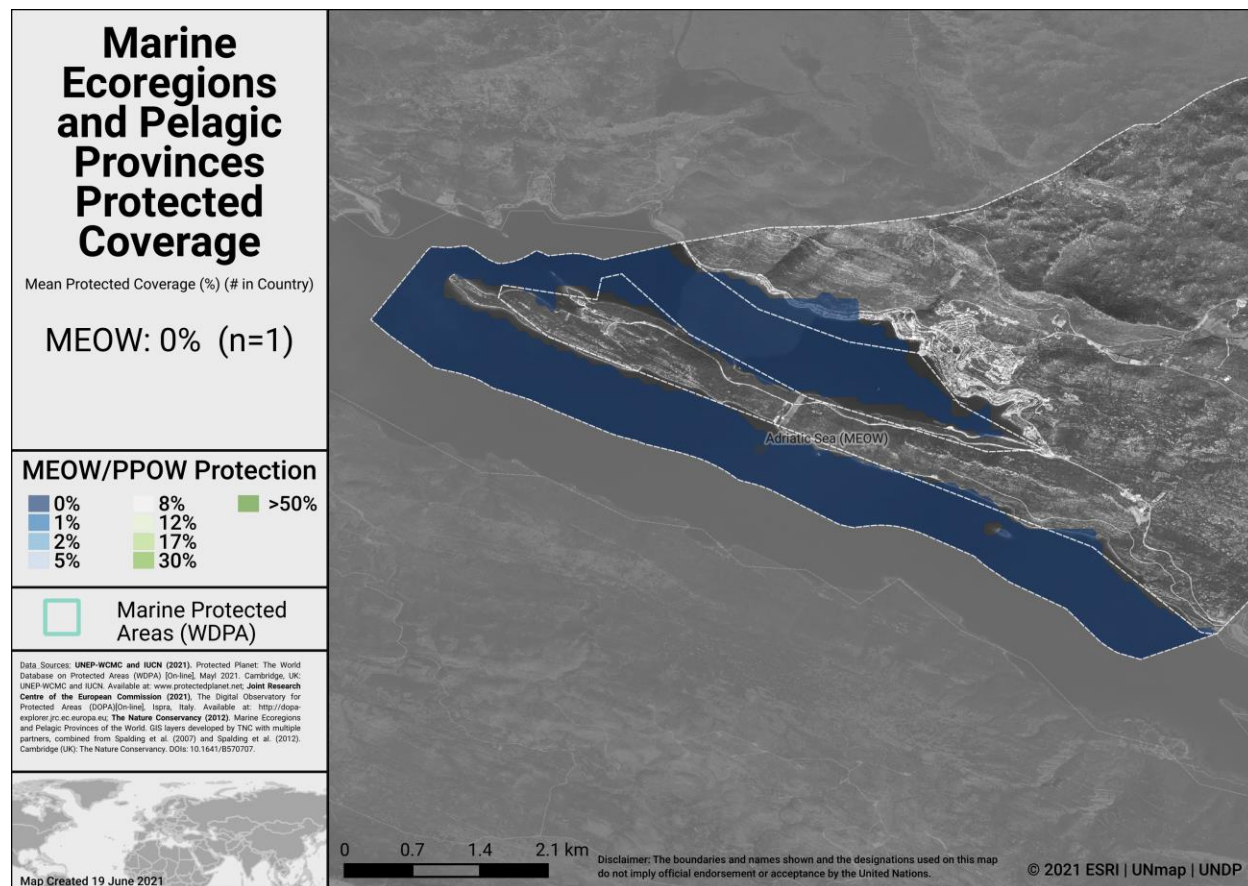
Terrestrial ecoregions of the World (TEOW) in Bosnia and Herzegovina



Marine Ecoregions of the World (MEOW) in Bosnia and Herzegovina







Marine ecoregions in Bosnia and Herzegovina

### Opportunities for action

There is opportunity for Bosnia and Herzegovina to increase protection in terrestrial and marine 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.

## 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](http://www.keybiodiversityareas.org).

Bosnia and Herzegovina has **11** Key Biodiversity Areas (KBAs).

