



Convention on  
Biological Diversity



# Aichi Biodiversity Target 11 Country Dossier: INDONESIA

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Global Partnership on  
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## 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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### 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

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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. 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, terrestrial coverage in Indonesia is 231,945.7 km<sup>2</sup> (12.2%) and marine coverage is 181,864 km<sup>2</sup> (3.1%).
- **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:** Indonesia contains 38 terrestrial ecoregions, 17 marine ecoregions, and 1 pelagic province: the mean coverage by reported PAs and OECMs is 17.5% (terrestrial), 8.0% (marine), and 1.2% (pelagic); 5 marine ecoregions have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Indonesia 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.



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### Areas Important for Biodiversity

- **Status:** Indonesia has 491 Key Biodiversity Areas (KBAs): the mean protected coverage of KBAs by reported PAs and OECMs is 26.0%, while 272 KBAs have no coverage by reported PAs and OECMs.
- **Opportunities for action:** there is opportunity for Indonesia 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 Indonesia, 14.1% of aboveground biomass carbon, 14.2% of belowground biomass carbon, 15.2% of soil organic carbon, 4.0% of carbon stored in marine sediments is covered by PAs and OECMs.
- **Opportunities for action:** for carbon, there is opportunity for Indonesia 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 8.6%.
- **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 Indonesia is: 92.8% under Government (78.6% Federal or national ministry or agency; 14.2% Sub-national ministry or agency).
- **Opportunities for action:** explore opportunities for governance types that have lower representation, for Indonesia this could relate to governance by Indigenous Peoples and/or local communities (IPLC), shared governance, etc. Increase efforts to



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identify the governance types for the 7.2% of sites that do not have their governance type reported.

- There is also opportunity for Indonesia to complete governance and equity assessments, to establish baselines and identify relevant actions for improvement.

### Protected Area Management Effectiveness

- **Status:** 58.4% of terrestrial PAs and 2.6% 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 Indonesia. Section I of the dossier presents data on the current status of Indonesia’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 Indonesia, in relation to each Target 11 element. The analyses present options for improving Indonesia’s area-based conservation network to achieve enhanced protection and benefits for livelihoods and climate change. Section II presents details on Indonesia’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.



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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



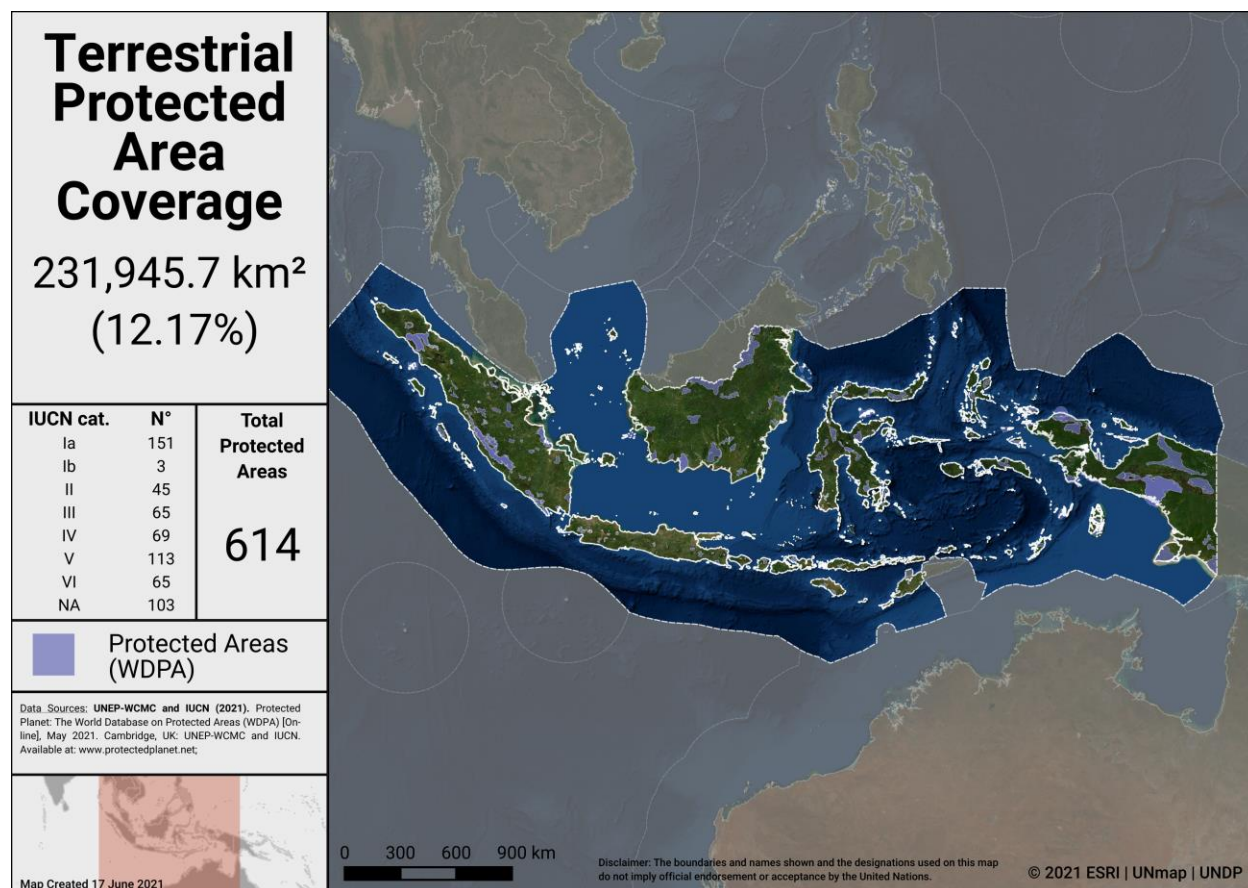
## COVERAGE - TERRESTRIAL & MARINE

As of May 2021, Indonesia has **733** protected areas reported in the World Database on Protected Areas (WDPA). 23 proposed PAs, 2 PAs that have no spatial boundary and no area listed in the WDPA, and a further 7 UNESCO-MAB Biosphere Reserves, are not included in the following (see details on UNWFP-WCMC’s methods for calculating PA and OECM coverage [here](#)).

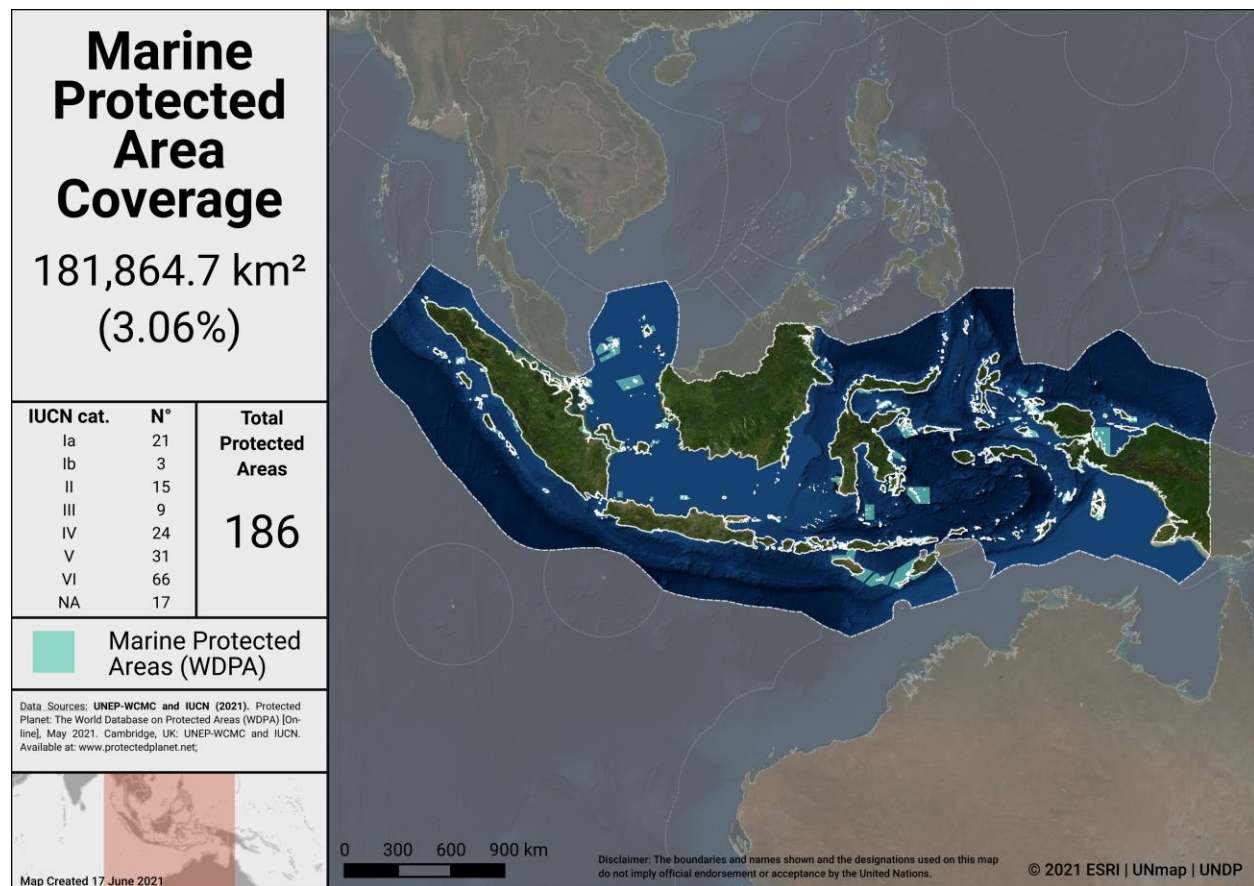
As of May 2021, Indonesia has **0** OECMs reported in the world database on OECMs (WD-OECM).

Current coverage for Indonesia:

- 12.2% terrestrial (614 protected areas, 231,945.7 km<sup>2</sup>)
- 3.1% marine (186 protected areas, 181,864 km<sup>2</sup>)



Terrestrial Protected Areas in Indonesia



Marine Protected Areas in Indonesia

### Potential OECMs

There are **21** unprotected Key Biodiversity Areas (KBAs) in Indonesia managed in a way consistent with the OECM definition (see Donald et al 2019 for further details, including a full list of sites).

Other examples of potential OECMs in could Indonesia:

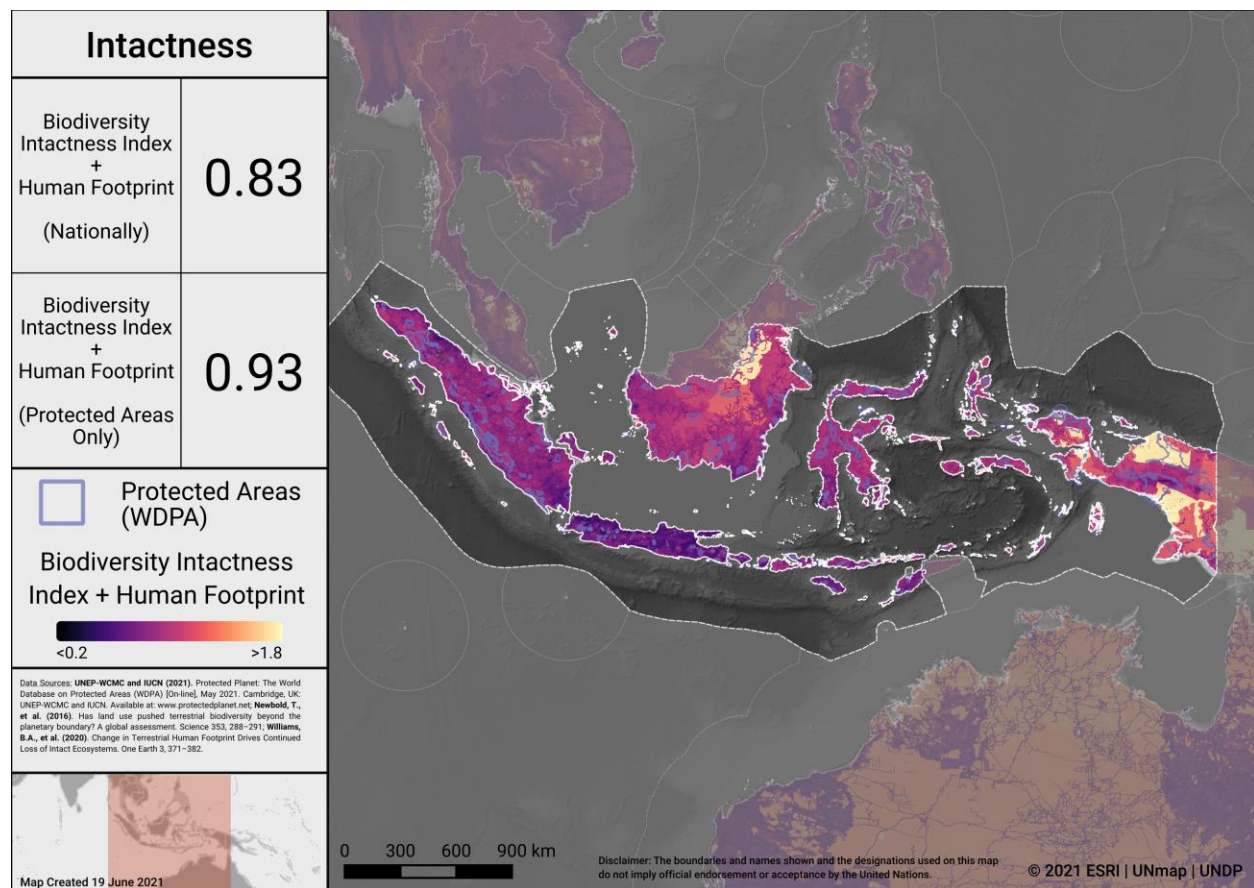
Potential OECM example	Area covered
Hutan Harapan, Sumatera.	98,000 ha
Community-based MPA: Ay and Rhun Island, Maluku.	47,968.74 ha
Tana' Ulen Lapan River.	~8,821 ha

For additional details on these potential OECMs, see Annex I in this dossier, and the full details are available in the collation of OECM case studies (IUCN, 2017).

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

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).

Indonesia has 38 **terrestrial** ecoregions. Out of these:

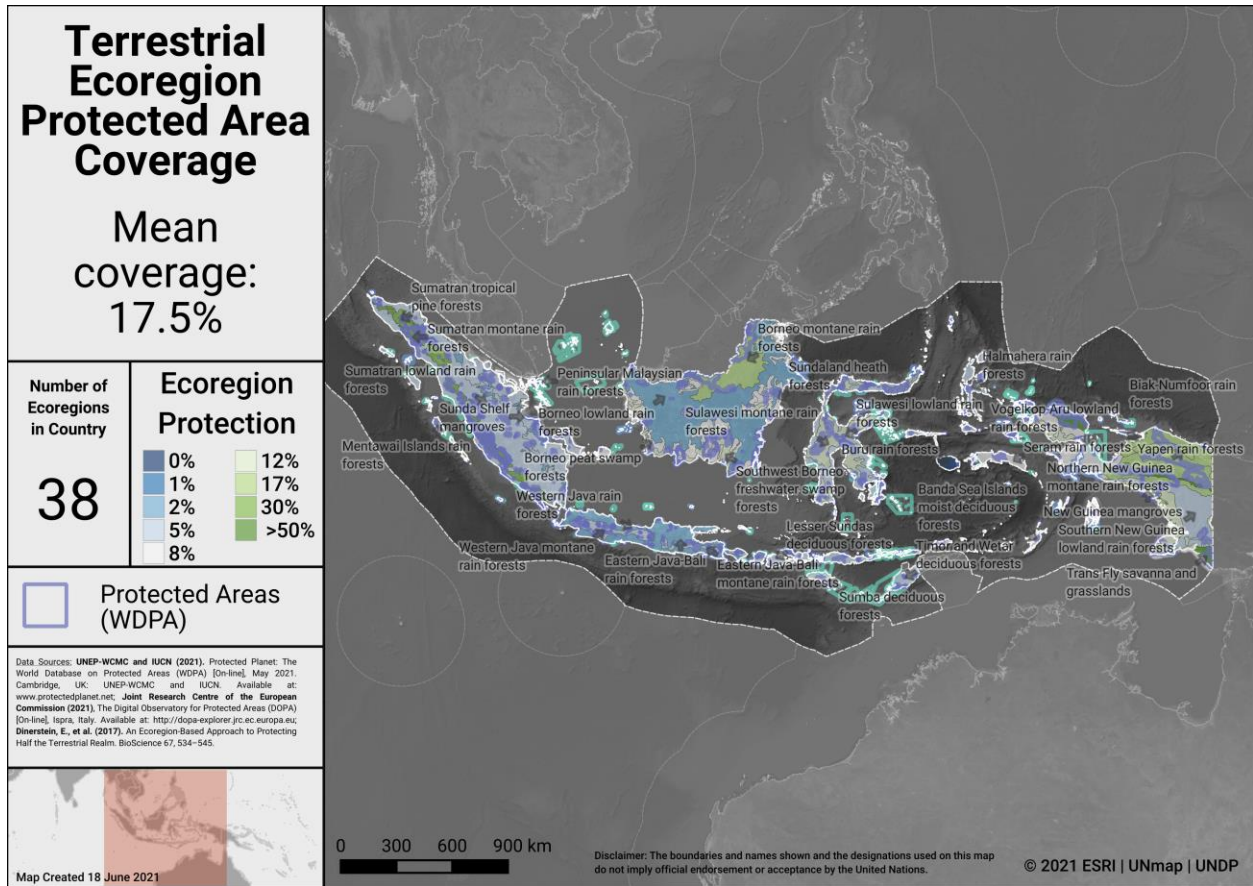
- All 38 ecoregions have at least some coverage from PAs and OECMs.
- 13 ecoregions have at least 17% protected within the country.
- The average terrestrial coverage of ecoregions is 17.5%.

Indonesia has 17 **marine** ecoregions and 1 **pelagic province**. Out of these:

- 12 marine ecoregions and 1 pelagic province have at least some coverage from reported PAs and OECMs.
- 4 marine ecoregions and 0 pelagic provinces have at least 10% protected within Indonesia's exclusive economic zone (EEZ).
- The average protected area coverage of marine ecoregions is 8.0% and the average protected area coverage of Pelagic Provinces is 1.2%.

A full list of terrestrial ecoregions in Indonesia is available in Annex II.

