



TECHNICAL PAPER: THE RELATIONSHIP BETWEEN KEY BIODIVERSITY AREAS AND OTHER DESIGNATIONS

Wildlife Practice, February 2017

This document is a technical paper aiming to provide some clarity around Key Biodiversity Areas (KBAs) and other designations, explaining the relative niches and roles of each and how they fit together.

This technical paper covers the following:

- Key Biodiversity Areas
- WWF Global 200 Ecoregions and WWF priority places
- Protected Areas
- High Conservation Value Areas
- Ramsar Sites
- World Heritage Sites
- Ecologically or Biologically Significant Marine Areas

This paper has drawn from the document “Applications of Key Biodiversity Areas: End-user Consultations”, available [here](#), which provides additional context and is useful further reading.

What are Key Biodiversity Areas?

KBAs are **sites contributing significantly to the global persistence of biodiversity** in terrestrial, inland water and marine environments. KBAs are at the ‘site’ scale, so very different to hotspots, ecoregions, wilderness areas etc.

A **global standard** to identify such sites has now been adopted by the IUCN Council following extensive consultation, and includes specific criteria and quantitative thresholds focussed on five aspects:

- A. Threatened biodiversity;
- B. Geographically restricted biodiversity;
- C. Ecological integrity;
- D. Biological processes; and,
- E. Irreplaceability through quantitative analysis.

The standard builds on more than 40 years of experience in identifying sites for different taxonomic, ecological or thematic subsets of biodiversity, in particular Important Bird and Biodiversity Areas from BirdLife International, but also Alliance for Zero Extinction sites and several others. The KBA Standard provides an overarching common framework for harmonising these approaches and a common “currency” for site conservation. It is a system that can be applied in a consistent, repeatable way by different users over time, helping to ensure that KBA identification is objective, transparent and rigorous through application of quantitative thresholds.

The “**World Database of Key Biodiversity Areas**” ([here](#)) includes an interactive online map of KBAs with links to documentation for each site (this documentation is intended to be detailed, but will need to be built up over time). In addition, KBA shapefiles will be available on request for non-commercial use, and are currently provided via the [Integrated Biodiversity Assessment Tool](#) at a fee for commercial purposes. KBAs currently in the database include Alliance for Zero Extinction (AZE) sites, BirdLife Important Bird and Biodiversity Areas (IBAs), IUCN Freshwater KBAs and KBAs identified through the Critical Ecosystem Partnership Fund (CEPF) hotspot profiling process. These sites will be re-assessed over time against the new global standard.

The **KBA Partnership** includes eleven of the world’s leading nature conservation organisations¹, which have come together to:

- identify, map and document thousands of Key Biodiversity Areas worldwide;
- promote targeted conservation action in Key Biodiversity Areas; and
- inform and influence public policy and private sector decision-making.

The Partners have agreed to focus for the initial five years of the Partnership on “**identifying, documenting, updating, and/or monitoring KBAs**”, in order to strengthen the global KBA portfolio.

The **KBA identification process** is a highly inclusive, consultative and bottom-up exercise. Anyone with appropriate scientific data may propose a site to qualify as a KBA, although consultation with stakeholders at the national level (both non-governmental and governmental organizations) is required during the proposal process. Any site proposal must undergo independent scientific review. This is followed by the official site nomination with full documentation (which must meet the [Documentation Standards](#) for KBAs.) Sites confirmed by the KBA Secretariat to qualify as KBAs will then appear on the “World Database of KBAs”.

KBA data and information are envisaged to have several roles, including;

- **Informing the identification of priority sites for legal protection**, including designation by international conventions: e.g. completing ecologically-representative protected area networks, candidate Ramsar sites.
- **Guiding the management of protected areas and other effective area-based conservation measures (OECMs)**: Information and data on the biodiversity elements within a KBA can help inform management and sustainable use decisions for statutory designated protected areas or other site-based conservation mechanisms (e.g. private protected areas, indigenous reserves, conservation easements, etc.).
- **Supporting private sector decision making**: e.g. risk management, informing Environmental Impact Assessments, Strategic Environmental Assessments etc. It should be noted that KBAs are not intended to be ‘no-go’ areas, although businesses will be encouraged to take special measures to reduce environmental impacts on KBAs. The KBA Partners are currently developing “*Guiding Principles and Recommendations for Responsible Business Operations in and around KBAs*”.
- **Guiding investment**: enabling donors to ensure that conservation funding is directed to the most important places for the global persistence of biodiversity, e.g. through the GEF and other funding sources. In addition, KBAs can and do inform environmental safeguards of international financing institutions as Critical Habitats or similar categories (e.g. International Finance Corporation.)
- **Informing land/sea use planning**: KBAs can be used in land and sea use planning at various levels as sites of high conservation value where certain types of activities such as sustainable use and conservation should be encouraged.

¹ BirdLife International, IUCN, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility (ex officio), Global Wildlife Conservation, NatureServe, Royal Society for the Protection of Birds, WWF, the Wildlife Conservation Society.