- Mean percent coverage of all KBAs by PAs and OECMs in Bosnia and Herzegovina is **30.0%**.
- **3** KBAs have full (>98%) coverage by PAs and OECMs.
- **3** KBAs have partial coverage by PAs and OECMs.
- **5** KBAs have no (<2%) coverage by PAs and OECMs.

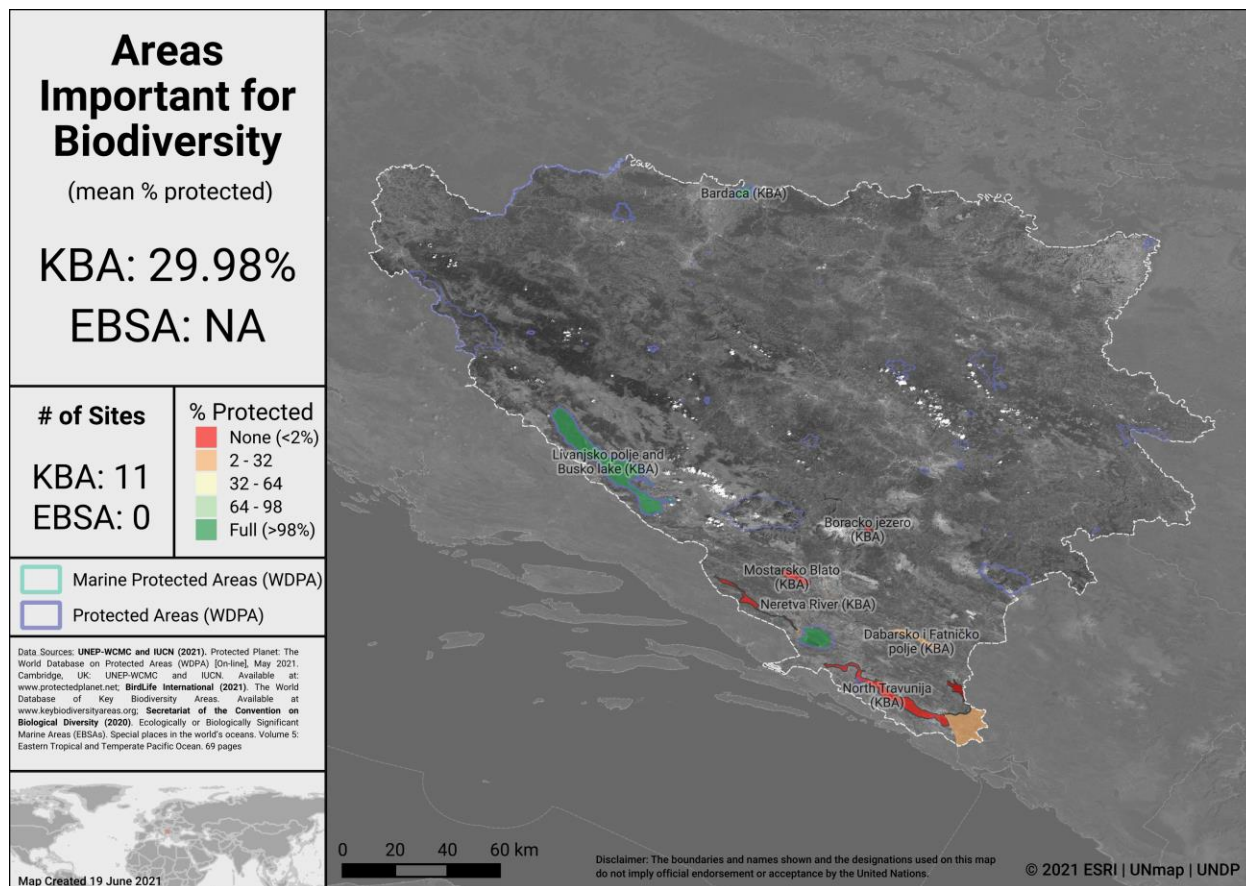
### Ecologically or Biologically Significant Marine Areas (EBSAs)

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 are no EBSAs to report in Bosnia and Herzegovina.