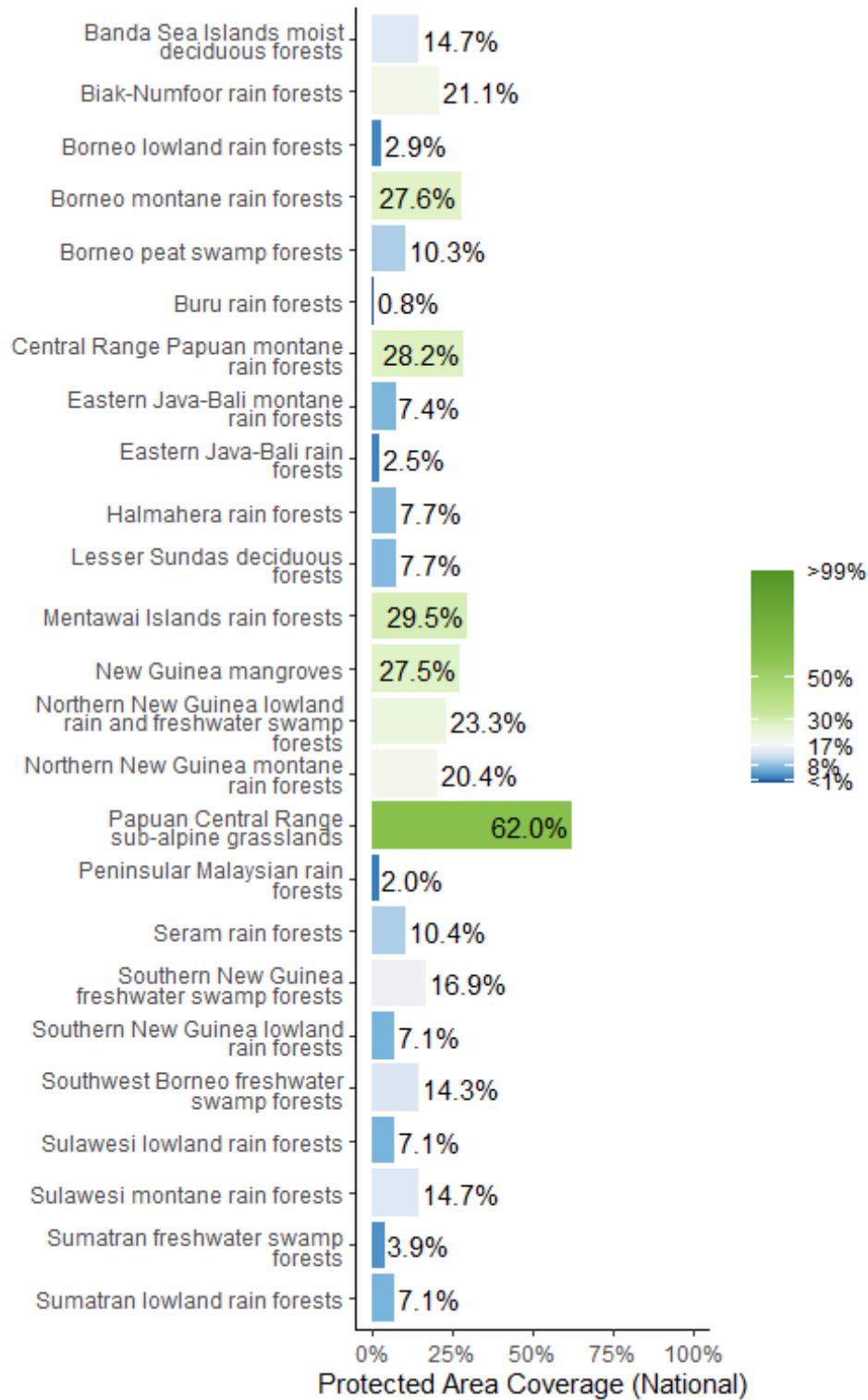




Terrestrial ecoregions in Indonesia



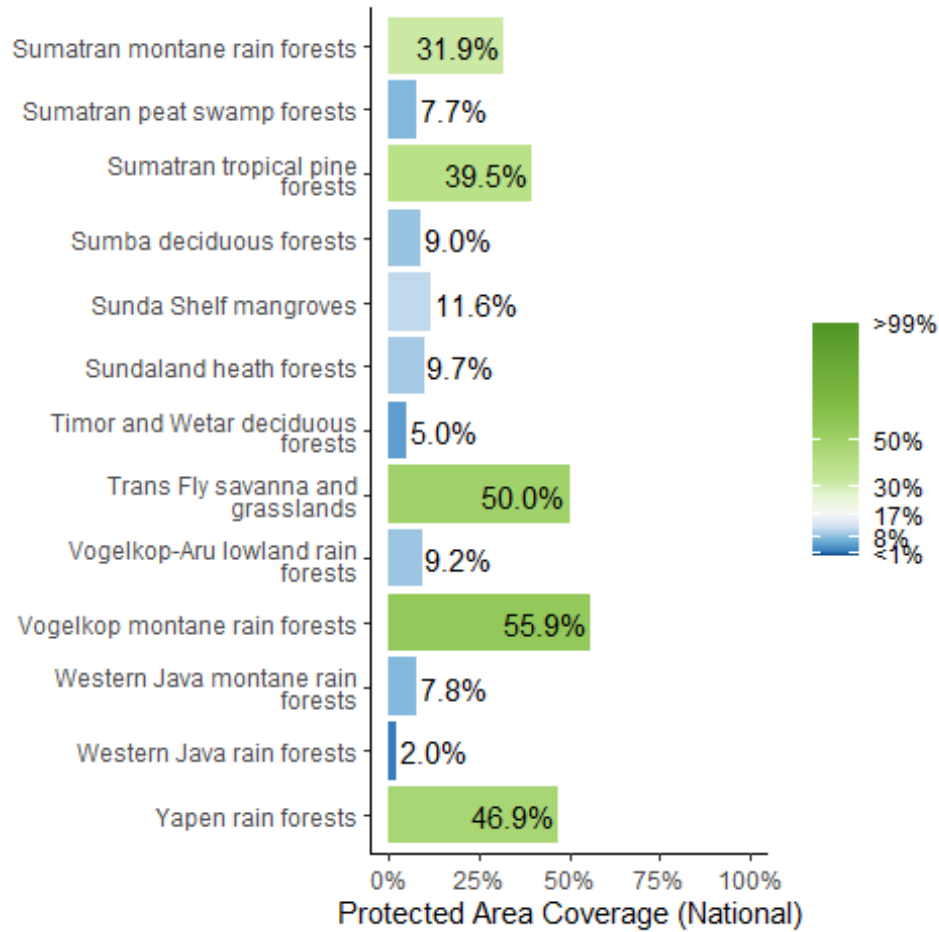
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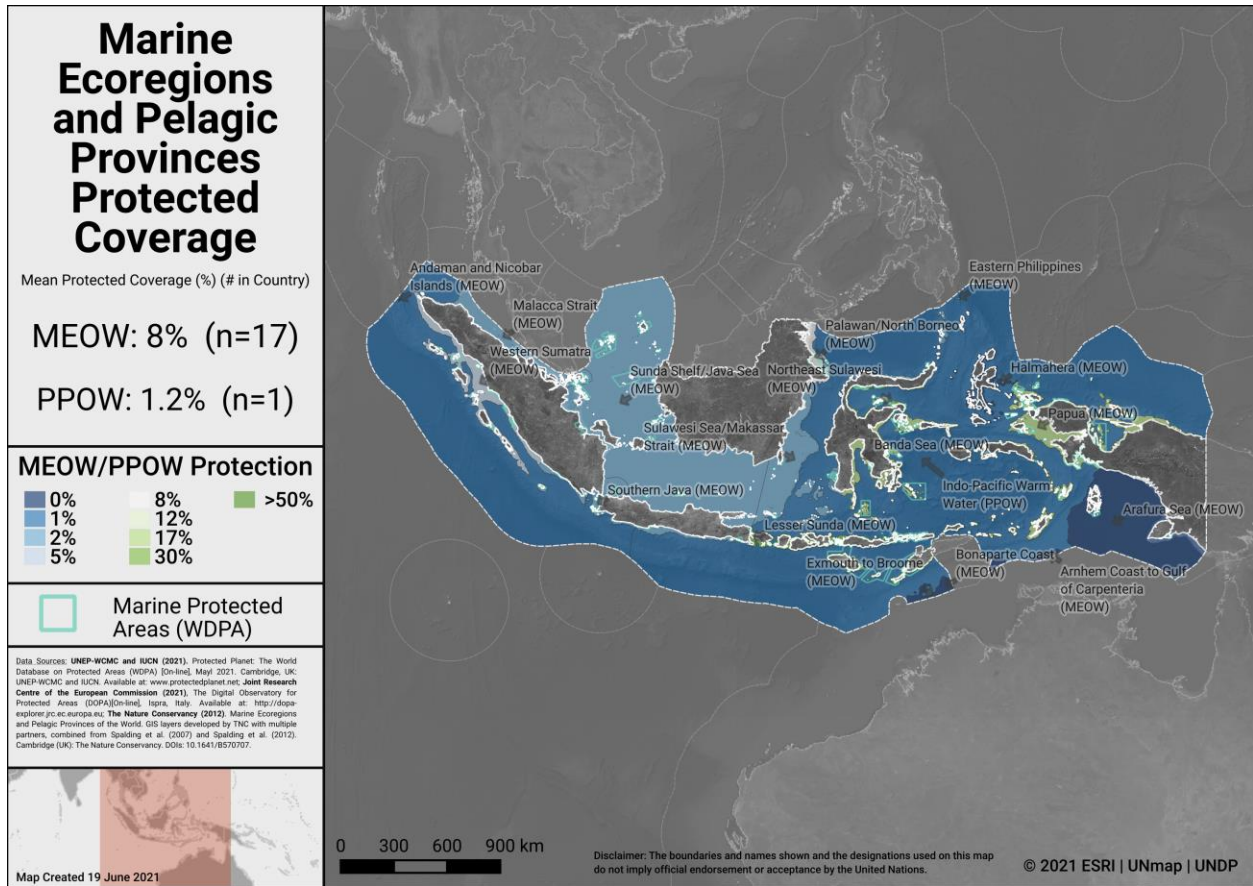
Terrestrial ecoregions of the World (TEOW) in Indonesia



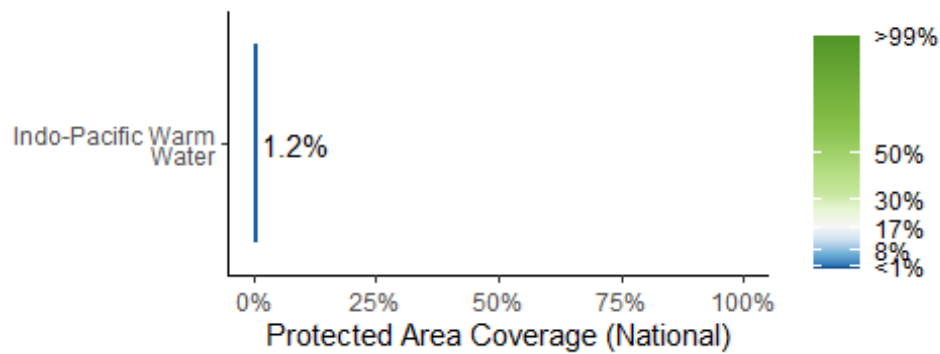
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Terrestrial ecoregions of the World (TEOW) in Indonesia (continued)

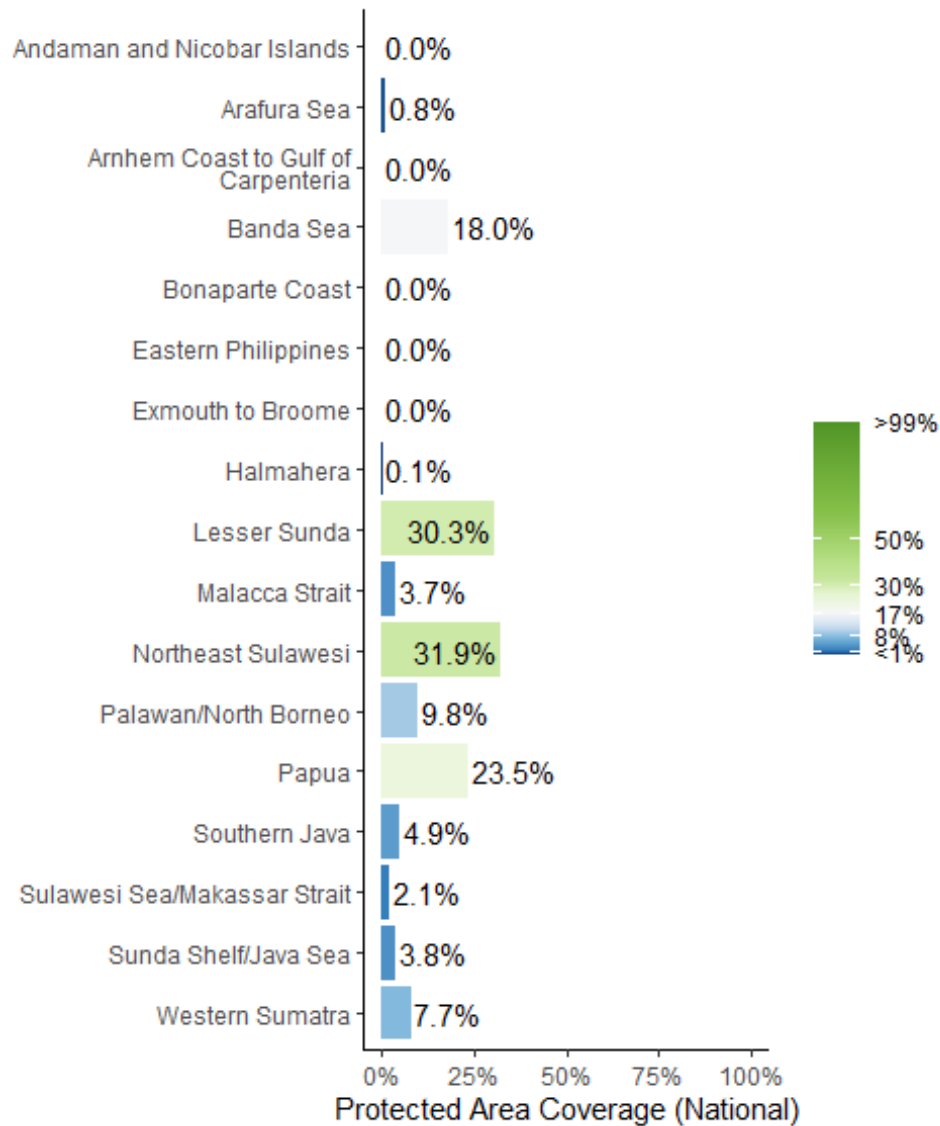


Marine ecoregions and pelagic provinces



Pelagic Provinces of the World (PPOW) in Indonesia





Marine Ecoregions of the World (MEOW) in Indonesia

### Opportunities for action

There is opportunity for Indonesia 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).

Indonesia has **491** Key Biodiversity Areas (KBAs).

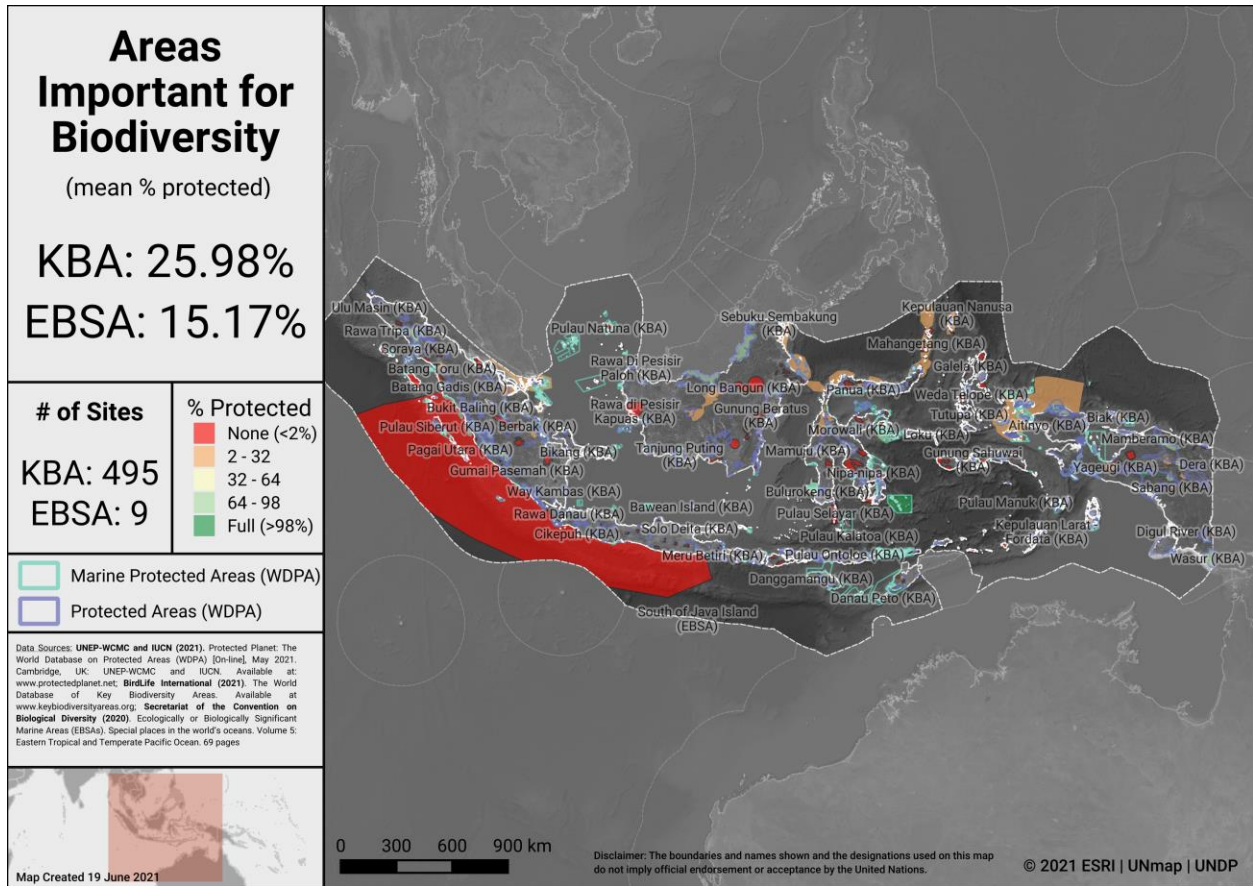
- Mean percent coverage of all KBAs by PAs and OECMs in Indonesia is **26.0%**.
- **27** KBAs have full (>98%) coverage by PAs and OECMs.
- **192** KBAs have partial coverage by PAs and OECMs.
- **272** KBAs have no (<2%) coverage by PAs and OECMs.

The unprotected portion of **21** of the KBAs with low coverage from reported PAs are managed in a way that is consistent with the OECM definition (See Donald et al., 2019 for full details, including the full list of sites and information on their management).

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

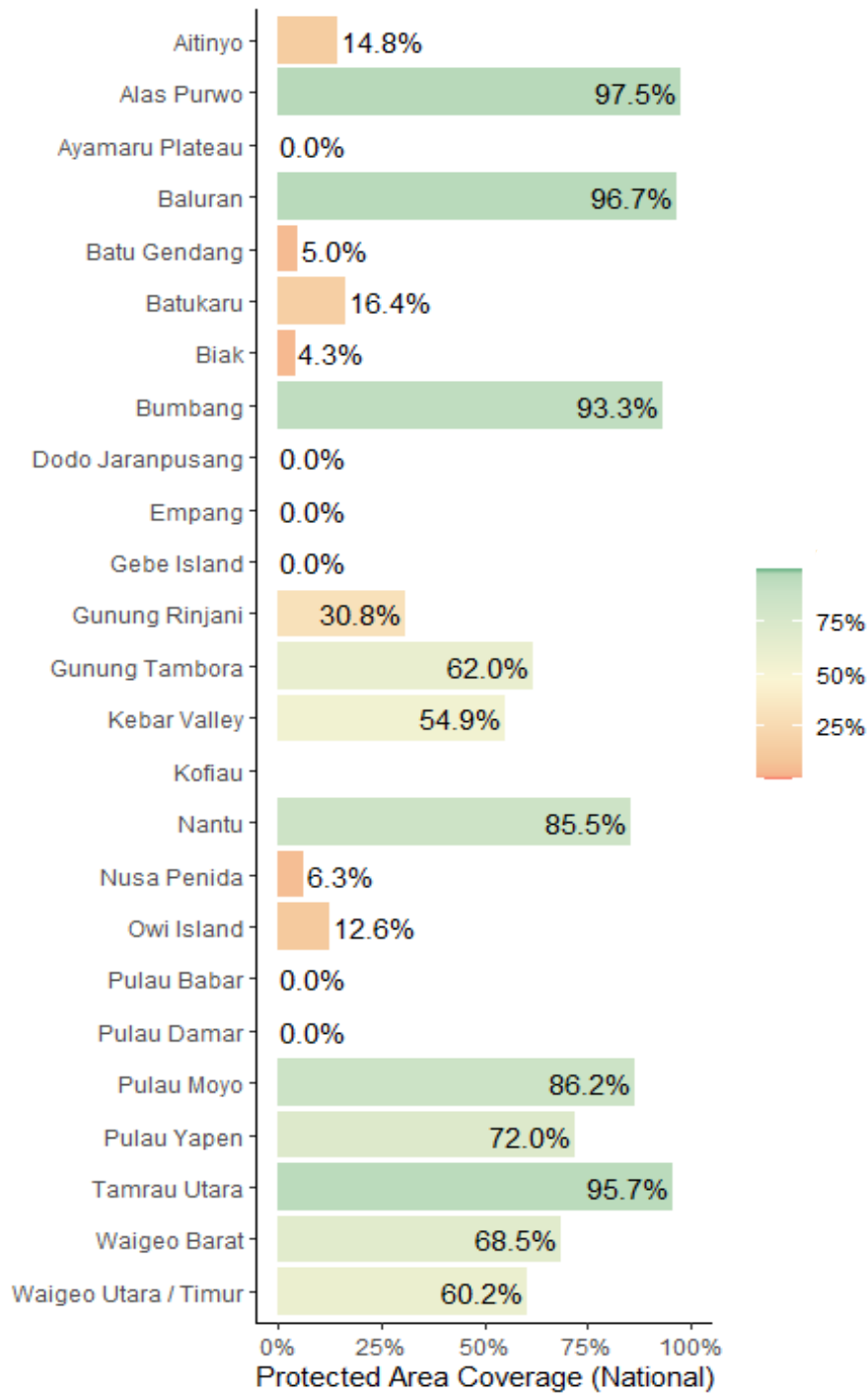
Other important areas for biodiversity may also include Ecologically or Biologically Significant Marine Areas (EBSAs), which were identified following the scientific criteria adopted at COP-9 (Decision IX/20; see more at: <https://www.cbd.int/ebsa/>). Sites that meet the EBSA criteria may require enhanced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

There are 9 EBSAs with some portion of their extent within Indonesia's EEZ, of which 2 EBSAs have no coverage from PAs or OECMs.



