

Lexicon

of spatial biodiversity assessment,
prioritisation and planning
in South Africa

Second Edition 2023

SANBI



Biodiversity for Life

South African National Biodiversity Institute

Lexicon of Spatial Biodiversity Assessment, Prioritisation and Planning in South Africa

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Acronyms

BCLME	Benguela Current Large Marine Ecosystem
BDO	Biodiversity offset
BDS	Biodiversity stewardship
BGIS	Biodiversity GIS (http://bgis.sanbi.org)
BMA	Biodiversity Management Agreement
BMP	Biodiversity Management Plan
BMP-E	Biodiversity Management Plan for Ecosystems
BMP-S	Biodiversity Management Plan for Species
BRP	Bioregional plan
CAPE	Cape Action for People and the Environment
CBA	Critical Biodiversity Area
CBD	Convention on Biological Diversity
CICES	Common International Classification of Ecosystem Services
CO	Collapsed
CR	Critically endangered
DD	Data Deficient
DEA	Department of Environmental Affairs (now DFFE)
DEAT	Department of Environmental Affairs and Tourism (now DFFE)
DFFE	Department of Forestry, Fisheries and the Environment
DWS	Department of Water and Sanitation
EBSA	Ecologically or Biologically Significant Marine Area
EEZ	Exclusive Economic Zone
EFZ	Estuarine Functional Zone
EI	Ecological infrastructure
EIA	Environmental Impact Assessment
ELSA	Essential Life Support Area (global term)
ELSAA	Essential Life Support Action Area (South African term)
EN	Endangered
EPL	Ecosystem Protection Level
ESA	Ecological Support Area
ETS	Ecosystem Threat Status
EW	Extinct in the Wild
EX	Extinct
FAO	Food and Agriculture Organization
FEPA	Freshwater Ecosystem Priority Area
GET	Global Ecosystem Typology
GIS	Geographic Information System
IAS	Invasive Alien Species
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
LC	Least Concern
MEC	Member of the Executive Council

MP	Moderately Protected
MPA	Marine Protected Area
MSP	Marine Spatial Planning
NBA	National Biodiversity Assessment
NBF	National Biodiversity Framework
NBSAP	National Biodiversity Strategy and Action Plan
NCMSBP	National Coastal and Marine Spatial Biodiversity Plan
NE	Not Evaluated
NEMA	National Environmental Management Act (Act 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act (Act 10 of 2004)
NEMPAA	National Environmental Management: Protected Areas Act (Act 57 of 2003)
NFEPA	National Freshwater Ecosystem Priority Areas project
NGO	Non-government organisation
NM	Nautical mile
NNR	No Natural Remaining
NP	Not Protected
NPAES	National Protected Area Expansion Strategy
NSBA	National Spatial Biodiversity Assessment
NT	Near Threatened
NVM	National Vegetation Map
NWM	National Wetland Map
OECM	Other Effective area-based Conservation Measure
ONA	Other Natural Area
PACA	Protected Area and Conservation Area database
PP	Poorly Protected
RLE	Red List of Ecosystems
RLS	Red List of Species
SAIIAE	South African Inventory of Inland Aquatic Ecosystems
SANBI	South African National Biodiversity Institute
SA-NECS	South African National Ecosystem Classification System
SANParks	South African National Parks
SACAD	South African Conservation Areas Database
SAPAD	South African Protected Areas Database
SEMA	Specific Environmental Management Act
SPLUMA	Spatial Planning and Land Use Management Act (Act 16 of 2013)
SWSA	Strategic Water Source Area
SWSA-gw	Strategic Water Source Area for groundwater
SWSA-sw	Strategic Water Source Area for surface water
TOPS	Threatened or Protected Species listed in terms of NEMBA
UNCCD	United Nations Convention to Combat Desertification
VU	Vulnerable
WP	Well Protected

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1 Introduction

1.1 Why a Lexicon?

South Africa has a history of more than two decades of spatial biodiversity assessment, prioritisation and planning. The National Biodiversity Assessment has become a regular and recognised national resource on the status of South Africa's biodiversity. There has also been tremendous progress in developing spatial biodiversity prioritisation and planning products that are widely used to inform policy, planning and decision-making in a range of sectors, including protected area expansion, national spatial development planning, Marine Spatial Planning, environmental authorisations, municipal land-use planning, catchment-level planning, and water resource management. The suite of spatial biodiversity assessment, prioritisation and planning products and tools has matured and grown over the past two decades, alongside the range of applications.