- **Informing extractive and other sectors:** KBAs may also be integrated into legislation, regulatory mechanisms, standards or certification schemes of relevant production sectors (e.g. linear infrastructure, forestry, agriculture, mining.)
- **Providing focus for the work of international, national and local NGOs:** As sites which contribute significantly to the global persistence of biodiversity, KBAs can be a useful tool for NGO priority setting.
- Providing **additional recognition** for sites that currently lack recognition from governments and others, e.g. indigenous peoples and community conserved areas; corridors of unprotected land providing crucial genetic exchange between protected areas, etc.
- **Supporting stabilisation of land tenure:** in some cases, identification of KBAs has provided indigenous peoples and community groups with additional arguments to help secure their collective governance over territories and natural resources.

The KBA effort has gained significant traction, with several developments meaning that the identification of areas as KBAs can support their improved conservation management. For example;

- The GEF-6 Biodiversity Strategy requires that protected areas established with GEF support are globally significant (i.e. meet the KBA criteria) and explicitly directs support to improving protected area financial sustainability towards protected areas that meet these criteria.²
- Within the World Bank’s recently concluded Environmental and Social Framework, the definition of “Critical Habitat”, which sets the bar for the most stringent lending safeguards, draws directly from a subset of the criteria for the identification of KBAs.³ The International Finance Corporation’s Performance Standard 6 definition of “critical habitat” also draws heavily on earlier KBA criteria.
- The percentage of Key Biodiversity Areas covered by Protected Areas is being used as an indicator for the UN Sustainable Development Goal 15 (Life on Land) and 14 (Life Below Water).⁴
- Coverage of KBAs is an indicator for CBD’s Aichi Target 11 on Protected Area networks.

Figure 1: Global map of KBAs. Interactive online map including information on each KBA is available [here](#).



² [GEF-6 Biodiversity Strategy](#), see p.35*

³ World Bank [Environmental and Social Framework](#), August 4th 2016

⁴ [Sustainable Development Goals Report 2016](#), see p.39 and 41

As can be discerned from Figure 1, there is still some work to do to ensure the KBA portfolio is representative regionally (eg currently there are more KBAs in Europe than most other regions), as well as taxonomically representative (a large number of the current KBAs have been identified based on birds, additional assessments for other taxa are now a priority.)

WWF Global 200 Ecoregions

The WWF Global 200 (G200) Ecoregions were developed by WWF scientists in collaboration with regional experts around the world, as the first comparative analysis of biodiversity to cover every major habitat type, spanning 5 continents and all the world's oceans (although noting that high seas/deep sea areas have not been systematically considered).

The aim of the Global Ecoregions analysis was to ensure that the full range of ecosystems is represented within regional conservation and development strategies, so that conservation efforts around the world contribute to a global biodiversity strategy.

How were WWF ecoregions selected?

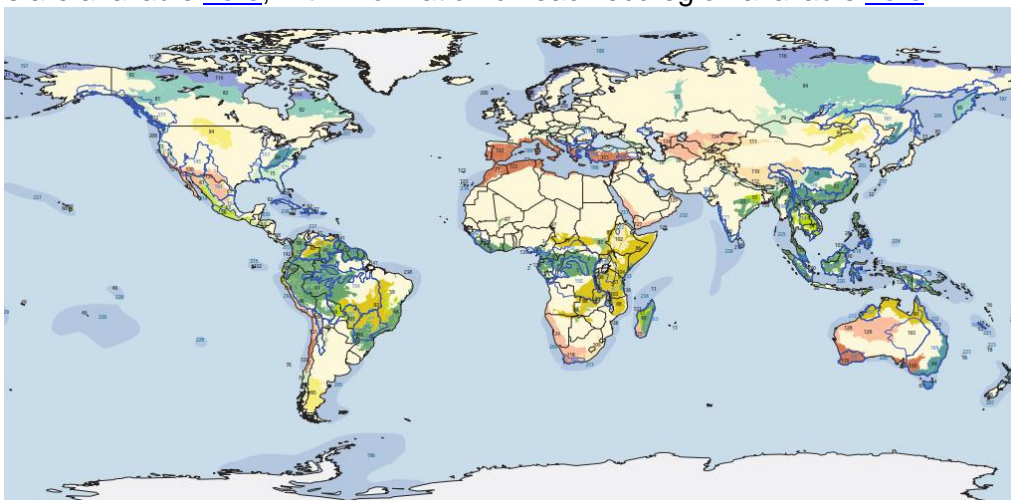
The WWF G200 Ecoregions were chosen from outstanding examples of each terrestrial, freshwater, and marine major habitat type. The 26 major habitat types describe different areas of the world that share similar environmental conditions, habitat structure, and patterns of biological complexity, and that contain similar communities and species adaptations.

In order to represent the unique fauna and flora of the world's continents and ocean basins, each major habitat type was further subdivided by 7 biogeographic realms (Afrotropical, Australasia, Indo-Malayan, Nearctic, Neotropical, Oceania, Palearctic).