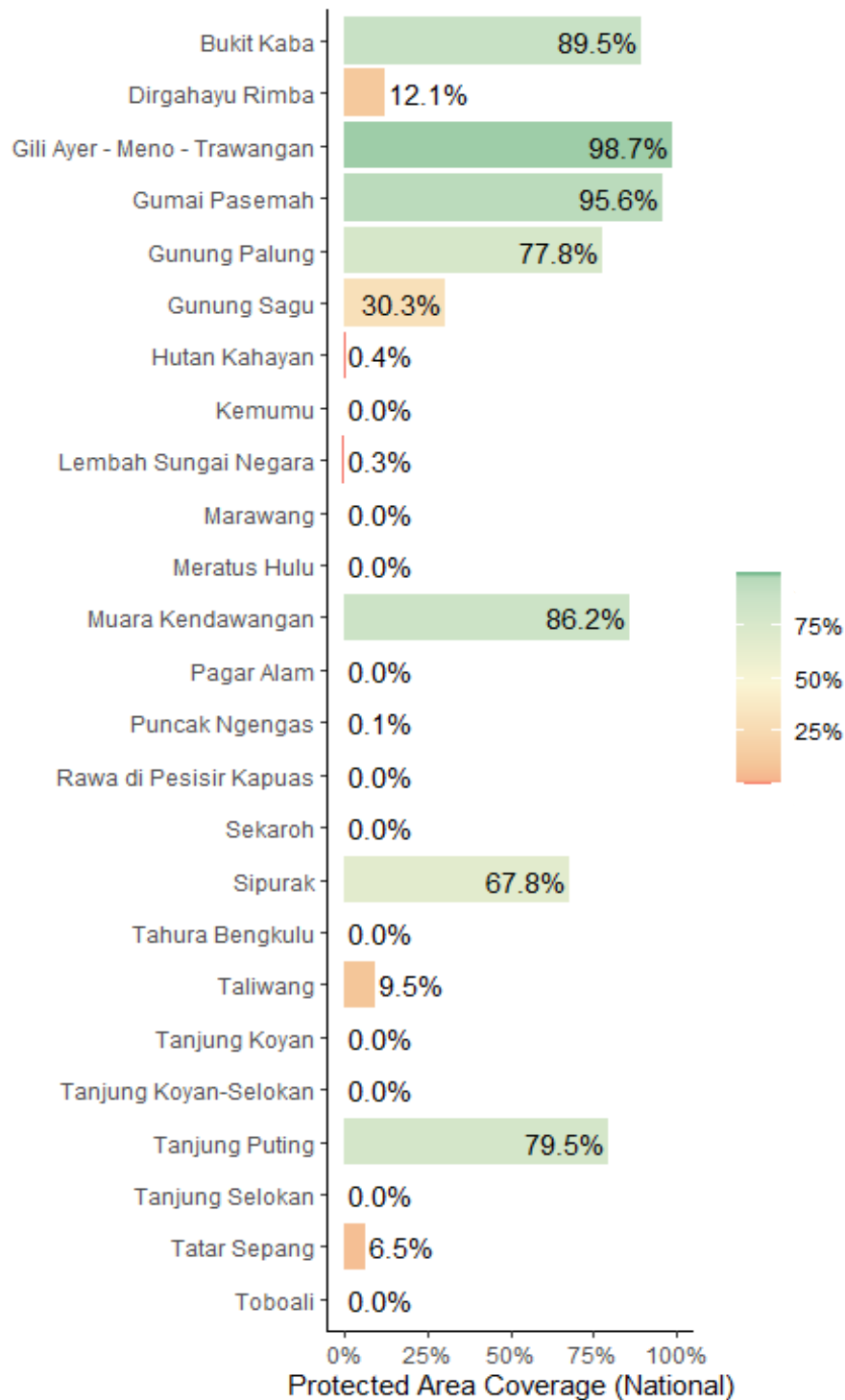
Areas Important for Biodiversity in Indonesia





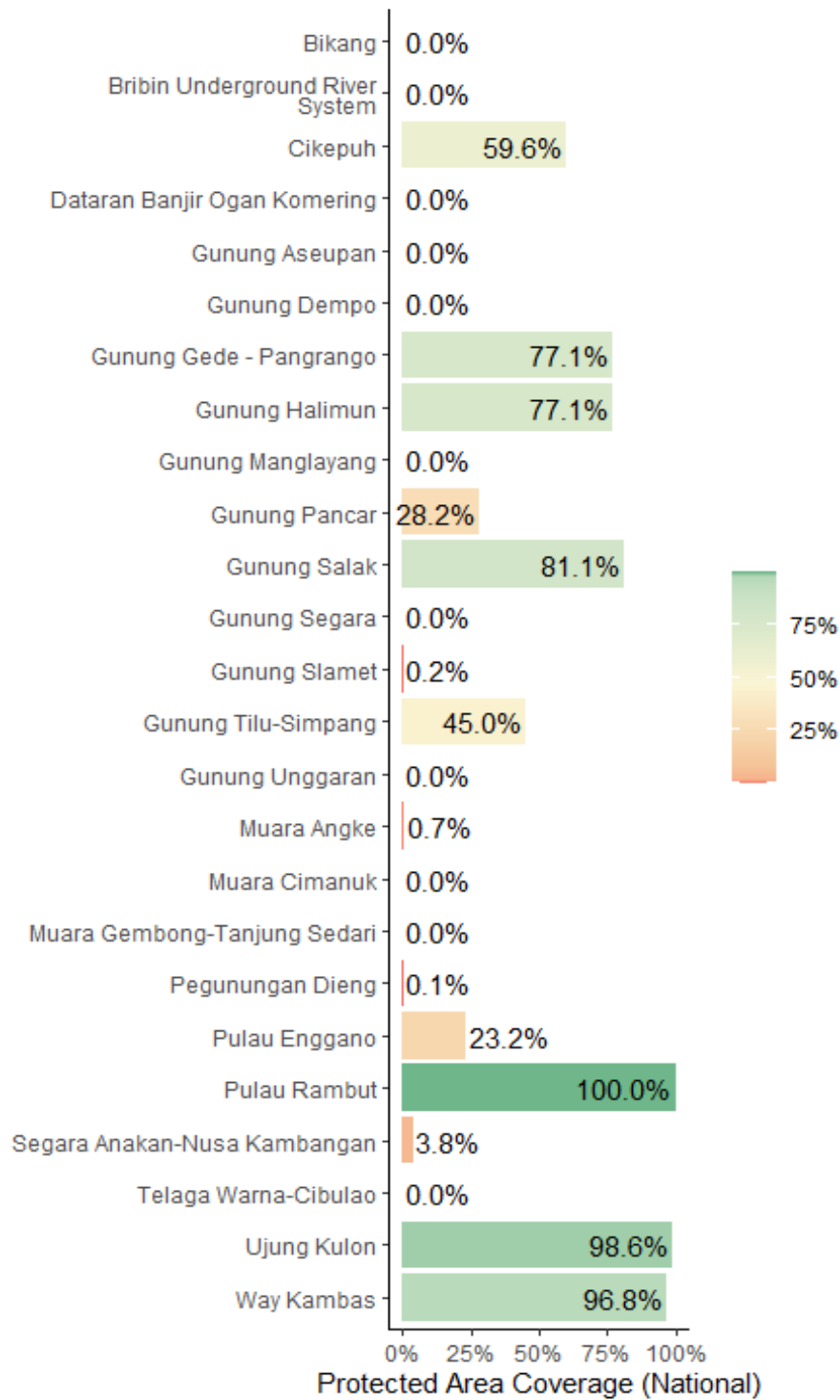
Key Biodiversity Area Coverage (KBA) in Indonesia





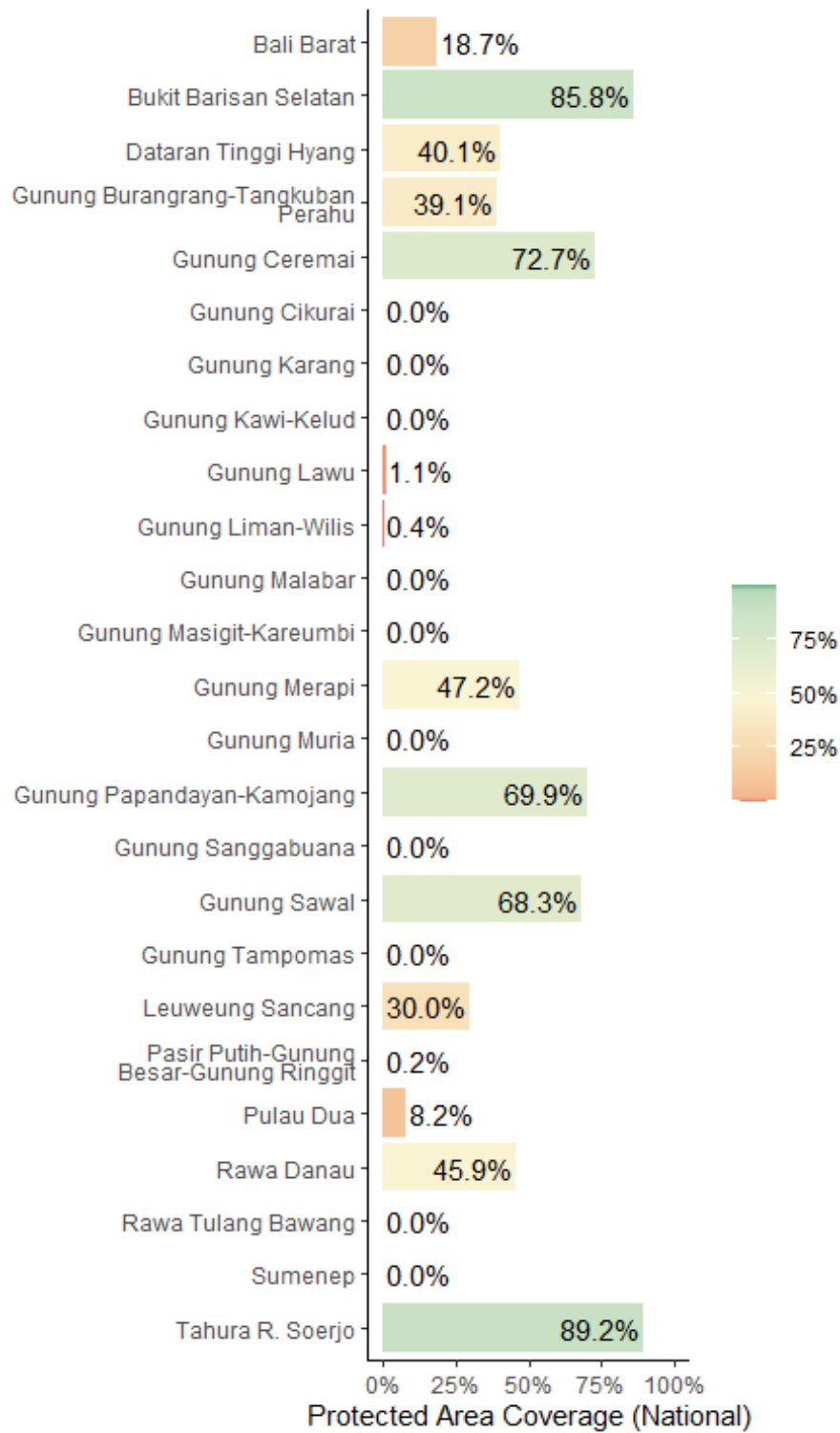
Key Biodiversity Area Coverage (KBA) in Indonesia





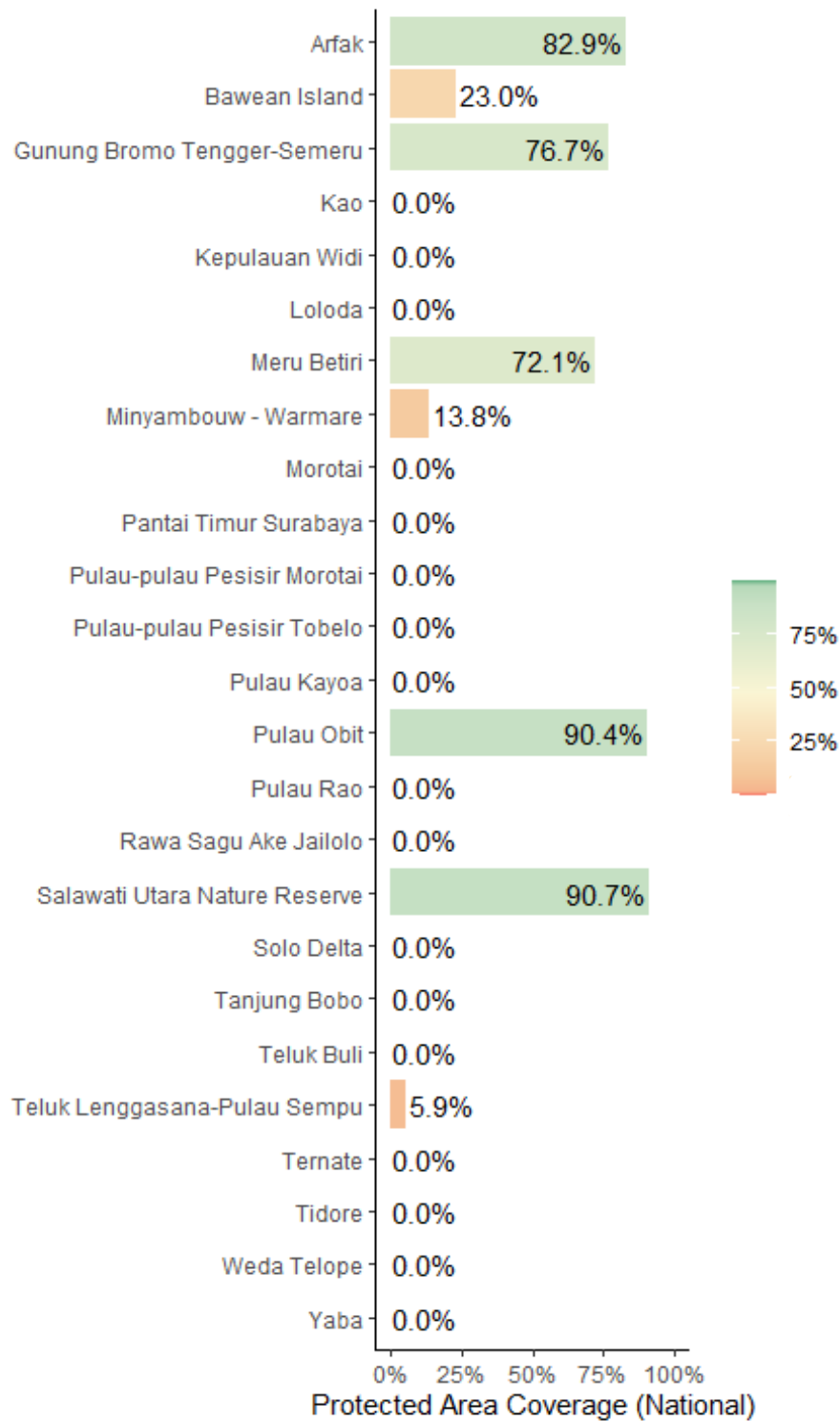
Key Biodiversity Area Coverage (KBA) in Indonesia