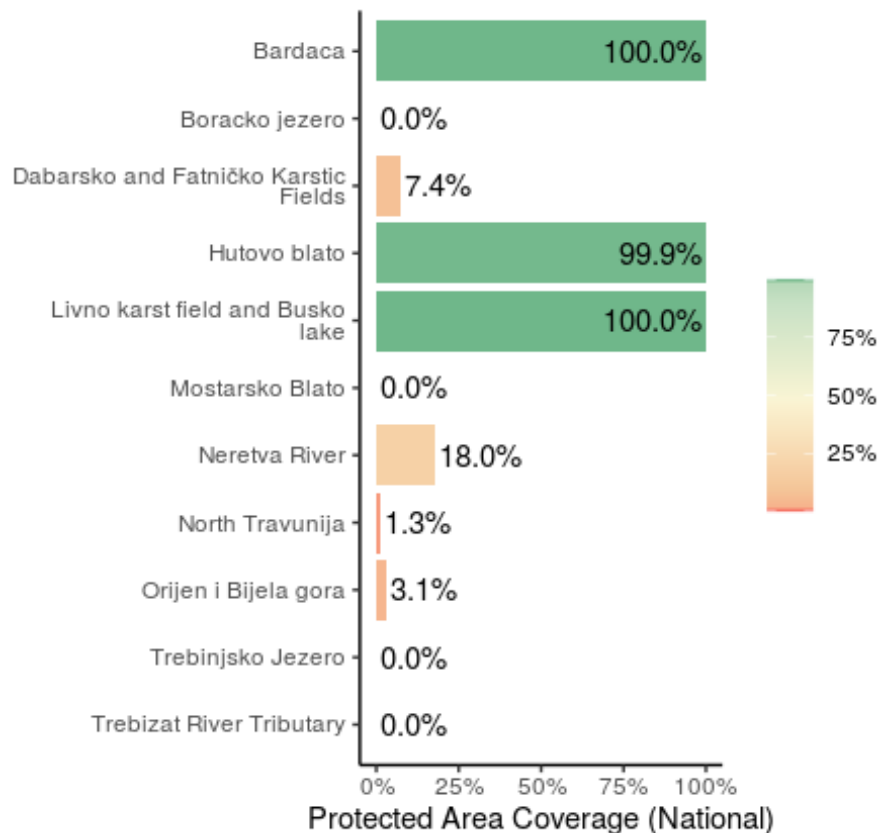






Areas Important for Biodiversity in Bosnia and Herzegovina





Key Biodiversity Area Coverage (KBA) in Bosnia and Herzegovina

### Opportunities for action

There is opportunity for Bosnia and Herzegovina to increase protection of KBAs that have lower levels of coverage by PAs and OECMs; priority could be given to those with no current 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

Forests in Bosnia and Herzegovina cover 2,188,000 ha in 2020 and include 95.1 million metric tonnes Carbon stock from above-ground biomass and 22.8 million metric tonnes Carbon from belowground biomass (no change from 2000); approximately 4.0% of forest and other wooded land is protected for conservation of biodiversity (according to the *State of Europe's Forests 2020 report*). According to [Global Forest Watch](#), total biomass carbon amounts to over 270 Mt, with soil carbon of 591 Mt. Based on data from global maps of marine sedimentary carbon stocks, standardized to a 1-meter depth (see Sala et al., 2021, and Atwood et al., 2020), Bosnia and Herzegovina has 1.0 Tg C from marine sediment carbon (0.0% in MPAs).

### 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 Bosnia and Herzegovina 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 Bosnia and Herzegovina 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 Bosnia and Herzegovina was 2.0%.

### PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Bosnia and Herzegovina is 0.29. This represents an increase from 0.24 in 2010.