Finally, ecoregions that represented the most distinctive examples of biodiversity for a given major habitat type were identified within each biogeographic realm. They were chosen based on the following parameters:

- species richness
- endemism
- higher taxonomic uniqueness (e.g., unique genera or families, relict species or communities, primitive lineages)
- extraordinary ecological or evolutionary phenomena (e.g., extraordinary adaptive radiations, intact large vertebrate assemblages, presence of migrations of large vertebrates)
- global rarity of the major habitat type

Figure 2: Global map of the WWF Global 200 Ecoregions. Additional maps of the G200 ecoregions are available [here](#), with information on each ecoregion available [here](#).



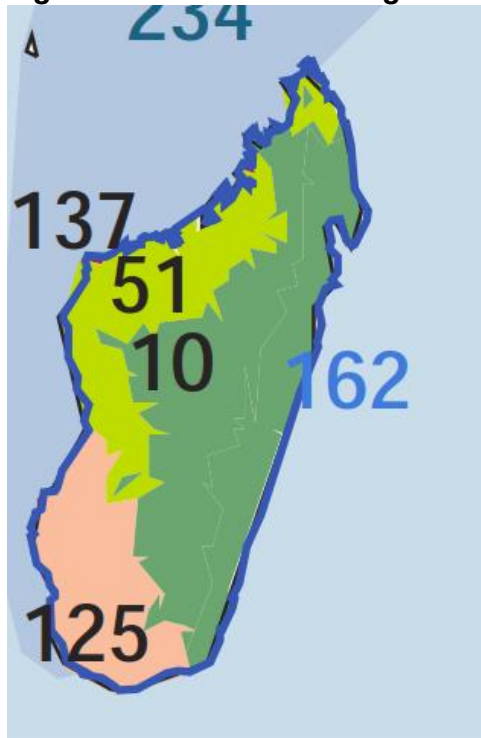
KBAs and Ecoregions

The main difference between the WWF G200 Ecoregions and KBAs is one of scale (see figure 3). Ecoregions are large areas, often spanning multiple countries or administrative boundaries, important for setting an overarching framework of global ecological priorities. By contrast, KBAs are sites, areas on land and/or in water with defined ecological, physical, administrative or management boundaries that are actually or potentially manageable as a single unit (e.g. a protected area or other managed conservation unit). Thus KBAs provide information on smaller, manageable areas within ecoregions that contribute significantly to the global persistence of biodiversity. Although some KBAs are very large (e.g. 50,000 km²), most will be considerably smaller than ecoregions.

Criterion B3a of the KBA standard allows the selection of KBAs based on species restricted to ecoregions, providing a clear link between the two designations.

Lastly it is important to note that many KBAs occur outside of the WWF Global 200 ecoregions. The finer scale of KBAs allows for a more comprehensive selection of sites.

Figure 3: WWF G200 Ecoregions in Madagascar



KBAs in Madagascar



WWF's [2008 Global Conservation Strategy](#), building on the G200 analysis, identified 35 **WWF global priority places** (see figure 4.) These priority places were on the whole much larger areas than the G200 ecoregions - a priority place was often made up of several G200 ecoregions combined. Thus as is the case with G200 ecoregions, KBAs will provide information on smaller, manageable areas within WWF Priority Places that contribute significantly to the global persistence of biodiversity.