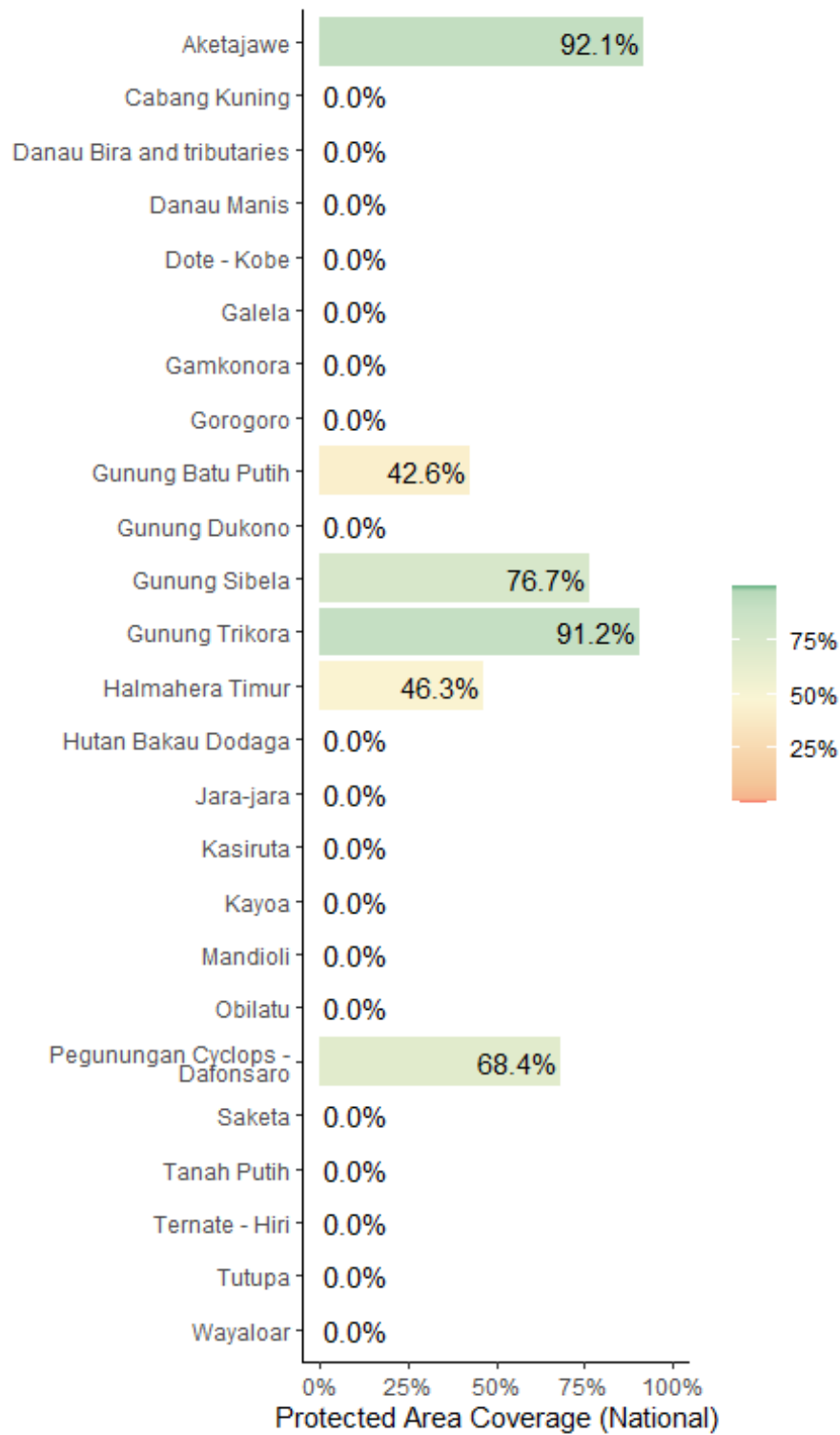


Key Biodiversity Area Coverage (KBA) in Indonesia



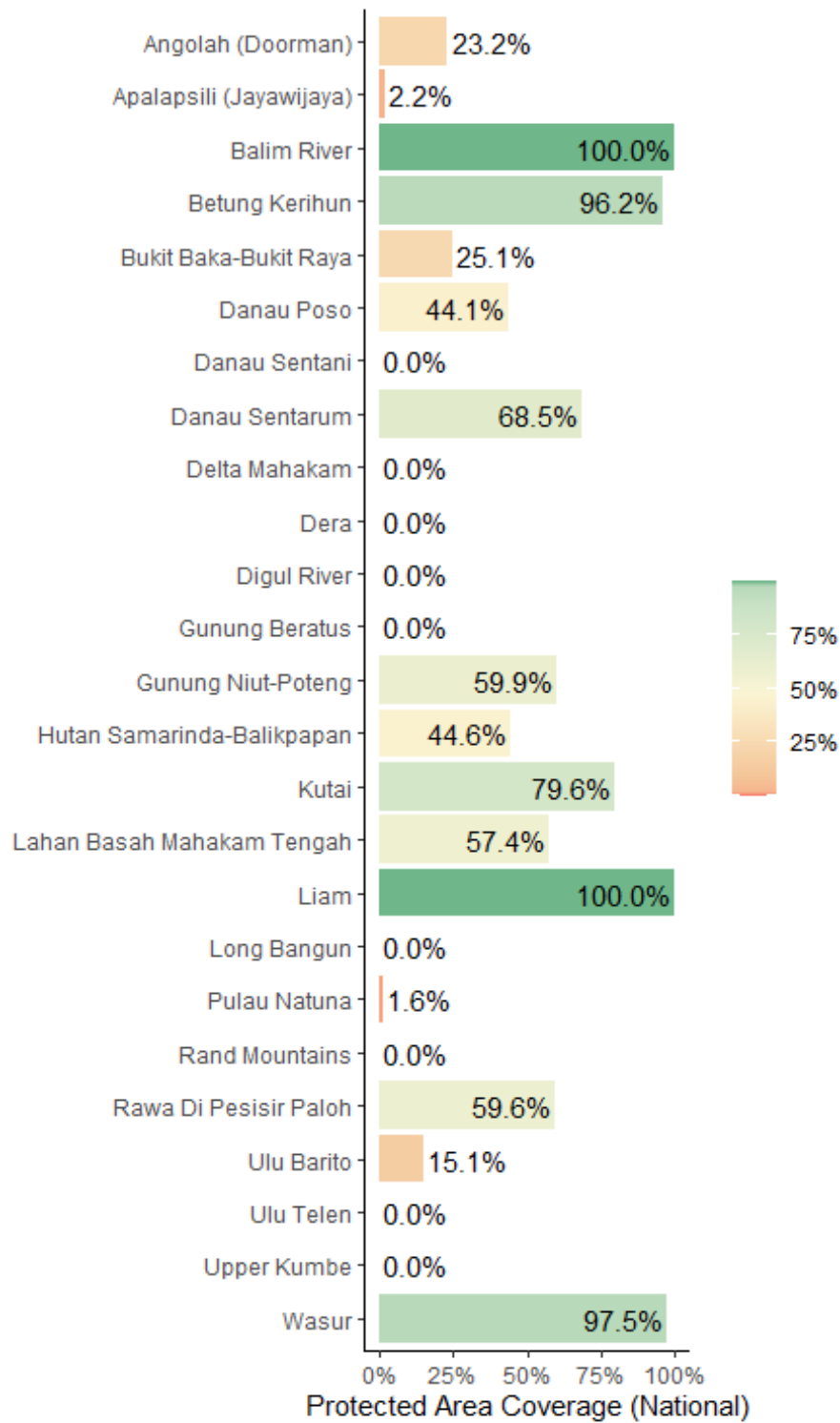


Key Biodiversity Area Coverage (KBA) in Indonesia

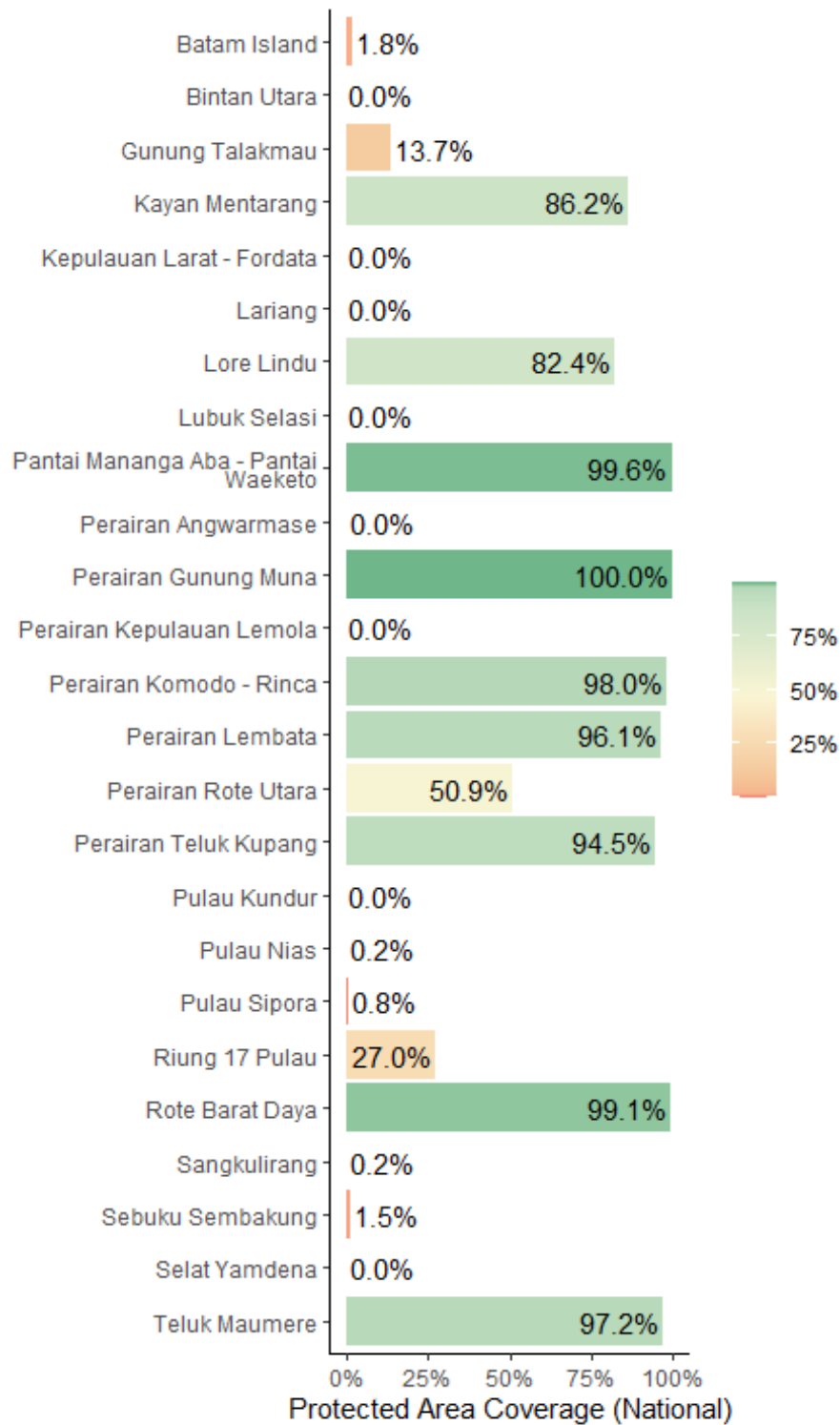


Key Biodiversity Area Coverage (KBA) in Indonesia

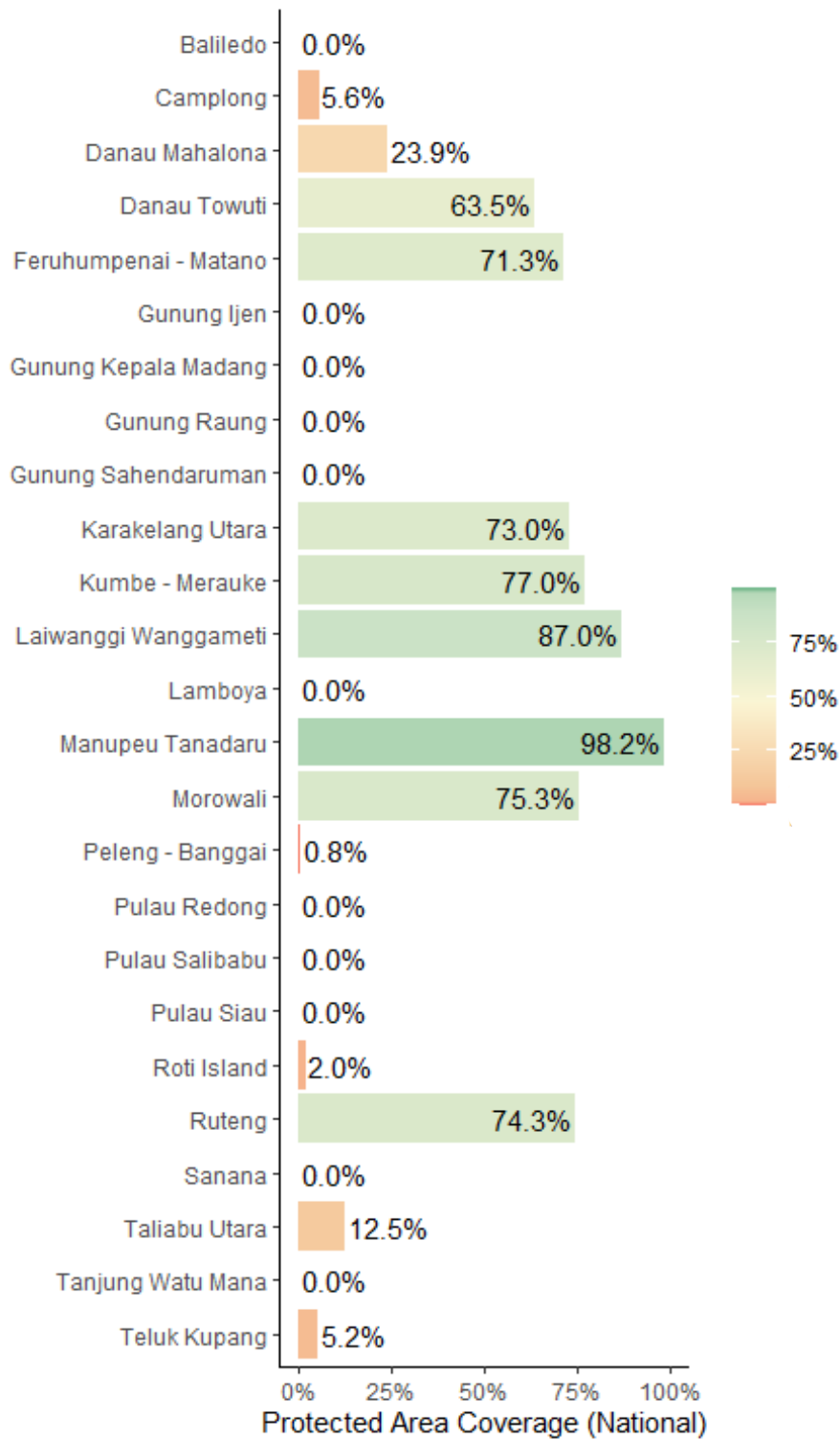




Key Biodiversity Area Coverage (KBA) in Indonesia

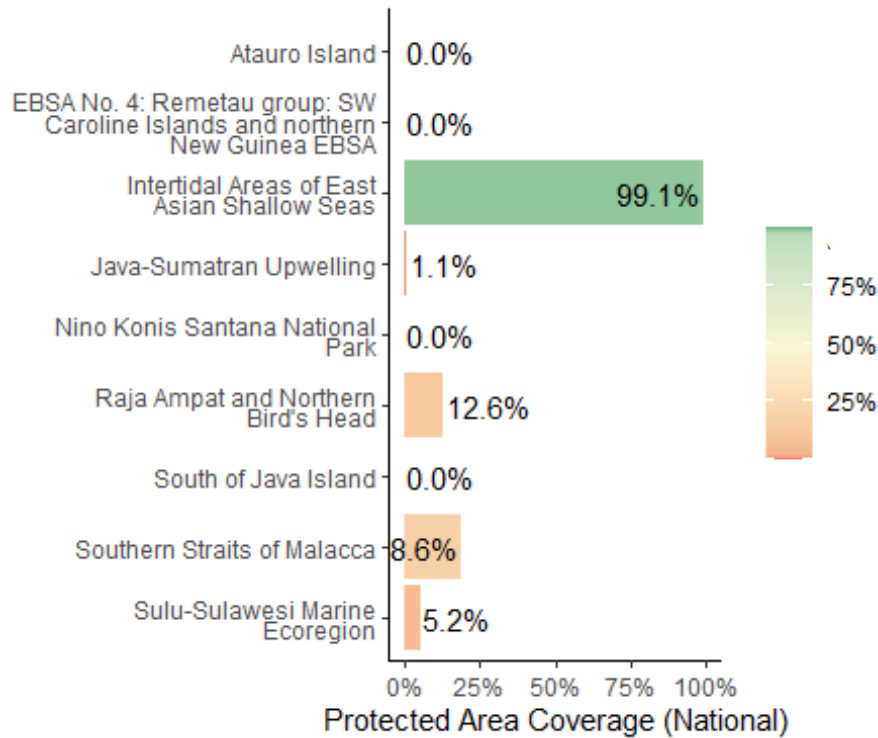


Key Biodiversity Area Coverage (KBA) in Indonesia



Key Biodiversity Area Coverage (KBA) in Indonesia

Coverage statistics for all remaining KBAs in Indonesia is available in Annex III.



Ecologically or Biologically Significant Marine Areas (EBSAs) in Indonesia

### Opportunities for action

There is opportunity for Indonesia 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.



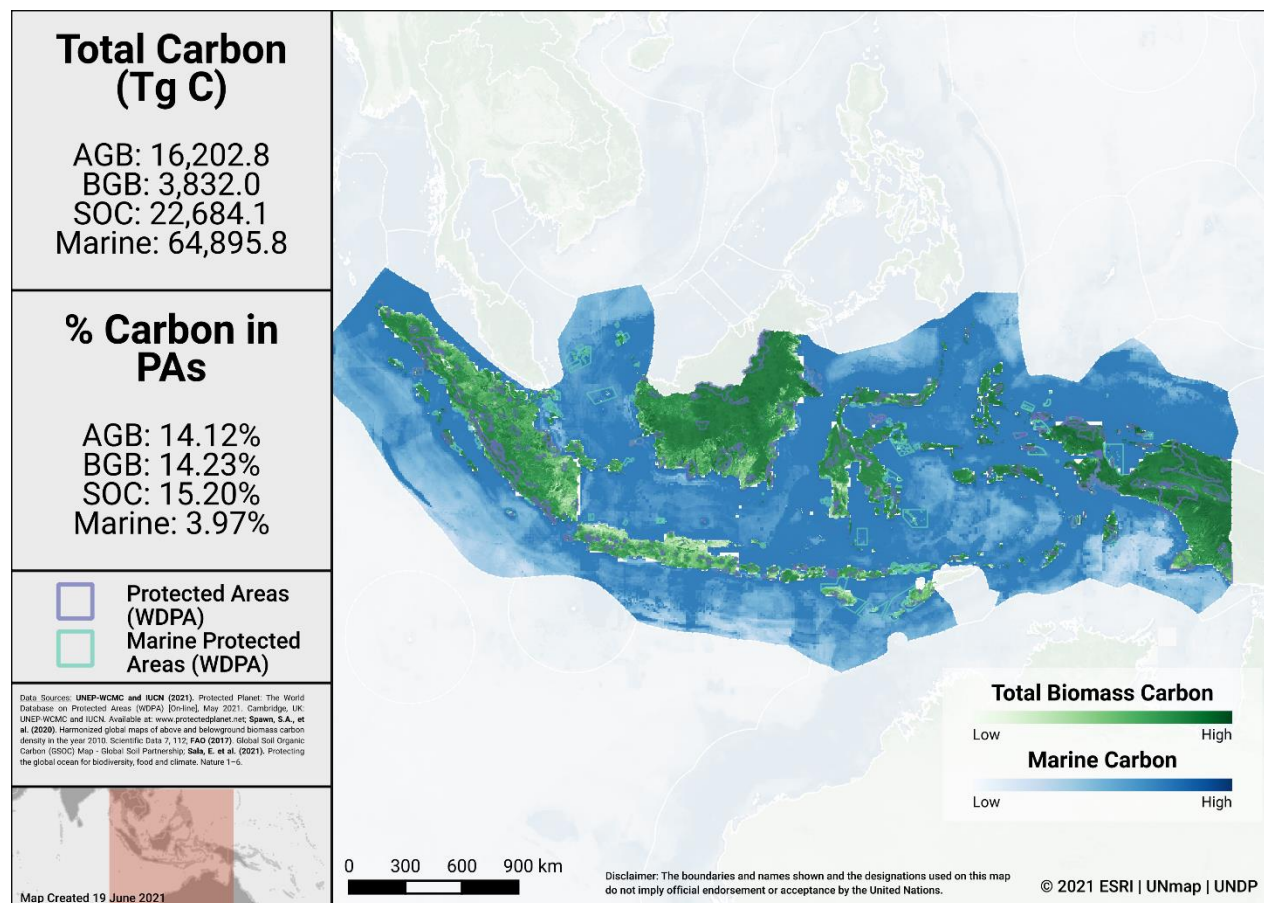
## AREAS IMPORTANT FOR ECOSYSTEM SERVICES

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

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 Indonesia and the percent of carbon in protected areas. The total carbon stocks is 16,202.8 Tg C from aboveground biomass (AGB), with 14.1% in protected areas; 3,832.0 Tg C from below ground biomass (BGB), with 14.2% in protected areas; 22,684.1 Tg C from soil organic carbon (SOC), with 15.2% in protected areas; and 64,895.8 Tg C from marine sediment carbon, with 4.0% in protected areas.