### Corridor case studies

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

### Opportunities for action

There is for a general increase of 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

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 Bosnia and Herzegovina reported in the WDPA have the following governance types:

- 97% are governed by **governments** (by federal or national ministry or agency)
- 0% are under **shared** governance
- 0% are under **private** governance
- 0% are under **IPLC** governance
- 3% **do not** report a governance type
  - (All of which are international designations)

### OECMs

As of May 2021, there are **0** OECMs in Bosnia and Herzegovina 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 Bosnia and Herzegovina (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 Bosnia and Herzegovina (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 Bosnia and Herzegovina (see Garnett et al 2018 for details).

### Opportunities for action

Explore opportunities for governance types that have lower representation, for Bosnia and Herzegovina this could relate to shared governance, etc. There is also opportunity for Bosnia and Herzegovina 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, Bosnia and Herzegovina has 60 PAs reported in the WDPA (only 42 individual PAs total); of these PAs, 4 (9.5%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 1.4% (692 km<sup>2</sup>) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
  - 37.3% of the area of terrestrial PAs have completed evaluations.
- 0.0% (0.0 km<sup>2</sup>) of the marine area of the country is covered by PAs with completed management effectiveness 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 Bosnia and Herzegovina 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

Forest area in Bosnia and Herzegovina has been quite stable, and covers approximately 54.9% of total land area, an area of 2,813,000 ha, including a variety of land uses included as 'other wooded land' [42.7% as forest and 12.2% as 'other wooded area']. As of 2020, it is reported that 4.0% of forest and other wooded land is protected for conservation of biodiversity (MCPFE classes 1 and 2). Over the period 2000-2020 forest area increased by 76,000 ha (2.7% of forest area). Changes in forest cover can indicate how effective PAs are in reducing forest cover loss. See full data on forests in Bosnia and Herzegovina here: <https://foresteurope.org/state-europes-forests-2020/>

### 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

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### 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 WDPA and WD-OECM as of 2021. For more information, see the workshop report at: <https://www.cbd.int/meetings/>

#### Summary from the workshop:

Priority actions and identified opportunities, if completed as proposed, will provide benefits for the qualifying elements of Aichi Biodiversity Target 11.

The following actions were identified during the workshops:

#### **Terrestrial and marine coverage:**

- 1) Legal enactments for establishment of planned protected areas
- 2) Completion of inventory of flora, fauna and fungi and creation of a database
- 3) Completion of the Red List of the RS.

#### **Ecological representation:**

- 1) Conduct the inventory of ecosystems and types of habitats in B&H.
- 2) It is needed to ensure financial resources in order to implement strategy and action plans for biodiversity protection.

#### **Areas Important for biodiversity and ecosystem services:**

- 1) Conduct research and single out group of ecosystems that provide essential services and make an assessment of the state of such ecosystems
- 2) Defining of the governance type and creation of management plans and other legal acts and documents
- 3) In order to increase the percentage of these areas it is needed to identify potential areas according to existing criteria.

**Connectivity:** Adapt proposed Natura 2000 sites and establish the ecological network in accordance with the laws on nature.



**Management effectiveness:**

- 1) To conduct management effectiveness assessment
- 2) To develop management and spatial plans for remaining protected areas.

**Governance and Equity:** Ministries in charge need to encourage and initiate local communities to develop nature conservation plans according to the laws on nature protection, and to establish new protected areas.

**Integration into the wider landscape and seascape:** Identified cross-border areas need to be established. Also, planned protected areas in BIH need to be designated.



## NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

Bosnia and Herzegovina 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 11. By 2020, map and urgently protect the specific biological diversity of BiH (canyon, mountain, alpine and wetland ecosystems, karst fields and alluvial plains) in compliance with the applicable spatial planning documents*

*Indicator = Percentage of each habitat under protection status*

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

NBSAP Action number	Action (original language from NBSAP)
3.1.1	Prepare the analysis (including mapping) of planned protected areas
3.1.2	Start procedures for establishment of protected areas planned in spatial plans, and monitor their progress
3.1.3	Establishment or appointment of existing institutions to manage the protected area

### UPDATE ON PROGRESS

*Prepare the analysis (including mapping) of planned protected areas/Start procedures for establishment of protected areas planned in spatial plans, and monitor them:*

- This has been **partially implemented**, since currently work is being done to identify all natural values in the territory of areas nominated in the project “Achieving Biodiversity Conservation through Creation and Effective Management of Protected Areas and Capacity Building for Protection of Nature in BiH” funded by the Global Environment Fund (GEF) and implemented by the United Nations Environment Program. The protection of the areas appointed through this project is still ongoing.