WWF global priority places

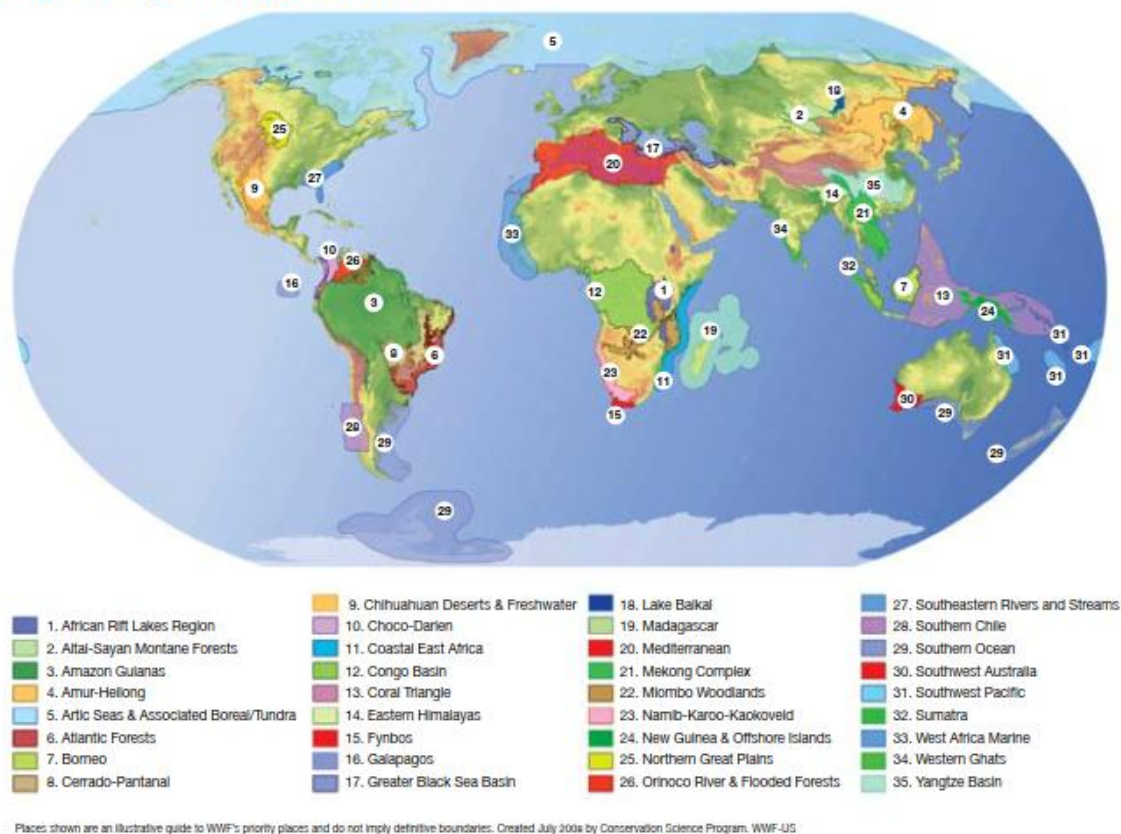


Figure 4: WWF priority places

Protected Areas (marine and terrestrial)

Sites identified as KBAs do not automatically have any kind of legal protection (the potential exception to this are International Bird Areas identified in the European Union, which qualify for legal protection under the Bird's Directive, based on judgements by the European Court of Justice and national court rulings.)

However in practice of course many KBAs have been officially designated as Protected Areas, and many protected areas have been identified as KBAs. The KBA approach offers a rigorous and quantitative way for governments, private landholders and local and indigenous communities to select sites that would be most important to protect, in order for protected areas to contribute to the global persistence of biodiversity. It is for this reason that the Global Environment Facility (GEF) requires that protected areas established with GEF support are globally significant (i.e. meet the KBA criteria) and explicitly directs support to improving protected area financial sustainability towards protected areas that meet these criteria.

The proportion of KBAs covered by protected areas is increasing - the [2016 UN Sustainable Development Goal report](#) highlighted that globally, the percentage of terrestrial, inland freshwater and mountain KBAs covered by protected areas has increased from 2000 to 2016 from 16.5% to 19.3%, 13.8% to 16.6%, and 18.1% to 20.1% respectively.

However it is important to reiterate that formal protection may not be appropriate or even desirable for all KBAs. Many KBAs are covered by OECMs ('Other Effective Area-based Conservation Measures' in the language of Aichi Target 11). Work is underway to quantify the proportion of KBAs covered by OECMs, and the proportion of unprotected sites for which OECMs

may be more appropriate than formal protected areas. The many KBAs which fall outside the protected area network vary widely in management regime, however identification as a KBA does imply that the site should be managed in ways that ensure the persistence of the biodiversity elements for which it is recognised. Identification of such sites as KBAs should help provide additional justification and motivation for improved conservation management.

High Conservation Value Areas

The High Conservation Value approach exists to identify resources and areas of particular conservation value, from biological, ecological and social / cultural perspectives. It was principally designed for use at the level of a forestry or agriculture concession to identify areas within a concession with high conservation values, although the approach is also used at landscape / seascape / jurisdictional scale. Originally developed for use within forests, it is being broadened to grasslands and freshwater as well as marine ecosystems.

Six types of HCVs are recognised:

- HCV 1 – Species diversity: Concentrations of biological diversity including endemic species, and rare, threatened or endangered species (RTE), that are significant at global, regional or national levels.
- HCV 2 – Landscape-level ecosystems and mosaics: Large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.
- HCV 3 – Ecosystems and habitats: Rare, threatened, or endangered ecosystems (RTE), habitats or refugia.
- HCV 4 – Ecosystem services: Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.
- HCV 5 – Community needs: Sites and resources fundamental for satisfying the basic necessities of local communities or indigenous peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or indigenous peoples.
- HCV 6 – Cultural values: Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.

Identifying, managing and monitoring High Conservation Values (HCV) is an important step towards achieving certification from several major forestry and agricultural commodity standard schemes. HCV requirements are also included in the policies of major financial institutions and banks, and in the procurement policies and sustainability commitments of global private sector organisations.

Most commonly, HCV areas within a concession will remain unconverted (for example under Roundtable on Sustainable Palm Oil certification or the Bonsucro global standard for sustainable sugarcane production) or are subject to low or minimal impact use (e.g. under FSC, depending upon the HCVs.) HCV areas are under the jurisdiction of the leaseholder or landowner. The standards (or companies) which require HCV assessments are usually responsible for the quality control (via certification audits), and ensuring that HCV areas are conserved & managed appropriately. The [HCV Resource Network](#) is co-owner of the methodology, together with FSC, and focusses on quality control of assessments and the development of the approach.