Carbon Stocks in Indonesia

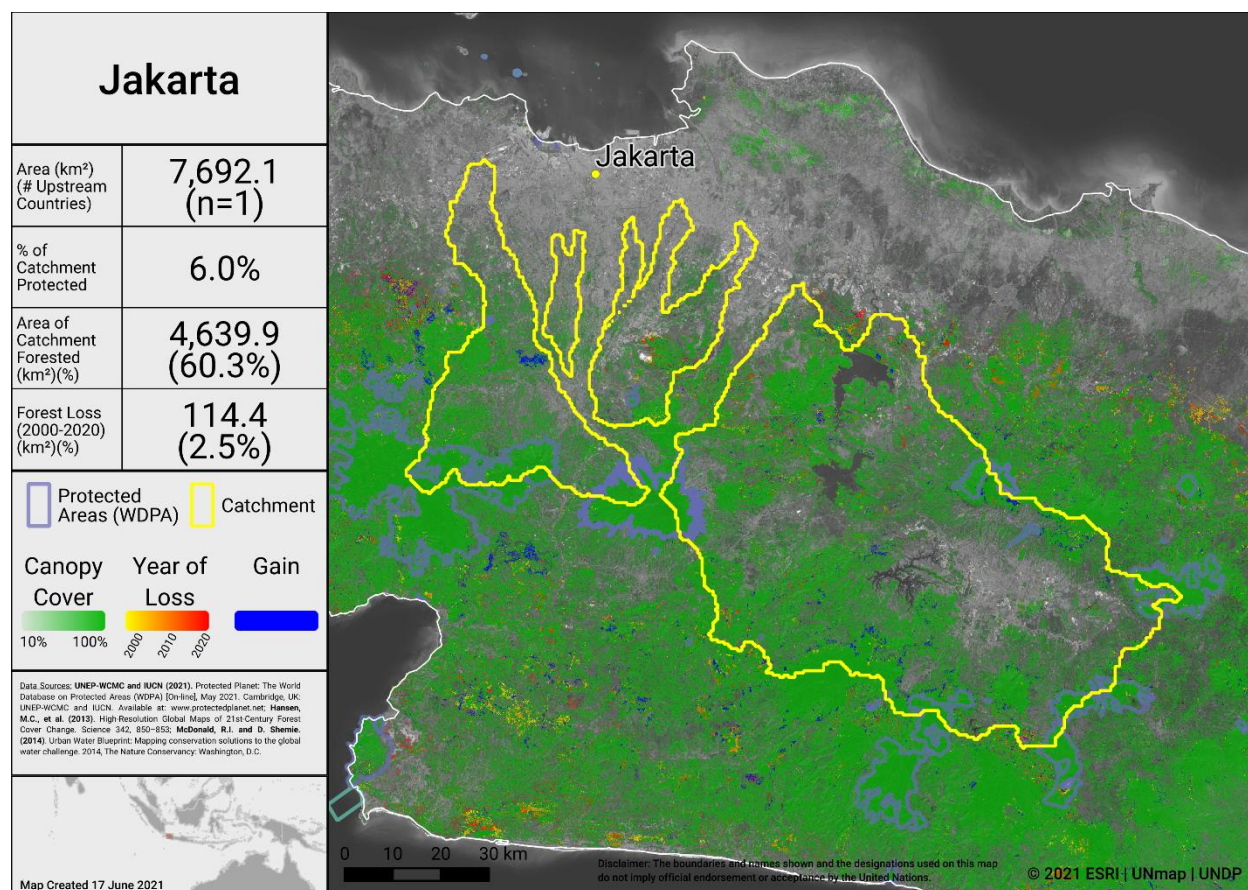


Water

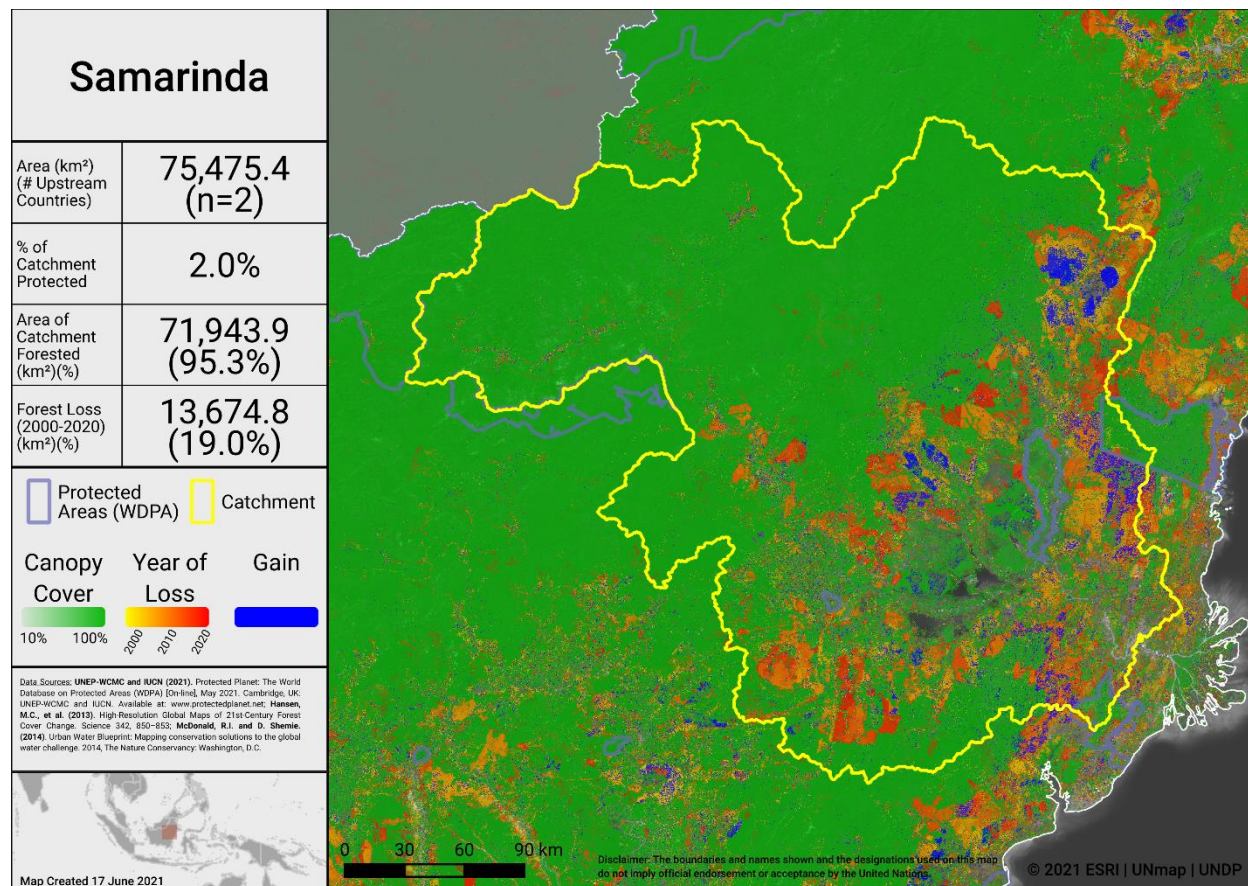
Information on the water sources for 534 cities is available via the City Water Map (CWM) and provides details on the catchment area of the watershed that supplies these cities (see McDonald et al., 2014 for details on methodology).

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 Indonesia may similarly depend on protected forest areas within and around water catchments. The maps below show the percentage forest cover and the forest loss from 2000-2020 in the most heavily populated water catchments of Indonesia. Intact catchments can support more consistent water supply and improved water quality.



Water catchment in Jakarta



Water catchment in Samarinda

### Opportunities for action

For carbon, there is opportunity for Indonesia 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 Indonesia was 8.6%.

### PARC-Connectedness Index

In 2019, as assessed using the PARC-Connectedness Index (values ranging from 0-1, indicating low to high connectivity), connectivity in Indonesia is 0.43. This represents no significant change since 2010.

### Corridor case studies

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

### Opportunities for action

There is opportunity for 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 Indonesia reported in the WDPA have the following governance types:

- 92.8% are governed by **governments**
  - 78.6% by federal or national ministry or agency
  - 14.2% by sub-national ministry or agency
  - 0.0% by government-delegated management
- 0.0% are under **shared** governance
- 0.0% are under **private** governance
- 0.0% are under **IPLC** governance
  - 0.0% by Indigenous Peoples
  - 0.0% by local communities
- 7.2% **do not** report a governance type

### OECMs

As of May 2021, there are **0** OECMs in Indonesia reported in the WD-OECM, however, for 21 potential OECMs overlapping unprotected KBAs:

- 5 are governed by **governments**
- 5 are under private governance (3 by NGOs, 1 by Business/corporate interests, and 1 under other private governance)
- 11 are under **IPLC** governance (3 by Indigenous groups; 8 by Local communities)

See details in Donald et al., 2019.

### Privately Protected Areas (PPAs)

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

- 1 potential PPA covers ~2500 ha (see Love & O2 case study, Annex III).
- PPAs **are not** formally defined in PA legislation (under that name, although PoWPA Action Plan emphasized the role of “protected areas managed by a private party”)
- PPAs **are** directly identified in Indonesia’s recent NBSAP.
- PPAs **are not** included as part of the current PA network.

See additional info in Indonesia’s [country profile](#) and presented in Annex IV.

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

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

### Other Indigenous lands

Lands managed and/or controlled by Indigenous Peoples cover an area of 877,673.0 km<sup>2</sup>, of which 724,855.0 km<sup>2</sup> falls outside of formal protected areas. Indigenous lands with a human footprint less than 4 (considered as 'natural landscapes') cover an area of 461,479.0 km<sup>2</sup> (for details on analysis see Garnett et al., 2018).

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

Boundaries of the lands Indigenous Peoples manage or have tenure rights over come from: Saiful, Y. Peluncuran Peta Indikatif Wilayah Adat Indonesia (Alliance of Indigenous Peoples of the Archipelago, 2014).

### Opportunities for action

Explore opportunities for governance types that have lower representation, for Indonesia this could relate to governance by Indigenous Peoples and/or local communities (IPLC), shared governance, etc. Increase efforts to identify the governance types for the 7.2% of sites that do not have their governance type reported.

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

### Equator Prize Projects

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

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



Organization	Year	Project Description
Yayasan Kerang Lestari Teluk Pemuteran	2019	<p>Yayasan Kerang Lestari Teluk Pemuteran (Pemuteran Bay Coral Protection Foundation) was started in response to the collapse of the local fishing industry near the Pemuteran community in Bali, due in large measure to coral reef loss from sedimentation, rising water temperatures, and unsustainable fishing methods such as reef bombing. The organization oversees more than 70 artificial ‘biorock’ coral reefs, which have restored fish stocks and marine biodiversity. The chain effect of connecting the artificial reefs has helped to rejuvenate local subsistence fishing livelihoods.</p> <p>Hundreds of community members have been trained in artificial reef building. The community has created a de facto locally managed marine protected area, with community enforcement of regulations that prohibit destructive fishing practices. An ecotourism enterprise draws scuba divers from around the world and provides an additional source of income. Ecotourism revenues have been reinvested into local schools, environmental education, and shoreline restoration projects to control erosion. The community model for reef restoration and marine management has been replicated in other coastal communities across Indonesia.</p>
Alliance of the Indigenous Peoples of the Kayan Mentarang National Park	2020	<p>Bringing together 11 Indigenous groups, Forum Musyawarah Masyarakat Adat Taman Nasional Kayan Mentarang (FoMMA) advocates for the rights of communities who live on 20,000 square kilometers of customary land in Northern Kalimantan. A large portion of their ancestral lands, mainly made up of forests and rivers, overlaps with Kayan Mentarang National Park. The park was the first in Indonesia to be placed under a collaborative management arrangement. Government and Indigenous authorities, represented by FoMMA, decide jointly on resource management as well as traditional access and use rights, promoting local stewardship over the park. FoMMA has supported communities to document and map over 20,000 square kilometers of Indigenous territories. In 2019, they secured legal recognition for a first block of 2,500 square kilometers of customary lands under national law. FoMMA’s communities pursue traditional forest-based local economies, and protect large swaths of rainforest in an effort to mitigate climate change and retain traditional ways of life.</p>



Organization	Year	Project Description
Customary Community of Dayak Iban in Sungai Utik Longhouse	2019	<p>Throughout a 40-year campaign to obtain legal recognition of land rights to their 9,504-hectare customary forest, the Indigenous Group of Dayak Iban Sungai Utik Long House have consistently defended their lands against illegal logging, palm oil production, and corporate interests, protecting an estimated 1.31 million tons of carbon. Known as the Sungai Utik forest guardians, the group lives in West Kalimantan in a 214-metre traditional long house that accommodates 318 people. The Dayak Iban sustainably manage their forest in accordance with customary laws — 6,000 hectares are reserved as protected forest and 3,504 hectares are reserved for crop cultivation managed in a traditional rotation system. This management system provides the group with food, medicine, and clean water. Valuing nature and cultural integrity over temporary wealth from the sale of their land, the Dayak Iban illustrate the power of sustainable Indigenous management for climate change mitigation and human well-being.</p>
Dewan Penasihat Pengelolaan Taman Nasional Bunaken (BNPMAB, Bunaken National Park Management Advisory Board)	2004	<p>Dewan Penasihat Pengelolaan Taman Nasional Bunaken (BNPMAB, Bunaken National Park Management Advisory Board) is a landmark case for local co-management of a marine protected area in Indonesia. The initiative brings together government agencies, international partners, and local communities in the collaborative management of the Bunaken National Park in North Sulawesi. The park comprises more than 8,000 hectares of coral reef, extensive seagrass beds, and vast mangrove forests, as well as around twenty-two distinct villages. The 30,000 residents of these coastal and island communities are represented on the management board by the Bunaken Concerned Citizen's Forum (Forum Masyarakat Peduli TN Bunaken).</p> <p>In partnership with the Indonesian Department of Nature Conservation, the board has designed a practical and efficient user fee system that generates revenues for the protected area and its residents, funding a joint patrol system as well as a number of community development projects.</p>



Organization	Year	Project Description
FORMADAT: The Alliance of the Indigenous Peoples of the Highlands in the Heart of Borneo	2015	This trans-border Indigenous Peoples alliance came together in 2004 to build on the shared historical and cultural bonds between the Lundayeh, Kelabit, Lun Bawang, and Sa'ban peoples living in the highlands of the heart of Borneo. The Alliance of the Indigenous Peoples of the Highlands in the Heart of Borneo (FORMADAT) aims to integrate conservation and development at the landscape level and to generate benefits for local people by preserving the rich natural and cultural diversity of the region, an area that includes the largest surviving intact forested and traditionally farmed catchment area on the island of Borneo. Farmers in the region use a traditional wet rice farming system, developed over centuries, which allows the same fields to be farmed continually and is unique in Borneo where most use shifting agriculture. The group has prioritized farming native varieties of rice and fruits, building innovative value-added supply chains to NGOs and networks such as Slow Food International. FORMADAT also works as an advocacy network that actively lobbies for greater land tenure security, Indigenous Peoples rights, and forest protection. Several member communities have conducted territorial mapping and campaigned to gain rights to their traditional lands, including collaborative management of lands inside an Indonesian national park.
Kelompok Peduli Lingkungan Belitung	2015	On an archipelago off the east coast of Sumatra that has been devastated by tin mining and unmitigated industrial development, Kelompok Peduli Lingkungan Belitung is working to rehabilitate, protect, and sustainably manage coastal resources. Community management of coral reefs, mangroves, fishing zones, and tropical forests has led to improved livelihoods and the restoration of a unique marine and coastal ecosystem. The group has effectively created three programs that balance environmental protection with ecotourism, including the Kepayang Island Conservation Center (for training, environmental education and turtle conservation), the Mendanau Mangrove Conservation Center (for mangrove and tropical rainforest protection), and the Batu Mentas Nature Reserve and Tarsius Sanctuary (which protects a threatened population of tarsius). Scuba diving, jungle treks, river tubing, tarsius expeditions, mangrove tours, homestays, fishing tours, and boat rentals all are run by and directly benefit the local population. The group has successfully advocated for the creation of a regional marine conservation plan that includes no-take and sustainable fishing zones as well as five island turtle conservation areas, where more than 12,000 baby turtles have been released over the past five years. More than 45,000 mangrove trees have been replanted to date, and the group oversees community nurseries that cultivate 20,000 seedlings.



Organization	Year	Project Description
Komunitas Adat Muara Tae	2015	<p>Komunitas Adat Muara Tae is a community of Dayak people in Kalimantan fighting for the protection of their customary forests. Of their original 11,000 hectares of land, only 4,000 hectares remain, the rest having been lost to illegal clear-cutting by palm oil, mining, and logging companies. Through community mapping, demarcation of their traditional territory, and advocacy with government and industry, the group is working to achieve legal recognition of their land rights. The community has replanted more than 700 hectares of forest with traditional wood and fruit trees that are becoming increasingly rare due to land clearing for extractive industries. The movement was formed as a means of struggle and cooperation, a way of maintaining, safeguarding, and preserving their culture and the natural resources in the customary forest. Komunitas Adat Muara Tae is a model of peaceful community resistance for forest protection in Indonesia – one community fighting with dignity for their survival.</p>
Yayasan Planet Indonesia	2017	<p>Fighting economic activities detrimental to the environment, Planet Indonesia identifies, under the leadership of the benefiting Dayak communities, sustainable livelihood opportunities through the development of conservation compacts and community businesses. Activities range from forest protection to anti-wildlife trafficking to securing land rights. Business groups have been set up in more than 50 villages, comprising 2,100 members, more than two-thirds of whom are women and/or Indigenous. Community members are trained to run small-scale businesses, savings and loans programs build community capital, a revolving fund covers damages and operational costs, and coaching and mentoring ensures long-term sustainability of each community business. 30,000 hectares of forest have been protected and over 40,000 seedlings planted. To build awareness of the importance of conservation across generations, a fellowship program provides 50 high school students annually with funds to conduct adaptation and mitigation projects.</p>



Organization	Year	Project Description
Bunaken National Park Management Advisory Board (BNPMAB) and Bunaken Concerned Citizen's Forum (FMPTNB) - Indonesia	2004	<p>Dewan Penasihat Pengelolaan Taman Nasional Bunaken (BNPMAB, Bunaken National Park Management Advisory Board) is a landmark case for local co-management of a marine protected area in Indonesia. The initiative brings together government agencies, international partners, and local communities in the collaborative management of the Bunaken National Park in North Sulawesi. The park comprises more than 8,000 hectares of coral reef, extensive seagrass beds, and vast mangrove forests, as well as around twenty-two distinct villages. The 30,000 residents of these coastal and island communities are represented on the management board by the Bunaken Concerned Citizen's Forum (Forum Masyarakat Peduli TN Bunaken).</p> <p>In partnership with the Indonesian Department of Nature Conservation, the board has designed a practical and efficient user fee system that generates revenues for the protected area and its residents, funding a joint patrol system as well as a number of community development projects.</p>
KOMUNTO (Komunitas Nelayan Tomia – Tomia Fishermen Community)	2010	<p>The Komunitas Nelayan Tomia (KOMUNTO, Fishing Community of Tomia) is a community-based organization composed of representatives of fishers' groups from East Tomia, Indonesia. The organization was established in response to shared community concerns regarding foreign commercial fishing, the use of destructive fishing methods, and a vacuum in local government leadership on the sustainable management of Wakatobi natural resources.</p> <p>The initiative encourages the local management of natural resources to improve community wellbeing. It has promoted local participation in zoning and spatial planning of Wakatobi National Park, and established three protected areas around the island of Tomia to allow fish stocks to regenerate. Financial contribution from members fund savings and loan services and support for members with in times of need.</p>



Photo from the Equator Prize Winner:



## 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, Indonesia has 733 PAs reported in the WDPA; of these PAs, 254 (34.7%) have management effectiveness evaluations reported in the global database on protected area management effectiveness (GD-PAME).

- 7.1% (135,467 km<sup>2</sup>) of the terrestrial area of the country is covered by PAs with completed management effectiveness evaluations.
  - 58.4% of the area of terrestrial PAs have completed evaluations.
- 0.1% (4,776 km<sup>2</sup>) of the marine area of the country is covered by PAs with completed management effectiveness evaluations.
  - 2.6% 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.

### OECMs

As of May 2021, there are 0 OECMs in Indonesia reported in the WD-OECM; however, there are 21 unprotected KBAs which may fit the OECM definition. Responding to 'How effective is the management in conserving biodiversity?':

- 2 potential OECMs are 'Effective'
- 8 potential OECMs are 'Partly effective'
- For 10 potential OECMs, the response was 'Don't know'
- For the remaining 1 potential OECM, there is no info

See details in Donald et al., 2019.

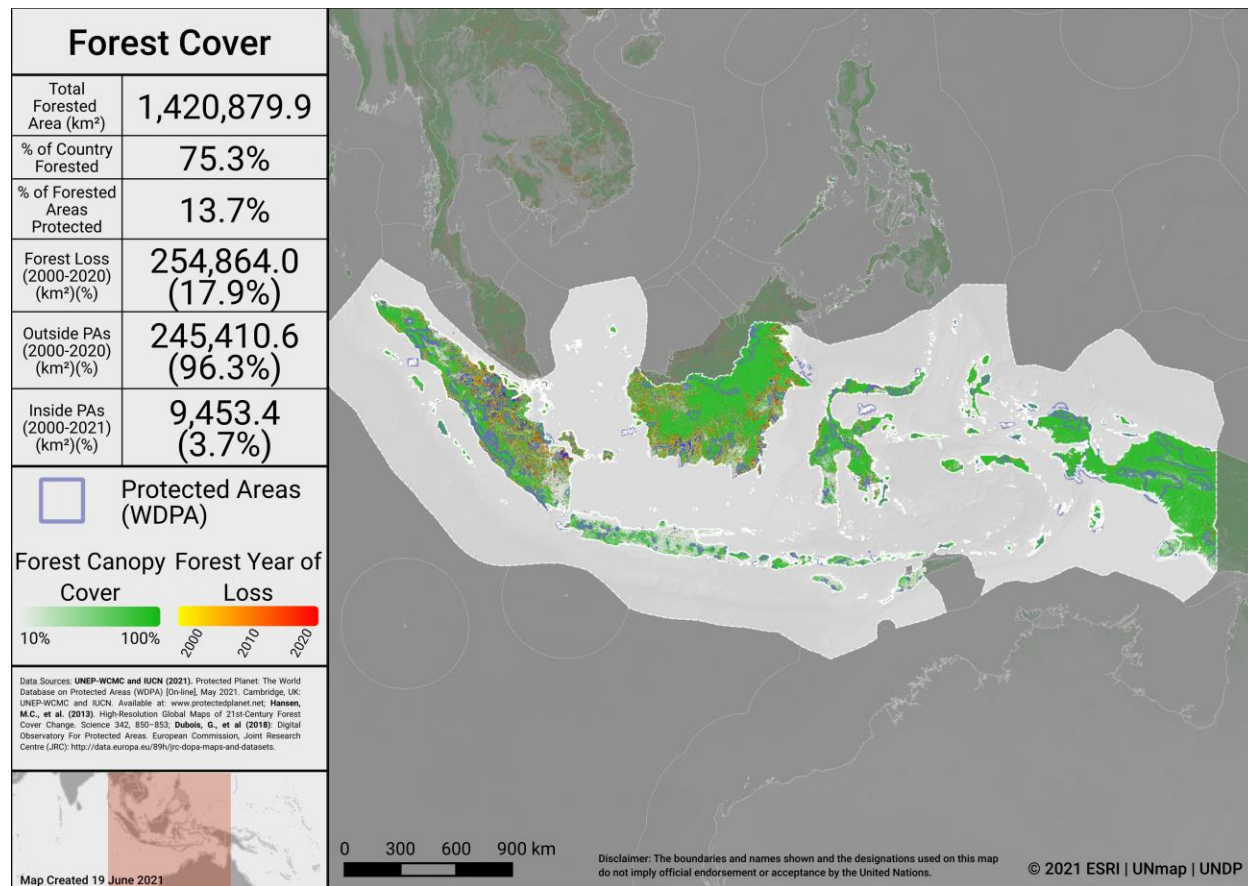
Also see the details presented on conservation effectiveness for Hutan Harapan potential OECM in Annex I.