*Establishment or appointment of existing institutions to manage the protected area:*

- This is **partially implemented** this arises from the fact that after the period when the NBSAP BiH had been made, new protected areas were established, as well as new managers, while for the areas that are currently in the procedure of establishment, the managers have not yet been established.





## 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 <sup>2</sup> )	Type of new protected area	Qualitative elements potentially benefitting (based on keyword search of PIFs)
6990	Yes	2,541	Terrestrial	Ecologically representative; Effectively managed; Equitably managed



## OTHER ACTIONS/COMMITMENTS

### Leaders' Pledge for Nature

Bosnia and Herzegovina **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.

### Commitments for PAs and OECMs from Other National Policies

Policy document	Ecosystem	Policy text
Disaster Response Assessment and Roadmap 2018	Grasslands & Agricultural systems	Revitalizing and conservation of grazing areas; improving biodiversity and conservation of Indigenous genetic resources.
National Development Plan	Grasslands & Agricultural systems	Support measures for protection of biodiversity and sustainable use of genetic resources.
Protected Area Plan	Forest ecosystems	Legal enactments for establishment of planned protected areas.
Climate Change Adaptation and Low-Emission Development Strategy 2013	Forest ecosystems	More and better legally enforced protected areas network; technical assistance, mentoring and workshops to expand and protect protected areas to enable adaptation.
Climate Change Adaptation and Low-Emission Development Strategy 2013	Forest ecosystems	Promotion of city-based multi-seasonal tourism summer eco-tourism.
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Forest ecosystems	By 2020, certify all state owned forests
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Forest ecosystems	By 2020, establish and strengthen cooperation for improved protection and sustainable use of biological diversity in the countries of the Western Balkans.



<b>Policy document</b>	<b>Ecosystem</b>	<b>Policy text</b>
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Forest ecosystems	By 2020, map and evaluate the benefits from forest, agricultural and water ecosystems, and strengthen the environmental permit mechanism and supervisory inspection within protected area spaces, areas of special interest and areas from the Natura 2000 ecological network plan.
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Forest ecosystems	By 2020, complete the inventory of: (i) flora, fauna and fungi; (ii) ecosystems and types of habitats.
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Forest ecosystems	By 2020, develop the red books of plants, animals and fungi, and adopt action plans for protection of the most endangered taxa.
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Forest ecosystems	By 2020, prepare and implement in situ and ex situ programs for protection of domestic varieties, breeds and their animal relatives, including their inventory and establishment of Indigenousness parameters.
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Wetland ecosystems	By 2020, map and urgently protect the specific biological diversity of BiH (wetland ecosystems) in compliance with the applicable spatial planning documents.
Strategy and Action Plan for Protection of Biological Diversity 2015-2020	Grasslands & Agricultural systems	By 2020, map and urgently protect the specific biological diversity of BiH (canyon, mountain, alpine, karst fields and alluvial plains) in compliance with the applicable spatial planning documents.



## ANNEX I

### FULL LIST OF TERRESTRIAL ECOREGIONS

<b>Ecoregion Name</b>	<b>Area (km<sup>2</sup>)</b>	<b>% of Global Ecoregion in Country</b>	<b>% of Country in Ecoregion</b>	<b>Area Protected (km<sup>2</sup>)</b>	<b>% Protected in Country</b>
Balkan mixed forests	1,795.3	0.8	3.5	21.5	1.2
Dinaric Mountains mixed forests	27,498.5	47.2	53.7	1,160.9	4.2
Illyrian deciduous forests	4,958.6	12.2	9.7	387.9	7.8
Pannonian mixed forests	16,947.3	5.5	33.1	278.1	1.6





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This document was created using the knitr package with R version 4.0.3.

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