KBAs and HCV areas

KBA criteria overlap significantly with the HCV criteria (see table 1 below). However the KBA process is not a substitute for HCV because it only addresses some of the HCV types, and there are some significant differences in the two approaches, including the following;

- KBAs are defined exclusively on ecological criteria, whereas there are several HCV criteria relating to social and cultural values.
- The KBA criteria have quantitative thresholds which must be met for an area to be identified as a KBA (for example “site regularly holds $\geq 0.5\%$ of the global population size AND ≥ 5 reproductive units of a critically endangered or endangered species”), whereas adherence to the HCV criteria is defined on a much more qualitative basis.
- On the whole, the scale at which KBAs and HCVs are applied is likely to be different. As noted above, HCVs will primarily be areas within a forestry or agriculture concession that may need to be set aside. KBAs on the other hand would, on the whole, be larger than a set-aside site within a concession, and more routinely be relevant as an input to systematic conservation planning at a regional / national level. However whilst HCV is primarily used within a concession context, assessments at a landscape level using the HCV Assessment Manual have been conducted. This broader scale application of HCV is likely to have more overlap with the KBA approach.
- A global database of KBAs is maintained and freely available online, which allows any stakeholder to access information on the location, status and threats of every KBA identified worldwide. There is currently no similar accessible global repository of HCV areas.

Table 1: Comparison of HCV criteria and KBA criteria (note that not all the HCV and KBA criteria are included in this table.)

HCV criteria	KBA criteria
HCV1: Protected areas	Not applicable
HCV 1: Concentrations of rare and threatened species	KBA A1: Threatened taxa
HCV 1: Concentrations of endemic species (restricted range)	KBA B1: Geographically restricted species
HCV 1: Areas of critical temporal use (e.g. breeding and migration sites)	KBA D1: Demographic aggregations
HCV 2: Large natural areas HCV 3: Rare or threatened ecosystems	KBA B3: Biome restricted assemblages KBA A2: Threatened ecosystem types KBA B4: Geographically restricted ecosystem types

Source: Paper for the Integrated Biodiversity Assessment Tool process

The KBA process offers a short-cut to addressing, in particular, HCV 1, by providing both a methodology and an internationally accepted approach. Even where KBAs have not been identified, the guidelines and criteria being developed for KBAs may offer a set of minimum and consistent standards that could be applied within HCV manuals and national interpretations.

HCV processes have implications for development of KBAs. Many HCV assessments are conducted in remote areas lacking surveys to identify ranges of rare, threatened and endangered species, habitats and species assemblages. In many of these cases, the assessments, including both ground surveys and detailed GIS analyses of broader landscapes, provide valuable and unique data and are conducted by reliable ecological and conservation experts in these ecosystems. It has been recommended that procedures be developed to incorporate relevant HCV assessment findings into the processes of KBA nomination and delineation.

KBAs are referenced multiple times in both the HCVRN Common Guidance for HCV Identification 12 times (see [here](#)), and in the HCV Assessment Manual that all licenced HCV assessors have to follow (see [here](#)). The presence of KBAs is an indicator of potential risks and impacts of the prospective plantation, so assessors are obliged to look for any KBA designations as part of their analysis of the wider landscape context before the HCV assessment.

Close cooperation is needed to ensure greater complementarities between HCV and KBA.

Ramsar sites

The Convention on Wetlands, called the Ramsar Convention, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

Under the Ramsar Convention, each Contracting Party undertakes to designate at least one wetland site for inclusion in the List of Wetlands of International Importance (the "[Ramsar List](#)"). There are over 2,000 "Ramsar Sites" on the territories of over 160 Ramsar Contracting Parties across the world.

Ramsar Sites are designated because they meet the [Criteria for identifying Wetlands of International Importance](#). The first criterion refers to sites containing representative, rare or unique wetland types, and the other eight cover sites of international importance for conserving biological diversity.

Group A of the Criteria. Sites containing representative, rare or unique wetland types

Criterion 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.

Group B of the Criteria. Sites of international importance for conserving biological diversity

Criteria based on species and ecological communities

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

Criterion 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.

Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.

Specific criteria based on water birds

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Specific criteria based on fish