### Changes in forest cover in protected areas and OECMs

Forested areas in Indonesia cover approximately 75.3% of the country, an area of 1,420,879.9 km<sup>2</sup>. Approximately 13.7% (194,315.3 km<sup>2</sup>) of this is within the protected area estate of Indonesia. Over the period 2000-2020 loss of forest cover amounted to over 254,864.0 km<sup>2</sup>, or 13.5% of the country (17.9% of forest area), of which 9,453.4 km<sup>2</sup> (3.7% of forest loss) occurred within protected areas. The map below shows how forest cover has



changed in Indonesia 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 Indonesia

### 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 East Asia and Southeast Asia on achieving Aichi Biodiversity Targets 11 and 12 took place 15 - 18 September 2015 in Yanji, Jilin Province, China. 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 coverage:**

- 1) Bromo Tengger Semeru, Gunung Merapi, Gunung Ciremai, Manupeu Tana Daru, and Sembilang National Parks designated as areas for restoration
- 2) Establish guidance for the restoration/recovery
- 3) Target area of restoration/recovery on the degraded protected area (terrestrial) are 100,000 Ha Develop capacity building for the restoration implementation.

**Marine coverage:** Establish new MPAs (encourage marine conservation local area)

#### **Ecological representation:**

- 1) Twelve ecoregions prioritized based on biodiversity and representativeness. Representation of low land forest increased to 2100 km<sup>2</sup>, or 6.7% of remaining habitat type (60% increase in coverage)
- 2) Establish essential ecosystem area.

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

- 1) 13 essential ecosystem area will be established in 2015. Establishment Public Forest. Rehabilitate mangrove forest.
- 2) 17 Essential Ecosystem areas established and managed by Collaboration Management



- 3) Improve the protection on habitat of the prioritized species on the 5 partially protected/have yet not protected KBAs.

**Connectivity:**

- 1) Spatial arrangement of the Sulawesi PA system improved based on the terrestrial PA system consolidation plan (including corridors, area expansion and boundary rationalization) for Sulawesi and integration of the plan into the provincial land use plans.
- 2) Develop integrated watershed management in 180 prioritized Watershed.

**Management effectiveness:**

- 1) Increase METT index minimum 70% for 260 protected areas.
- 2) 150 document of management plans of protected areas are developed and endorsed.
- 3) Improved the METT guidance
- 4) Develop capacity building
- 5) Extent of implementation of RBM (Resort-based Management).

**Governance and Equity:**

- 1) the number of village that assisted in buffer zone of protected areas increase 77 villages
- 2) The total area of conservation forest in traditional zone which managed through community partnership are 100,000 ha.

**Integration:** No actions were identified for this element of Target 11.

**OECMs:**

- 1) Improve the management of Biodiversity garden
- 2) Establish new Forest City and Biodiversity Garden in the remaining province.



## NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPs)

Indonesia 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: Realization of sustainable maintenance and improvement of conservation areas Actions: Sustainable management of protected forest*

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

NBSAP Action number	Action (original language from NBSAP)
2.2.3	Formulation of policies on standardization, technology and net production in environmental management -- Number of/total area of protected biodiversity resources with application of sustainable standard/criteria
2.5	Management & conservation of reservoirs, watersheds, situ and other water container buildings -- Number of protected sources of water
2.7	Conservation area management and development of essential ecosystem areas -- Total areas and number of plans for essential area management
3.11	Expansion of marine conservation area into 20 million ha;
3.12	Recovery of land conservation area (Total land conservation recovery area is 250,000 ha)
3.13	Sustainable management of protected forest -- Number of documents on conservation area management
3.14	Integrated management of watersheds -- Amount of integrated management of watersheds (180 KLHK-priority watersheds)
3.15	Essential ecosystem technical assistance -- Number of essential ecosystem units formed (34 units)
3.16	Expansion and sustainable management of lands for agriculture, plantations and animal husbandry -- Total area of land used for agriculture, plantations and animal husbandry



## APPROVED GEF-5, GEF-6, & GCF 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> )	Qualitative elements potentially benefiting (based on keyword search of PIFs)
4867	Yes	already in WDPA	All except Ecosystem services and Connectivity
4892	Yes	already in WDPA	All except Ecologically representative and Connectivity
5171	No	0	Effectively managed; Equitably managed; Connectivity; Integration
5285	No	N/A	All Qualitative Elements
5622	No	N/A	Areas important for biodiversity; Effectively managed; Equitably managed; Integration
6965	No	N/A	All except Ecologically representative
9086	No	N/A	Ecosystem services; Equitably managed; Integration
9239	No	N/A	Ecosystem services; Effectively managed

### Approved Green Climate Fund (GCF) Protected Area-related biodiversity projects

The Green Climate Fund's investments listed as approved projects as of May 2021 were considered. The GCF supports paradigm shifts in both climate change mitigation and adaptation that may impact quality of PAs or contribute to better integration within the wider land- and seascapes around PAs. Only projects with result areas for either or both *Forest and Land Use and Ecosystems and Ecosystem Services result areas* were included.

GCF ID	Project theme	Result area	Target 11 element
FP130	Mitigation	Forest and land use	Integration; Equitably managed; Effectively managed

## 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:

*#OceanAction15560*: Implementation of the Arafura and Timor Seas Regional and National Strategic Action Programs, by United Nations Development Programme (UNDP) (UN entity).

- Area to be added: **5,500 km<sup>2</sup>**.
- Notes on area added: Joint UNDP project with Indonesia and Timor-Leste: 555,000 ha MPA off the coast of Papua Province in Indonesia, in the vicinity of Kolepon Island; and 90,000 ha MPA off the south coast of Timor-Leste.
- Progress report: No progress report submitted (as of March 2021).
- Further details available at:  
<https://oceanconference.un.org/commitments/?id=15560>.

*#OceanAction18259*: Establishment of 4.3 million ha marine conservation areas to reach 20 million ha by 2019, by Ministry of Marine Affairs and Fisheries of the Republic of Indonesia.

- Area to be added: **55,546 km<sup>2</sup>**.
- Notes on area added: Per progress report (Feb 2020): “... successfully established more >6.69 mil ha of marine conservation areas, in total achieved 23.1 mil ha by 2019 (exceeds target of 20 mil ha)” [18.1 mil ha currently reported in WDPA, so increase is ~5 mil ha].
- Progress report: Yes (17 Feb 2020). Overall status: **Completed**.
- Further details available at:  
<https://oceanconference.un.org/commitments/?id=18259>.

*#OceanAction16930*: Inaya Marine Conservation Program (Indonesia), by Nusa Dua Reef Foundation (Non-governmental organization (NGO)).

- 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=16930>.

*#OceanAction14399*: Indonesia Substantially Enlarge its Maritime Conservation Area, by Coordinating Ministry for Maritime Affairs of the Republic of Indonesia (Government).

- Area to be added: see **OA#18259**.
- Progress report: No progress report submitted (as of March 2021).

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- Further details available at:  
<https://oceanconference.un.org/commitments/?id=14399>.

*#OceanAction19193*: Managing and conserving Indonesia's rich marine coastal biodiversity through MPAs, by Wildlife Conservation Society (WCS) (NGO).

- Area to be added: see **OA#18259**.
- Notes on area added: Per progress report (Jan 2020), project is completed: >500,000 ha of new MPAs in West Nusa Tenggara, North Maluku, North Sulawesi, and Aceh from 2017 to date.
- Progress report: Yes (April 2021). Overall status: **Completed**.
- Further details available at:  
<https://oceanconference.un.org/commitments/?id=19193>.

### Ocean Actions improving MPA or OECM coverage post-2020:

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

- Area to be added: 373,500 km<sup>2</sup>.
- Notes on area added: WCS will support the expansion and creation of approximately 431,100 km<sup>2</sup> of MPAs at four provinces: Aceh, North Maluku, North Sulawesi and West Nusa Tenggara, and two national MPAs [57,500 km<sup>2</sup> is covered by other Ocean Actions and recent MPA increases in the country] – see information in country profile for WCS MPA project: <https://mpafund.wcs.org/>
- Progress report: Yes (2019), status=On Track.
- Further details available at:  
<https://oceanconference.un.org/commitments/?id=16178>.

### Other Ocean Actions

Other Ocean Actions submitted as voluntary commitments for SDG 14.5, will also create benefits for the qualifying elements of Aichi Biodiversity Target 11:

*#OceanAction15500*: KONSERVASI LAUT INDONESIA LESSER SUNDA INDONESIA, by BPSPL DENPASAR (Government).

- Types of actions involved: MPA management and/or enforcement; trainings; restoration; data collection; monitoring.
- Target 11 element addressed: Effectively managed.
- Progress report: No progress report submitted (as of May 2021).
- Further details available at:  
<https://oceanconference.un.org/commitments/?id=15500>

## OTHER ACTIONS/COMMITMENTS

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

*1. Indonesia has designated more than 23 million hectares as protected areas 2. encourage and utilize protected areas as environmentally sound economic growth centers, such as for ecotourism, forest birthing, forest healing and development of medicinal plants and other genetic resources.*



## ANNEX I

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### ADDITIONAL DETAILS ON POTENTIAL OECS

*Hutan Harapan*, Sumatera, Community-based MPA: Ay and Rhun Island, Maluku, Tana' Ulen Lapan River:

- **Overview:** Hutan Harapan is still rich in biodiversity and is an important habitat for over 1,350 different species; 133 of which are globally threatened; includes 2 IBAs, 238 coral species identified and 683 fish species found in Banda Sea; effort underway to revitalize Sasi [traditional wisdom for seasonal closure] to sustain fisheries, one of nine tana' ulen forest areas mapped and documented in the wilayah adat of Hulu Bahau (Kalimantan); tana' ulen (forest area with restricted access), generally chosen based on good hunting ground with abundance of wildlife, a stream or river where easy to catch fish, valuable timber, etc.; these areas are in the process of being registered as ICCAs.
- **Boundaries & Geographical Space:** 98,000 ha (in the southern part of Sumatra); site is an Ecosystem Restoration Concession (ERC), a new category of forestry concession in Indonesia, 47,968.74 ha, declared by community with village regulation and traditional law through participatory process, ~8,821 ha (covers headwaters of several streams that flow into the Lapan and then Berini rivers); tana' ulen boundaries tend to follow natural boundaries (ridges, mountains, and rivers).
- **Governance Type:** managed by a private company; forest area is categorized under state forest land; collaboration and livelihood zones have also been designated to work with communities living inside the concession, village is managed under national government authority but in Ay and Rhun Island community has traditional rights based on Adat law to manage marine areas, Indigenous community governance (long-standing tradition among Dayak Kenyah).
- **Permanence:** Conservation measures in protection zone can be as long as the duration of the license (100 or 60 years) and even so during the restoration period, measure in place for the medium term; any change will require process of communication and consensus with community, measures are in place year round, over the long-term.
- **Management Objectives:** improving the forest resource productivity, protecting/conserving the remaining lowland rainforest, sustaining livelihood of the communities that depend on forest resources, developing innovative methods for rehabilitating degraded lands and secondary forests as well as restoring the ecosystem functions; biodiversity conservation is an implicit management objective, sustain fisheries, develop the area as marine tourism destination, and to sustain traditional wisdom; not yet measured using Indonesia MPA Management Effectiveness Evaluation tool (EKPP3K) but it will soon use this tool – plan is to evaluate management effectiveness once every two years, an integral part of the larger Indigenous territory within which they are embedded and provide specific

social, economic, and environmental services; conservation objectives of 'sustainable use' and 'inter-generational' are explicit.

- **Conservation Effectiveness:** ERCs open possibility for biodiversity conservation in Indonesia's production forest areas in a long run; de facto logging moratorium applied in ERCs provides opportunity for long term biodiversity conservation; conservation effectiveness of ERCs can be measured at species, site, habitat, and landscape levels, area just recently declared (Dec 2015); to measure effectiveness, there is initial effort to train local communities to conduct participatory reef monitoring, management effectiveness can be evidenced by the good status of the forest and its biodiversity, and the lack of threats and compliance to the regulations by local people.

See full details in collation of OECM case studies (IUN, 2017)



## ANNEX II

### FULL LIST OF TERRESTRIAL ECOREGIONS

Ecoregion Name	Area (km <sup>2</sup> )	% of Global Ecoregion in Country	% of Country in Ecoregion	Area Protected (km <sup>2</sup> )	% Protected in Country
Banda Sea Islands moist deciduous forests	7,495.8	100.0	0.4	1,102.7	14.7
Biak-Numfoor rain forests	2,809.6	100.0	0.1	592.5	21.1
Borneo lowland rain forests	290,313.4	68.2	15.4	8,303.6	2.9
Borneo montane rain forests	80,981.6	68.2	4.3	22,377.6	27.6
Borneo peat swamp forests	46,198.7	68.8	2.4	4,780.0	10.3
Buru rain forests	8,585.8	100.0	0.5	68.5	0.8
Central Range Papuan montane rain forests	74,502.4	43.5	3.9	21,036.9	28.2
Eastern Java-Bali montane rain forests	15,829.3	100.0	0.8	1,171.5	7.4
Eastern Java-Bali rain forests	53,666.2	100.0	2.8	1,351.4	2.5
Halmahera rain forests	26,744.5	100.0	1.4	2,049.5	7.7
Lesser Sundas deciduous forests	39,281.0	100.0	2.1	3,019.0	7.7
Mentawai Islands rain forests	6,469.6	100.0	0.3	1,909.0	29.5
New Guinea mangroves	20,796.5	77.9	1.1	5,721.9	27.5

<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>
Northern New Guinea lowland rain and freshwater swamp forests	59,323.1	44.1	3.1	13,801.2	23.3
Northern New Guinea montane rain forests	16,583.5	71.5	0.9	3,386.6	20.4
Papuan Central Range sub-alpine grasslands	9,720.5	62.7	0.5	6,031.1	62.0
Peninsular Malaysian rain forests	5,653.9	4.5	0.3	115.8	2.0
Seram rain forests	19,275.9	100.0	1.0	2,000.3	10.4
Southern New Guinea freshwater swamp forests	50,459.7	50.7	2.7	8,530.5	16.9
Southern New Guinea lowland rain forests	75,406.0	61.6	4.0	5,332.2	7.1
Southwest Borneo freshwater swamp forests	36,601.8	100.0	1.9	5,225.2	14.3
Sulawesi lowland rain forests	115,802.6	100.0	6.1	8,210.0	7.1
Sulawesi montane rain forests	75,471.7	100.0	4.0	11,122.8	14.7
Sumatran freshwater swamp forests	17,994.6	100.0	1.0	693.8	3.9
Sumatran lowland rain forests	258,288.4	100.0	13.7	18,306.0	7.1
Sumatran montane rain forests	72,617.8	100.0	3.8	23,159.7	31.9
Sumatran peat swamp forests	87,120.5	100.0	4.6	6,685.0	7.7

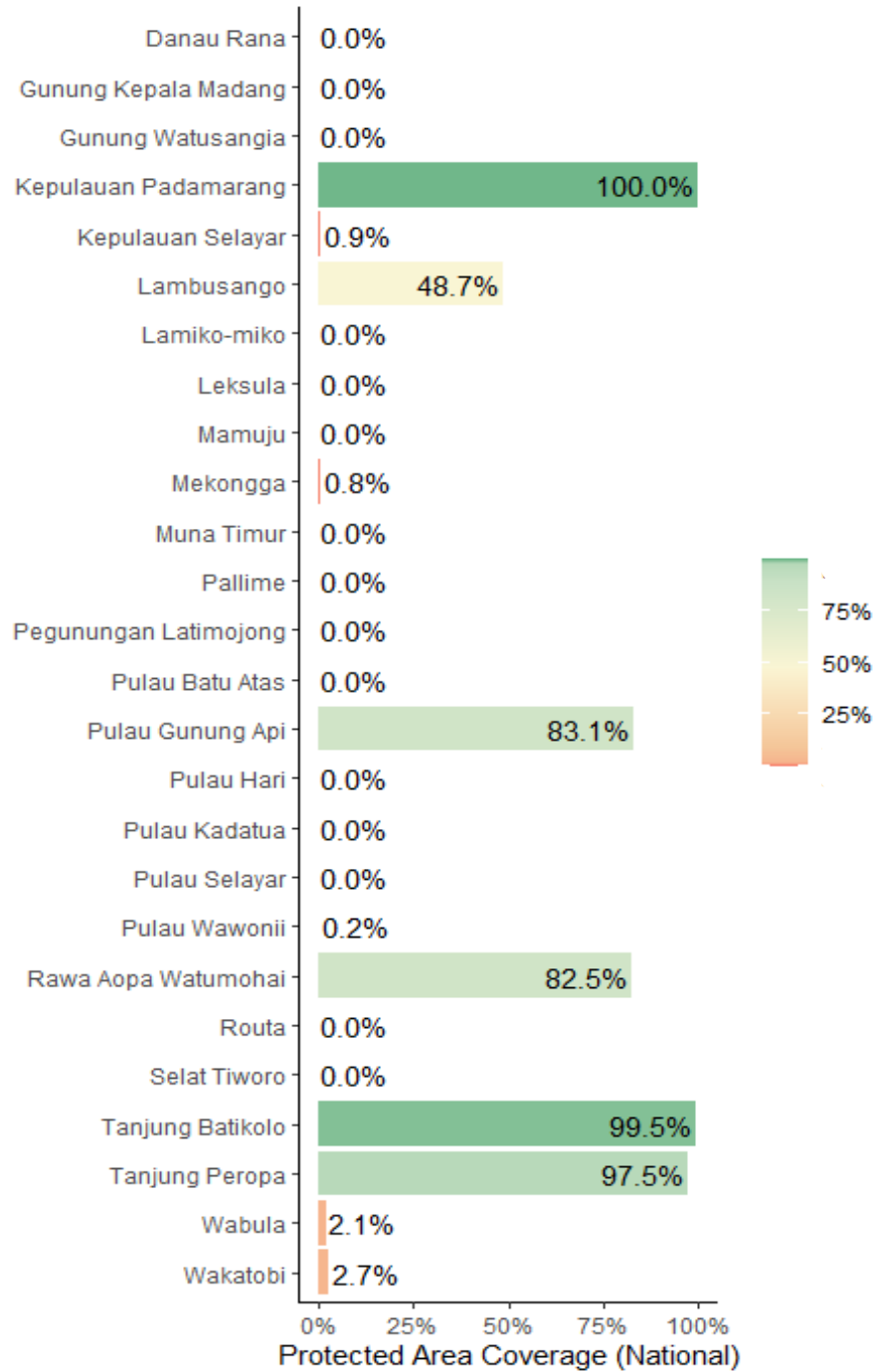


<b>Ecoregion Name</b>	<b>Area (km<sup>2</sup>)</b>	<b>% of Global Ecoregion in Country</b>	<b>% of Country in Ecoregion</b>	<b>Area Protected (km<sup>2</sup>)</b>	<b>% Protected in Country</b>
Sumatran tropical pine forests	2,748.0	100.0	0.1	1,085.6	39.5
Sumba deciduous forests	10,720.7	100.0	0.6	961.7	9.0
Sundaland heath forests	75,633.7	99.2	4.0	7,366.1	9.7
Sunda Shelf mangroves	29,081.9	78.0	1.5	3,365.1	11.6
Timor and Wetar deciduous forests	18,487.2	55.4	1.0	934.0	5.1
Trans Fly savanna and grasslands	8,317.5	31.2	0.4	4,160.3	50.0
Vogelkop-Aru lowland rain forests	77,059.7	100.0	4.1	7,100.5	9.2
Vogelkop montane rain forests	21,850.7	100.0	1.2	12,207.7	55.9
Western Java montane rain forests	26,171.0	100.0	1.4	2,032.2	7.8
Western Java rain forests	41,480.9	100.0	2.2	836.1	2.0
Yapen rain forests	2,406.7	100.0	0.1	1,127.7	46.9