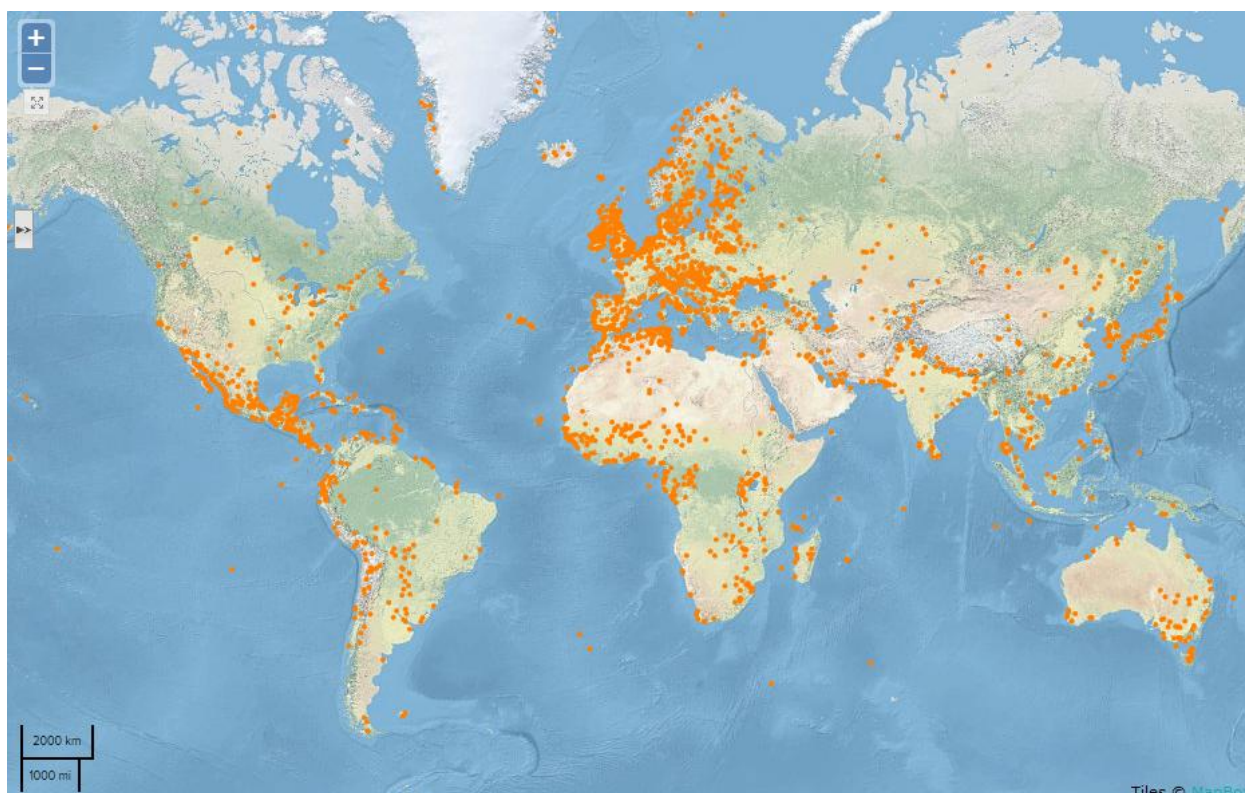
Criterion 7: A wetland should be considered internationally important if it supports a significant proportion of indigenous fish subspecies, species or families, life history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.

Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

Specific criteria based on other taxa

Criterion 9: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non avian animal species.

Figure 5: Global map of Ramsar sites (note that Ramsar sites are represented by dot points rather than site boundaries.) An online map of Ramsar sites, including information on each site, and a HydroBASINS datalayer (a series of polygon layers that depict watershed boundaries and sub-basin delineations at a global scale) is available [here](#).



KBAs and Ramsar sites

The key link between KBAs and Ramsar sites is that KBAs can provide information on sites with potential for Ramsar designation. Important Bird and Biodiversity Areas (the bird subset of KBAs) have been used for some time to identify Ramsar sites due to the strong overlap in criteria, with ‘shadow lists’ published for a number of regions.

Table 2: Comparison of KBA criteria and Ramsar site criteria

KBA Criteria	Ramsar Site criteria
C. Ecological integrity: Sites may qualify as KBAs under criterion C because they hold the most outstanding global examples of intact species assemblages with supporting large-scale ecological processes and so contribute significantly to the global persistence of biodiversity at the ecosystem level.	Criterion 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.
A1 :Threatened taxa; A2: Threatened ecosystems	Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

B3: Geographically restricted assemblages - a, b, c	Criterion 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.
D2: Ecological refugia; D3: Source populations	Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
Not at the global level, regional IBA criteria do correspond to this Criterion	Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.
D1: Demographic aggregations (partially)	Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.
B1: Individual geographically restricted species; B2: Co-occurring geographically restricted species (depending on the definition of "indigenous")	Criterion 7: A wetland should be considered internationally important if it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.
D3: Source populations (partially)	Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.
D1: Demographic aggregations	Criterion 9: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species

The Ramsar secretariat identified three key uses of the KBA concept within the Convention:

- Gap analysis to identify candidate sites for Ramsar listing: wetland KBAs that are not also Ramsar sites would form a list of potential sites that might help governments to complete their lists of Wetlands of International Importance;
- Confirmation of the quality of existing Ramsar sites: identification as a KBA would provide important additional affirmation of the significance of Ramsar wetlands;
- Identification of research needs: with respect to matching the Ramsar criteria with those for KBAs.