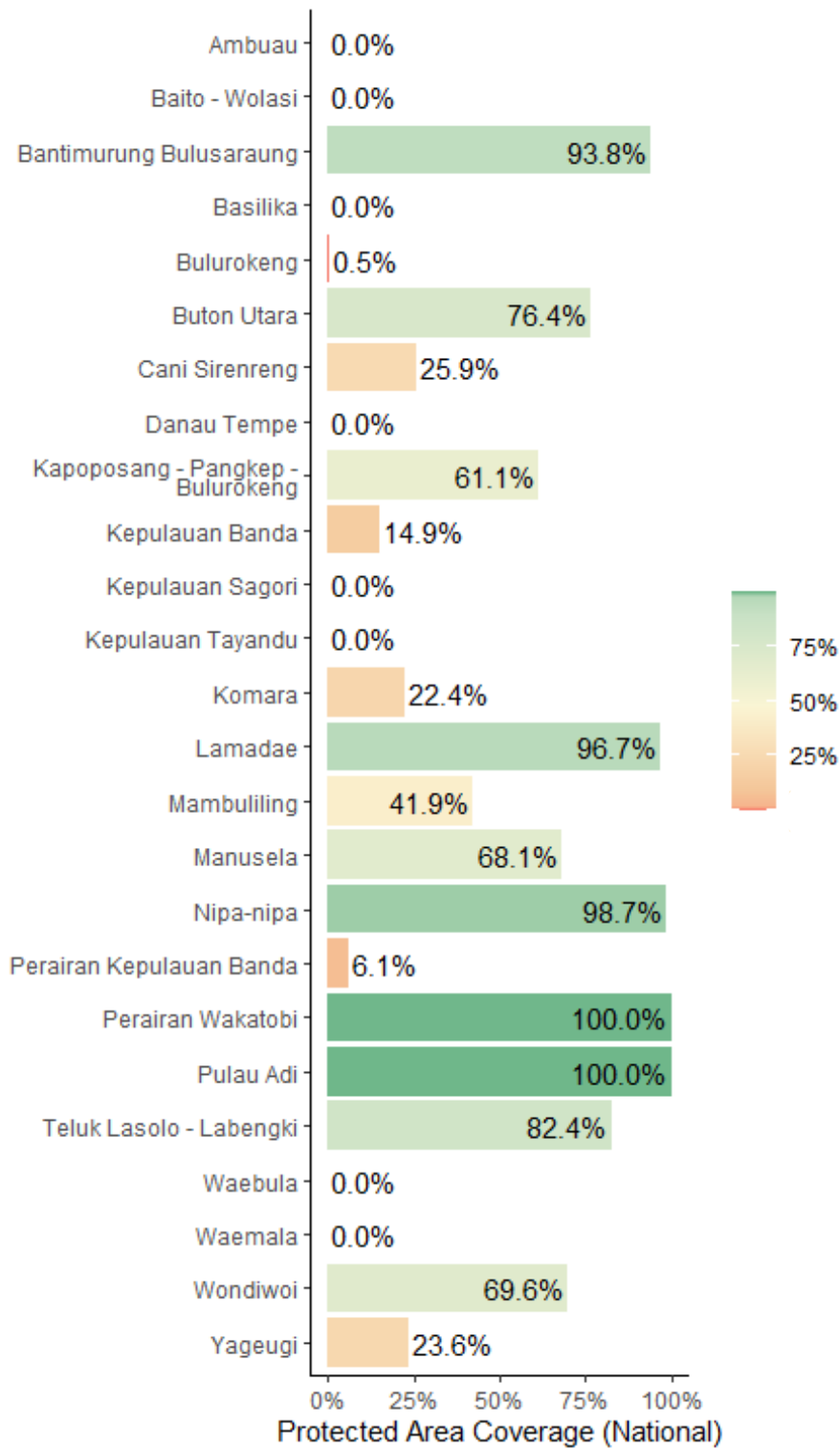
# ANNEX III

## KBA GRAPHS



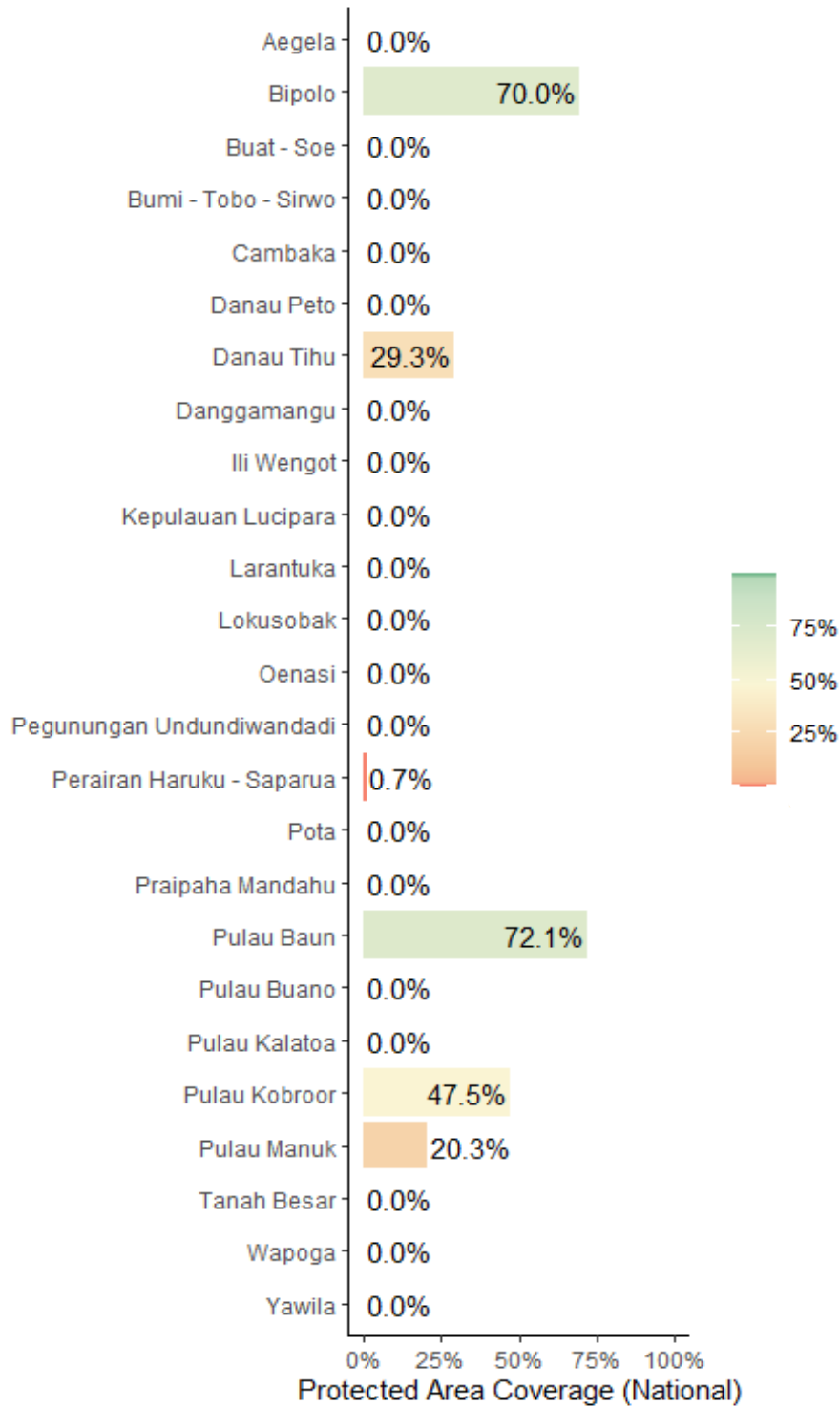
Key Biodiversity Area Coverage (KBA) in Indonesia





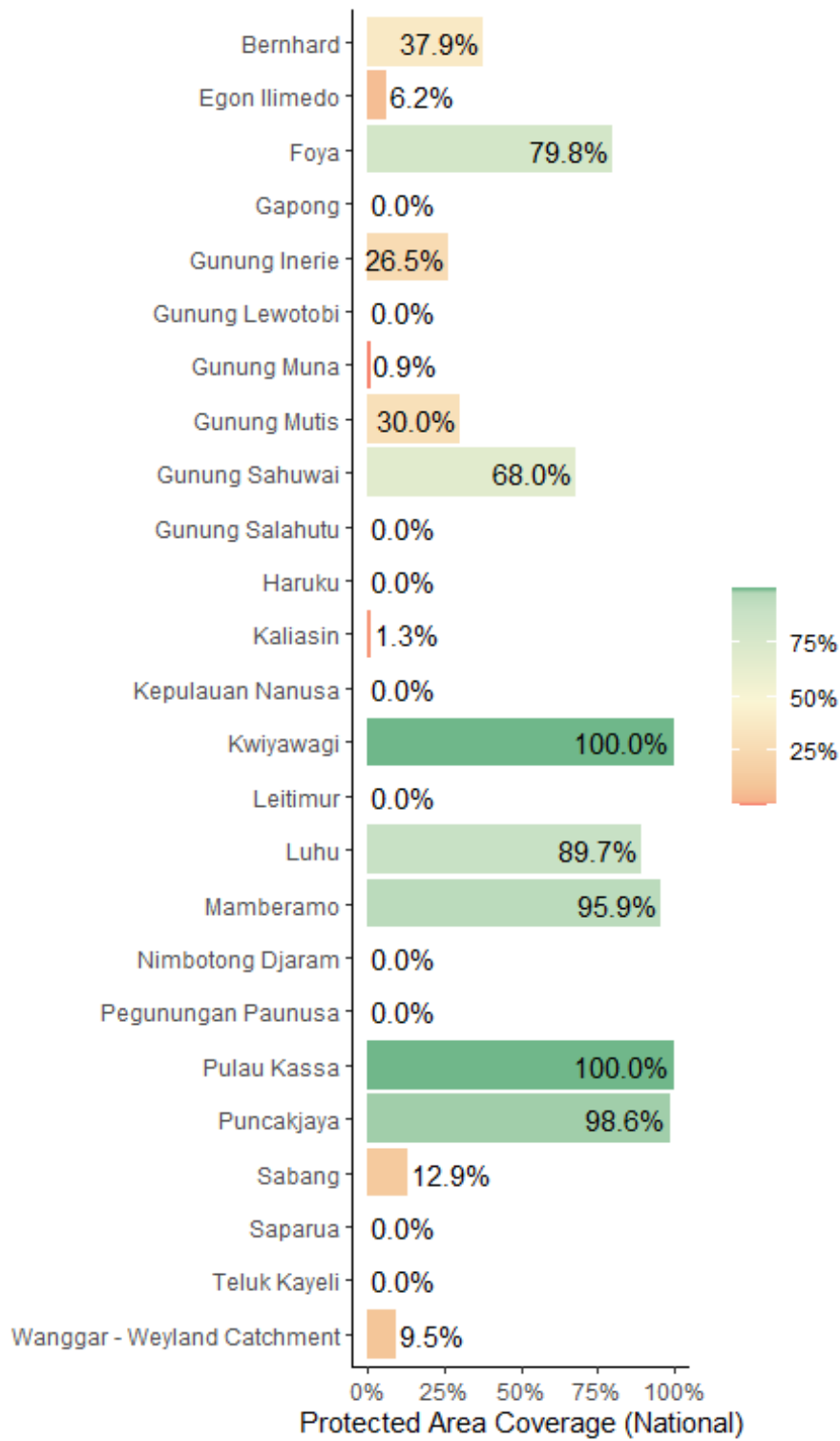
Key Biodiversity Area Coverage (KBA) in Indonesia





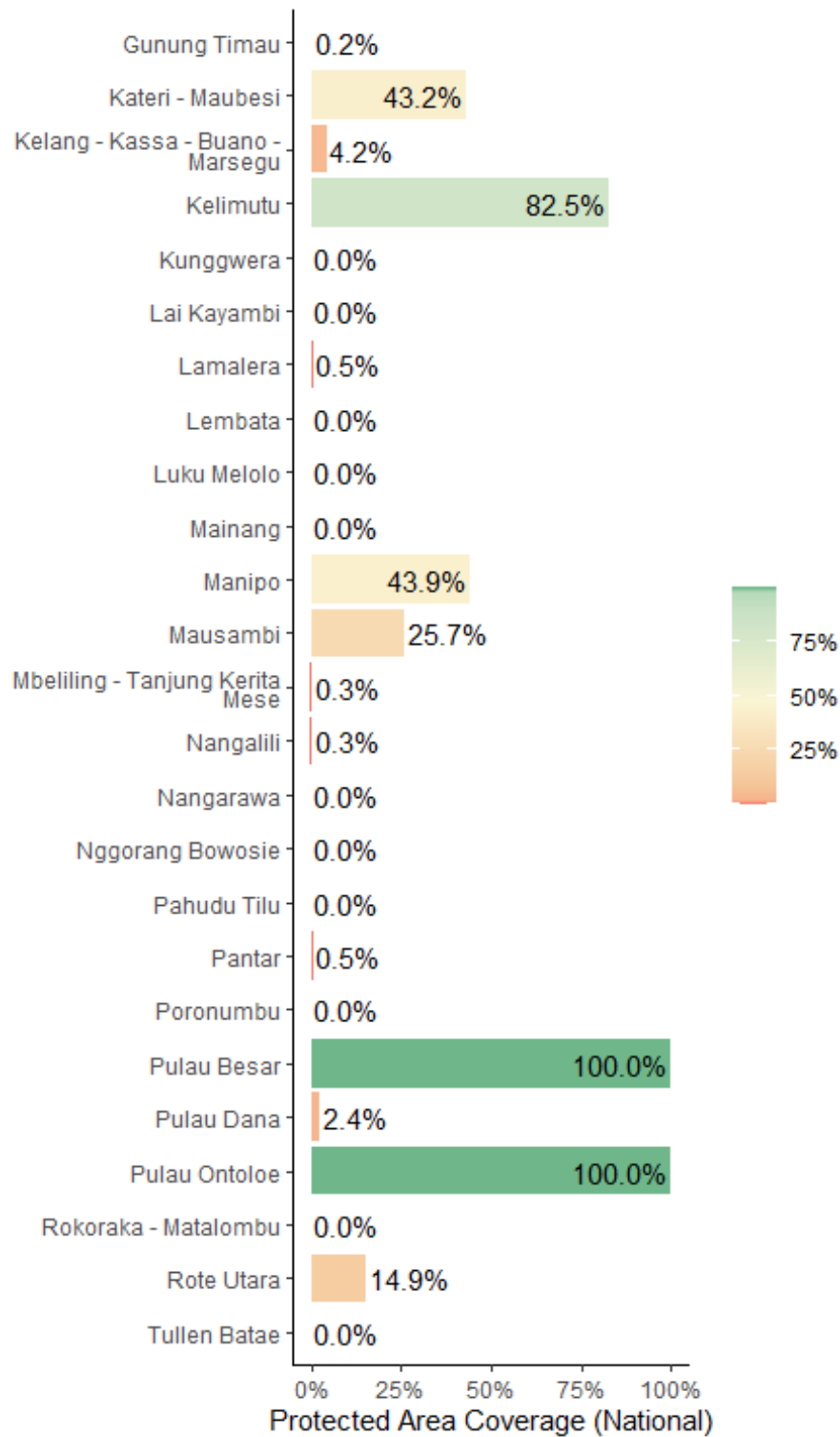
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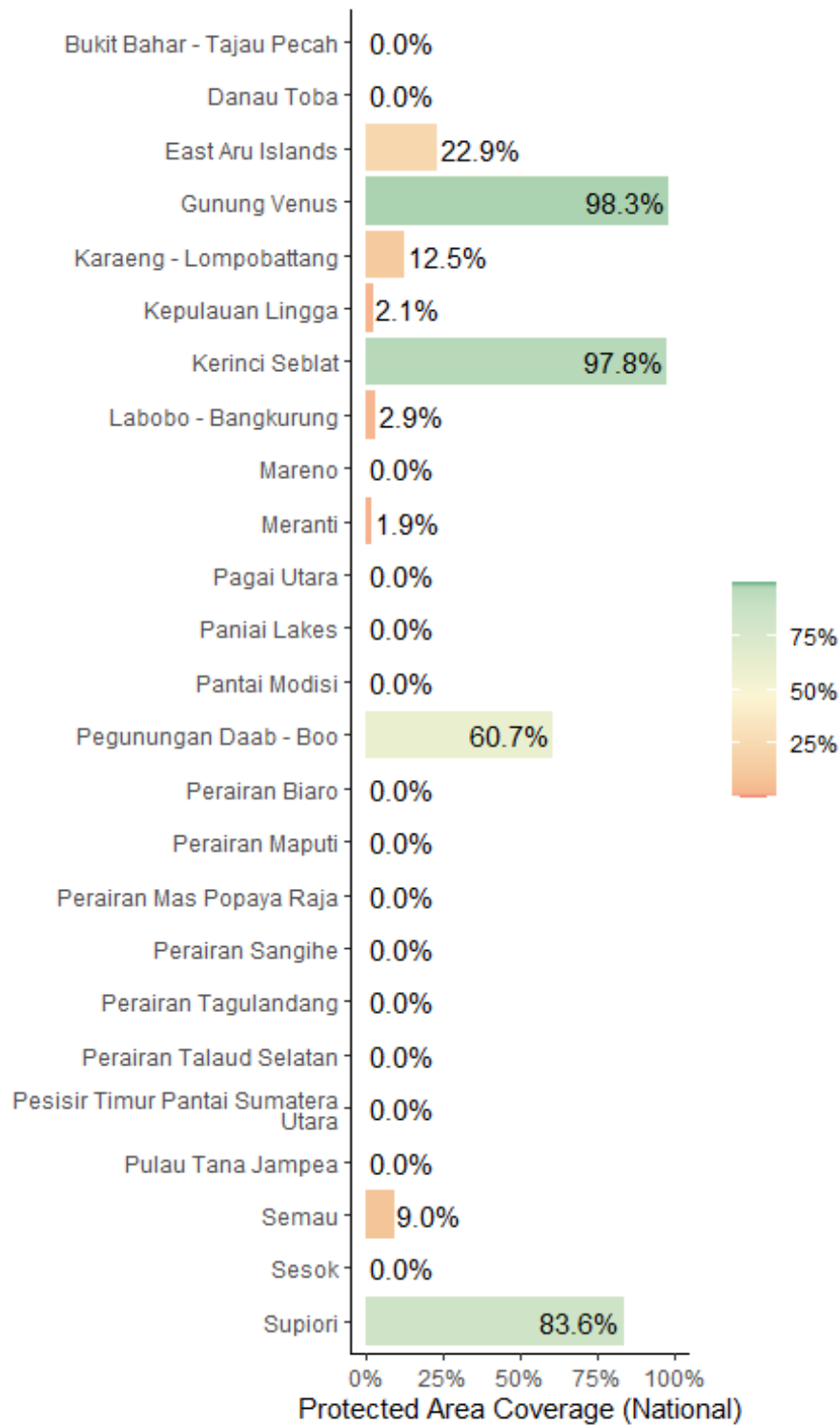
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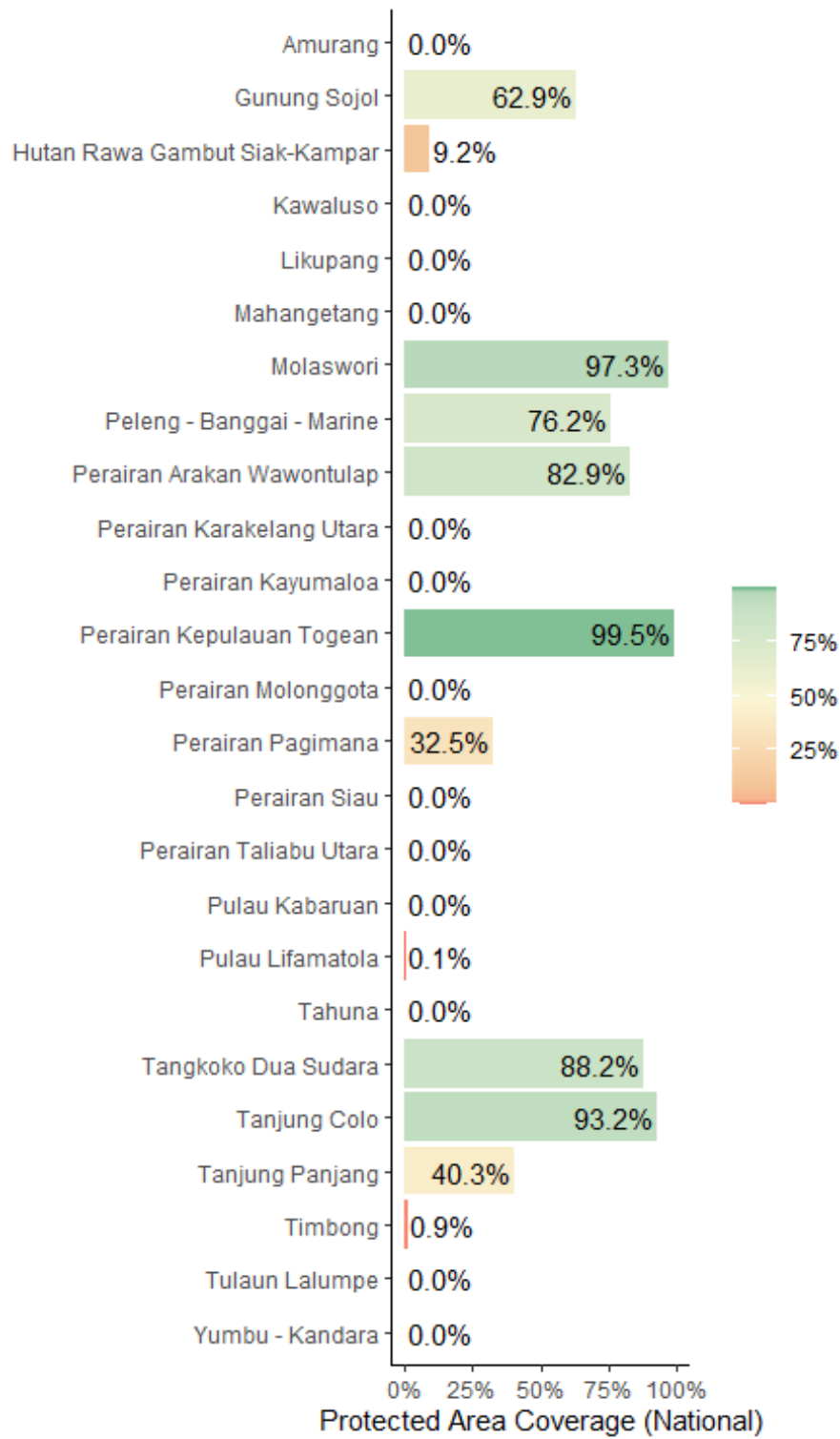


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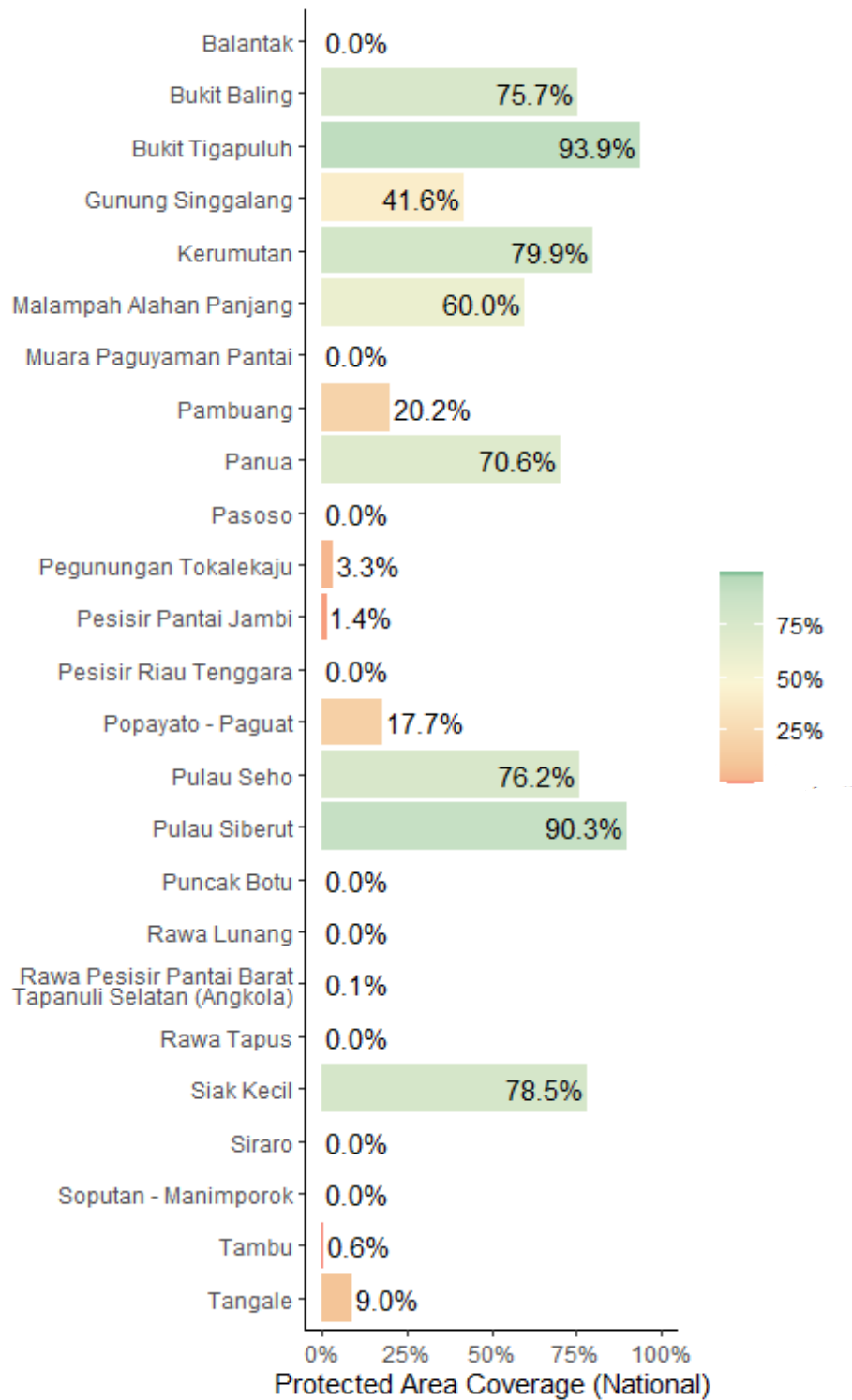
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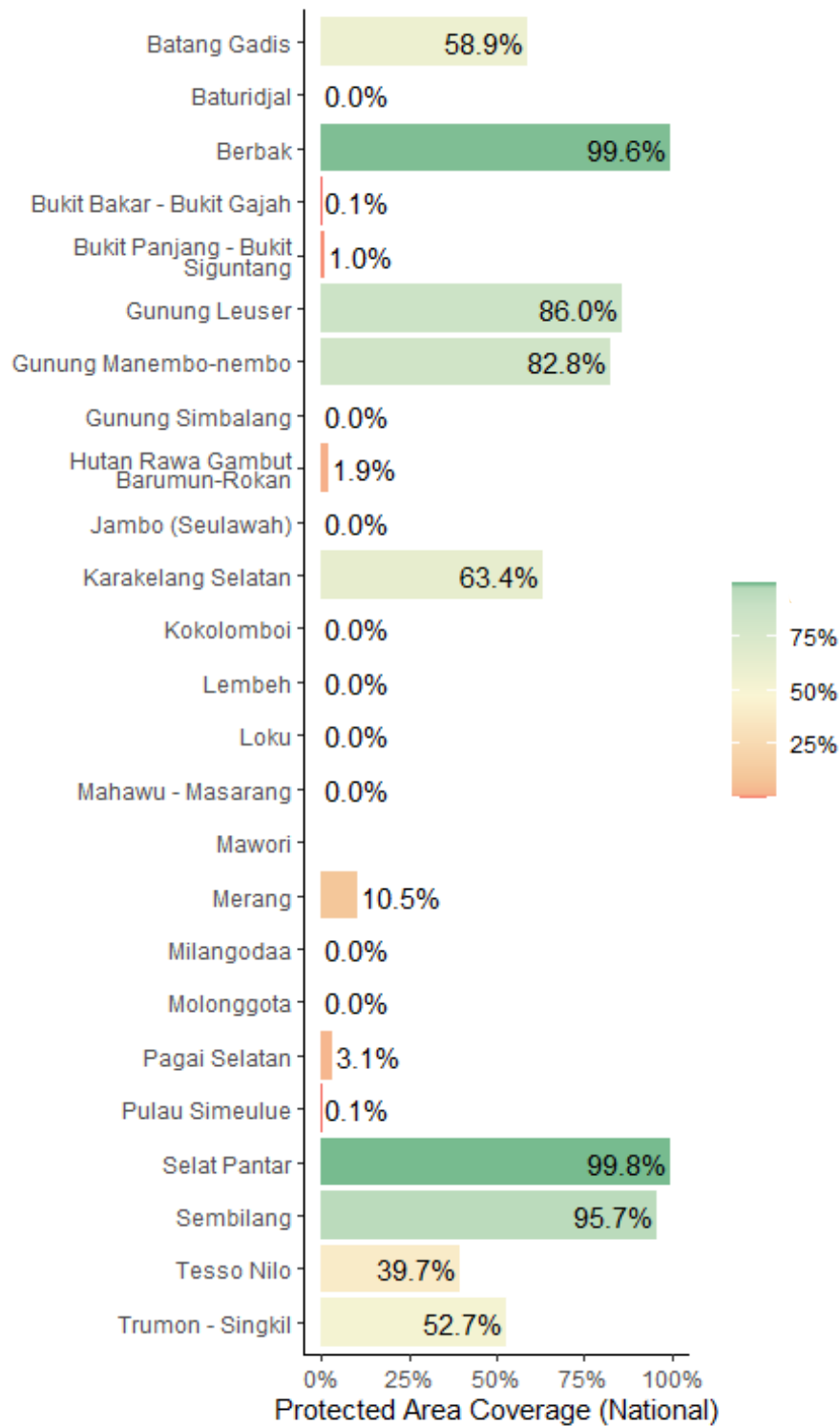
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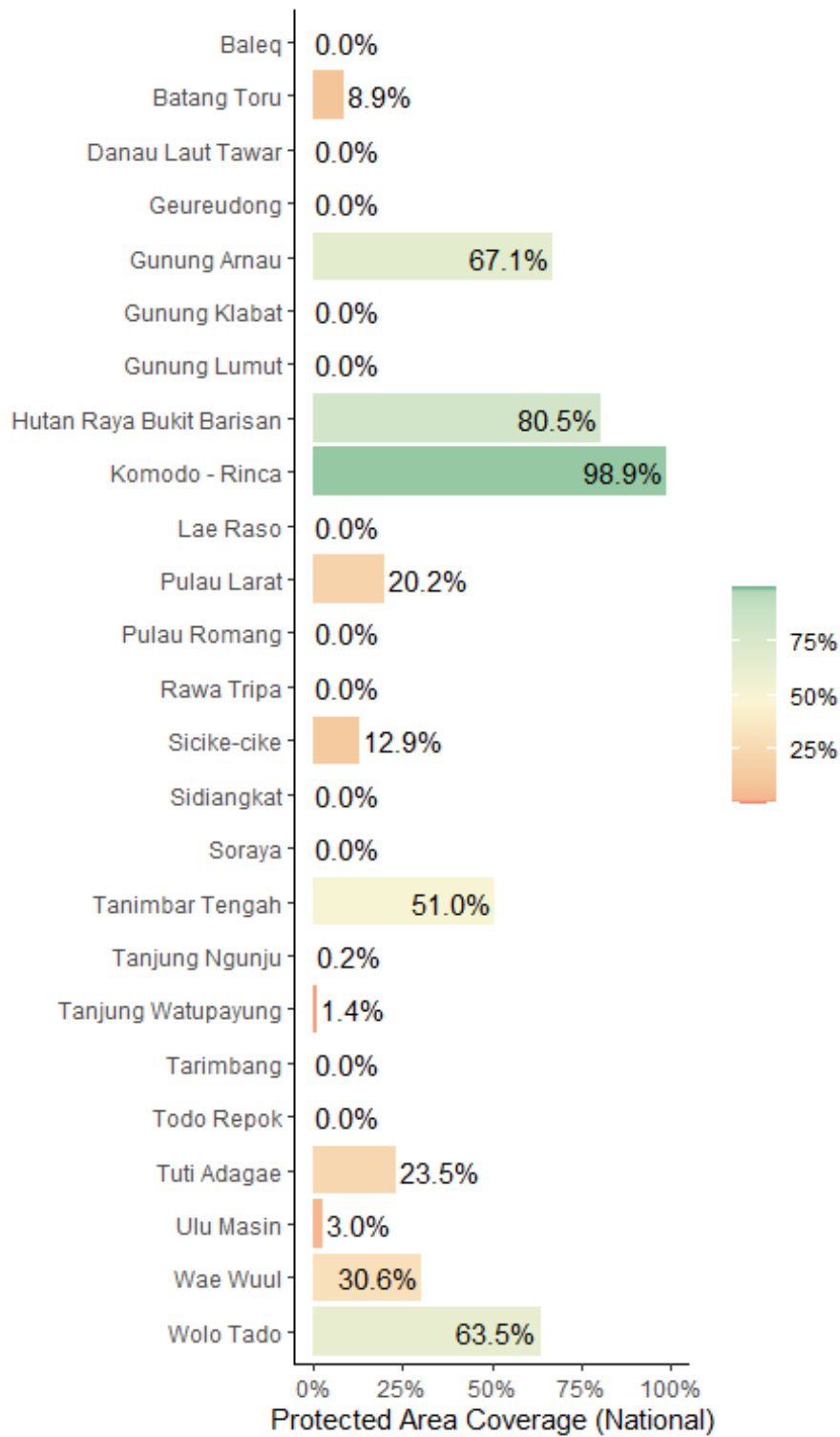


Key Biodiversity Area Coverage (KBA) in Indonesia



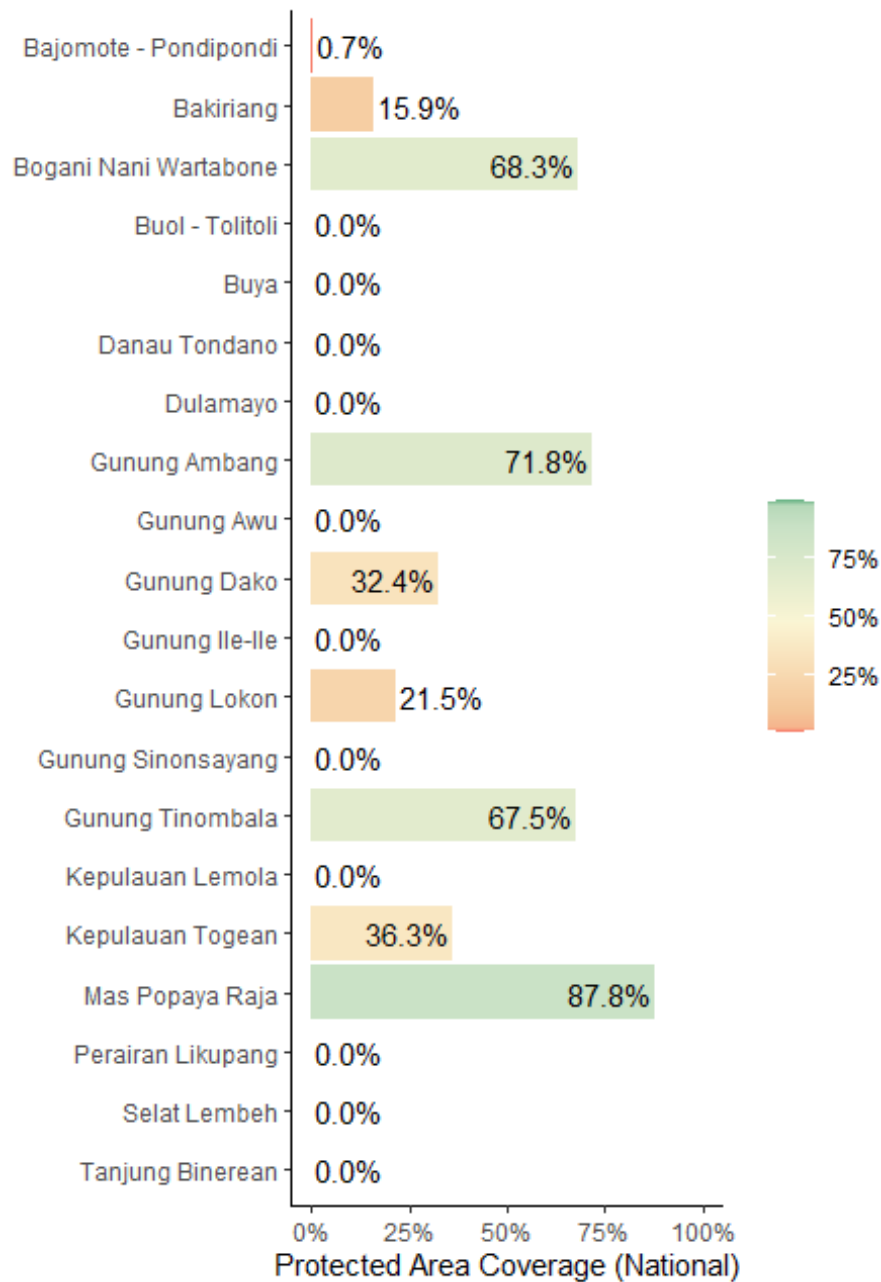
Key Biodiversity Area Coverage (KBA) in Indonesia





Key Biodiversity Area Coverage (KBA) in Indonesia





Key Biodiversity Area Coverage (KBA) in Indonesia



## ANNEX IV

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### ADDITIONAL DETAILS ON PPAs

- There is no formal definition for a Private Protected Area (PPA) under that name in Indonesian legislation. However, the Ministry of Environment and Forestry (MoEF) identified PPAs in a 2011 report to the Convention on Biological Diversity [Indonesia's PoWPA Action Plan]. In the report, authors at the MoEF emphasized the potential role of “protected areas managed by a private party,” rather than of privately-owned protected areas.
- Almost all the forests are publicly owned/administered by government agencies (~1% under the categories of ‘area designated for Indigenous Peoples and local communities’; <3% are ‘areas owned by individuals and firms’)
- Only one privately-owned area has been dedicated as a PPA in Indonesia (see Love &O2 case study). This area was created through a donation of land by an Indonesian national to a conservation NGO established expressly for the purpose of conservation.

#### Case studies/best practices:

- *Bukit Tigapuluh Ecosystem Restoration Concession*: **41,970 ha** of forest, formerly leased and logged. The area is located in eastern Sumatra, and directly abuts the southern edge of the 127,698 ha Bukit Tigapuluh National Park, which contributes to a coherent PA network, ensuring the extension of habitat for the major forest ecosystem and its services, as well as certain high-priority megafauna.
- *Taman Safari Park, West Java Province*: **558 ha**, a for-profit company, operating three “animal theme parks” located in Java and Bali. Their primary purpose is to support significant and endangered species.
- *Hutan Harapan (Forest of Hope)*: **98,000 ha**, in lowland rainforest formerly under logging concessions on the islands of Sumatra. The Hutan Harapan concession was coordinated by Burung Indonesia, an affiliate of BirdLife International and the Royal Society for the Protection of Birds (RSPB). Two contracts cover two adjacent forest areas, with terms of 60 and 90 years respectively.
- *Love &O2*: Love &O2 is an Indonesian NGO, which was created in 2016. That same year, Delia von Rueti, an Indonesian national, donated **2500 ha** of private land to the NGO for the creation of a protected area with high conservation value. The land is situated in the Central Kalimantan rainforest.

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



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