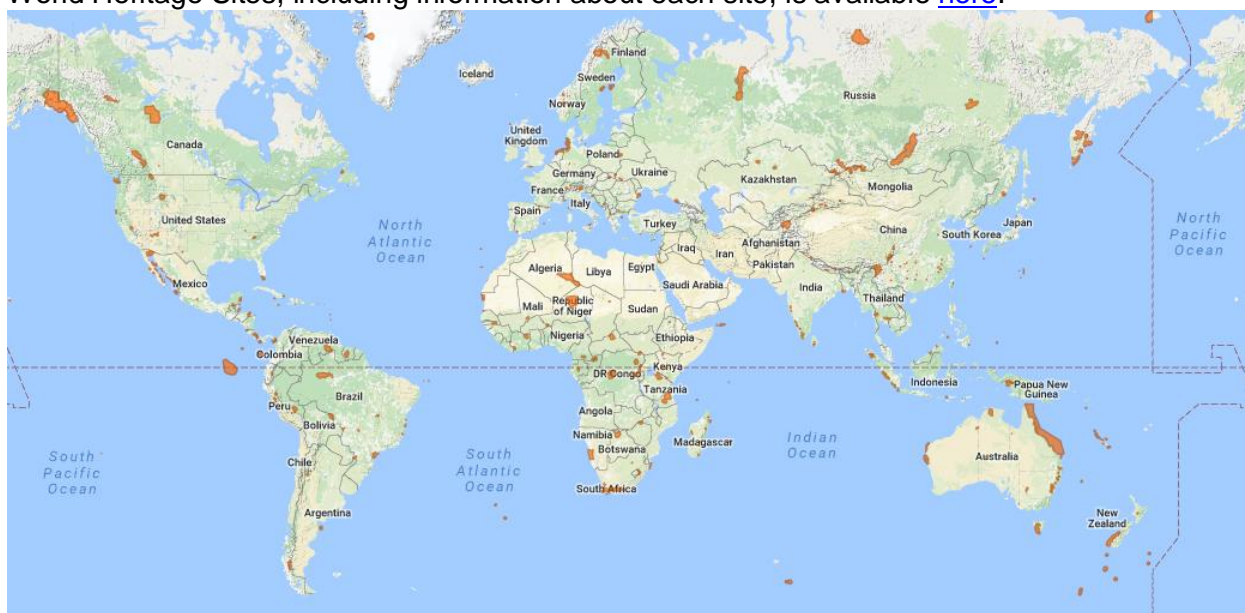
World Heritage Sites

The UNESCO World Heritage Convention, established in 1972, maintains as its central component the World Heritage List: a global list of natural, cultural and mixed sites that represent the finest examples of global heritage. Being entered onto the List requires a detailed screening process, including proof that a site has Outstanding Universal Value, a hard-to-define measure of the highest level of global significance, combined with integrity, authenticity and high quality protection and management. Inclusion on the List, which is decided by the World Heritage Committee, brings with it obligations in terms of maintaining the Outstanding Universal Value for

which it was inscribed, and failure to do this results first in entrance onto a Danger List and, in extreme cases, deletion from the List.

There are 238 natural World Heritage sites, 203 classified as natural sites, 35 mixed sites classified as both natural and cultural. Natural and mixed World Heritage sites protect over 286 million hectares (ha) of land and sea, in 102 countries.

Figure 6: Global map of natural and mixed World Heritage Sites. A searchable online map of World Heritage Sites, including information about each site, is available [here](#).



KBAs and World Heritage Sites

KBA data, where available, are already also being used as a source of information for assessing new World Heritage Site nominations in terms of their importance to biodiversity.

Moving forwards, at a global level, KBA data can support the identification of potential natural World Heritage sites, as discussed in the two recently published global gap analyses for terrestrial and marine sites. The gap analyses are intended to be updated at 5-10 year intervals and it is expected that KBA analysis will play an increasingly important part in this process.

However there are already several thousands of KBAs identified around the world and World Heritage Convention will only be able to provide recognition and protection of a small proportion of these sites as being of Outstanding Universal Value. Thus there will still be a need to prioritise among these sites and focus on only the most significant - this is where the World Heritage criteria and conditions of integrity and additional considerations such as irreplaceability come in.

Criterion ix of Natural World Heritage Sites (“to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals”) is similar to KBA criterion C, so sites identified under this criterion could be considered candidate WHS. Natural World Heritage Site criterion x (“to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation”) have a broad overlap with practically any global KBA, in particular with AZE sites or KBAs containing important populations of Critically Endangered species or ecosystems so these could be considered candidates as well.

Ecologically or Biologically Significant Marine Areas

In 2008, the 9th Conference of the Parties to the Convention on Biological Diversity (CBD) adopted a set of scientific criteria for identifying “ecologically or biologically significant marine areas”, or “EBSAs”, in need of protection (CBD decision IX, Annex I).

An area can be described as meeting the EBSA criteria by meeting one or more of the following criteria:

1. Uniqueness or Rarity
2. Special importance for life history stages of species
3. Importance for threatened, endangered or declining species and/or habitats
4. Vulnerability, Fragility, Sensitivity, or Slow Recovery
5. Biological Productivity
6. Biological Diversity
7. Naturalness

Subsequently, in 2010 the 10th CBD COP agreed on a global process to actually describe marine areas that meet the EBSA criteria throughout the world’s oceans and seas. Since then, the Secretariat of the CBD has organized, with a variety of partners, a series of specific regional workshops to “screen” a predetermined region of the ocean against the EBSA criteria. These workshops were attended by government officials, scientists and representatives of relevant NGOs (in many cases including WWF). The workshops differed in their geographic coverage: some considered the entire marine region regardless of administrative boundaries, while others focussed either on areas within or areas beyond national jurisdiction.

As of today, a large part of the global oceans has been considered by these regional EBSA workshops, including the following regions: the Western South Pacific, wider Caribbean & Western Mid-Atlantic, Southern Indian Ocean, Eastern Tropical & Temperate Pacific, North Pacific, South-Eastern Atlantic, Arctic, North-West Atlantic, the Mediterranean, North-East Indian Ocean, North-West Indian Ocean, and the Seas of East Asia. In addition, there is an ongoing process for areas beyond national jurisdiction (“high seas”) in the North-East Atlantic.

The description of a marine area meeting the EBSA criteria within the remit of the CBD is a *scientific and technical* exercise. A separate process is (still) needed for any conservation planning and the identification of appropriate management and monitoring measures. While it is generally understood that areas found to meet one or more of the EBSA criteria should receive enhanced attention in marine conservation strategies, there is no globally agreed process yet within the CBD how this can/should be realized. For marine areas found to meet the EBSA criteria that are situated *within* national jurisdiction, it will be up to the relevant coastal state(s) to determine appropriate management measures. For areas found to meet the EBSA criteria situated in areas *beyond* national jurisdiction, it is currently up to the different international competent organizations (e.g. International Maritime Organization/IMO; Regional Fisheries Management Organizations/RFMOs) to consider taking any specific sectoral measures..

Figure 7: Global map of EBSAs. An online map of all EBSAs including information on each EBSA is available [here](#).



KBAs and EBSAs

The main differences between KBAs and EBSAs are:

- Most EBSAs are large areas encompassing different biological or ecological features (especially when meeting different criteria), which would require different management approaches. On the other hand, KBAs should be managed as a single unit
- There are no quantitative thresholds for an EBSA description.
- EBSAs are a formal scientific and technical description through an intergovernmental treaty, whilst KBAs are identified through nationally-driven processes not linked to any intergovernmental process (the ultimate decision maker for KBA identification is the KBA Secretariat).

KBAs (particularly the IBA subset) have been highly influential in the list of EBSAs identified to date, and in future KBAs can feed into the EBSA process by providing a list of potential new EBSA sites as well as identifying areas within EBSAs that meet quantitative thresholds for global biodiversity significance and may be manageable at the site scale. The standard documentation compiled for KBAs can also be used to identify areas that are highly threatened and/or require more formal protection.

As noted above, KBAs must meet quantitative thresholds for one or more biodiversity features (e.g. species or ecosystems) triggering the criteria at a given site. KBAs will thus be most applicable in the near term for marine and coastal species and ecosystems with sufficient data to evaluate whether the thresholds have been met (for several of the criteria, population thresholds can be inferred using data on range, extent of suitable habitat and other metrics). The current paucity of data in the deep seas and open ocean can render KBA identification more difficult or impossible, and hence the KBA approach is not a substitute for EBSAs but rather a vehicle for additional information where such is available.

Therefore, it is important to continue to clearly communicate that KBAs and EBSAs are independent and complementary processes.

Table 3: Overlap of KBA and EBSA criteria

KBA criteria	EBSA criteria
B1: Individual geographically restricted species; B2: Co-occurring geographically restricted species; B3: Geographically restricted assemblages	1. Uniqueness or Rarity
D1: Demographic aggregations; D2: Ecological refugia; D3: Source populations	2. Special importance for life history stages of species
A1. Threatened taxa; A2. Threatened ecosystem types	3. Importance for threatened, endangered or declining species and/or habitats
C. ECOLOGICAL INTEGRITY (partially)	4. Vulnerability, Fragility, Sensitivity, or Slow recovery
D3: Source populations	5. Biological Productivity
B3: Geographically restricted assemblages (partially)	6. Biological Diversity
C. ECOLOGICAL INTEGRITY	7. Naturalness

There are several other types of marine designations, including:

- [Particularly Sensitive Sea Areas](#) (PSSAs). PSSAs are areas that need special protection through action by the International Maritime Organisation because of their significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities.
- [Vulnerable Marine Ecosystems](#) (VMEs). The VME concept emerged from discussions at the United Nations General Assembly (UNGA) and gained momentum after UNGA Resolution 61/105 (supplemented by UNGA Resolutions 64/72, 66/68, and 71/123). VMEs constitute areas that may be vulnerable to significant adverse impacts (SAIs) from bottom fishing activities. The criteria for identifying VMEs are found in paragraph 42 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas. To avoid potential impacts in these areas, species and habitats, the likelihood of SAIs should be assessed as per paragraph 47 of the FAO Guidelines, followed by appropriate conservation and management measures, including encounter protocols and move on rules, gear modification and fisheries closures.

Whilst these designations have not been addressed in detail within this document, they can be drawn upon as a useful knowledge base for potential KBA identification.