A community of practice of biodiversity planners has met annually since 2004 at the Biodiversity Planning Forum hosted by SANBI. SANBI has also convened a Biodiversity Planning Technical Working Group approximately annually since 2012, which focuses in more depth on technical issues. This active, highly engaged community of practice has shaped the concepts, terms, definitions and conventions that make up this Lexicon, with iterative refinement over time.

The first edition of this Lexicon (2016), titled the *Lexicon of Biodiversity Planning in South Africa*, was the first attempt to formally codify the suite of concepts, terms and definitions that had been developed through this community of practice. At the time it was recognised that the use of spatial biodiversity assessment and planning products as a central part of science-based policy advice was growing, and that standardised and consistent definitions of core concepts and commonly used terms were thus becoming increasingly important. The process of discussing and clarifying concepts and terms also in itself helped to strengthen and grow our quality of thinking as a community of practice.

The need for a second edition of the Lexicon has arisen for two main reasons. Firstly, new concepts and terms have come into use as spatial biodiversity assessment, prioritisation and planning has continued to develop and expand in South Africa and globally (reflected, for instance, in the broader title of this edition). Secondly, as in any field, the meaning of terms and use of language is not static but evolves through ongoing practice. In the seven years since the first edition, this has certainly been the case for many of the terms in this Lexicon.

The purpose of this Lexicon is to provide standard definitions and conventions for use of a suite of terms that reflect key concepts, to support:

- **Clarity and usability** of spatial biodiversity assessment, prioritisation and planning products for the growing number of end-users.
- **Credibility** and in some cases legal force of spatial biodiversity assessment, prioritisation and planning products.

A broader purpose is to contribute to the provision of effective science-based policy advice from the biodiversity sector, in support of national development goals and sustainable development. The Lexicon aims to assist those who are involved in translating South Africa's excellent biodiversity science into credible and useful information to inform policy, decision-making and action, contributing to a capable state that is able to deliver effective services. These include officials in government and also other actors and role players, including in the private sector, civil society and academia, who see the importance of biodiversity from a development perspective and wish to contribute to its conservation.

The audience of the Lexicon is in the first instance the biodiversity sector in South Africa, including but not limited to spatial biodiversity assessment, prioritisation and planning practitioners (whether public officials or consultants). The first edition also proved useful for the users of spatial biodiversity assessment, prioritisation and planning products in a range of sectors, including, for example, environmental assessment practitioners and municipal planners. It can be a useful resource for students and those who are new to the biodiversity sector. It may also be useful for practitioners in other countries, who could draw on elements relevant to their contexts.

1.2 Principles that underpin the Lexicon

The first edition of the Lexicon did not set out explicit principles but was nevertheless guided by implicit principles. In this edition we have attempted to articulate five principles explicitly. They are closely inter-related and overlap with each other to some extent. We hope this will help users of the Lexicon understand the rationale behind its construction and content.

1. We aim for a **conceptual clarity and coherence** – an internally consistent suite of terms that accurately and reliably reflect key concepts.
 - The Lexicon should represent a coherent set of concepts, not simply words.
 - The suite of terms should accurately reflect our thinking about the concepts concerned. The process of bringing them together in one place and formalising specifics of wording can be useful for helping to clarify and advance our collective thinking as a community of practice. By making sure we agree on the words, we are also often making sure we have a clear and shared understanding of the concepts they represent.
 - Terms and their definitions must reflect concepts in a precise way, with as little room for ambiguity as possible. It is important for everyone who uses a term to have the same meaning in mind.
 - It is essential not to have a single term that is used to describe more than one concept.
 - It is best not to have many terms for one concept (although in practice there are sometimes two terms that have essentially the same meaning – this is fine as long as it is made explicit).
 - It is essential that the definitions of related terms should not contradict each other.

2. We aim for **consistency** in the use of specific terms. This includes:
 - Consistency across different documents and other material (such as presentations, information on websites) within particular areas of expertise.
 - Consistency among different sub-sectors within the biodiversity sector.
 - Consistency across space – so that a term used by practitioners in one part of the country means the same to practitioners in another part of the country.
 - Consistency in use of terms across government, NGOs and the private sector.
 - Consistency over time, although recognising that language evolves and may be refined over time (hence the need for updated editions from time to time).
 - Consistency, where possible and appropriate, with established global terms, allowing for adaptation to the South African context where necessary.
 - Consistency in use of colours linked to certain terms, particularly for map categories, to assist in visual recognition.

At the same time, we allow for *flexibility* where necessary and appropriate, for example between different realms or different provinces. The aim is *sufficient consistency* that serves a purpose rather than unnecessary rigidity.

3. Our written and spoken language should be as **comprehensible** (easy to understand) as possible.
 - We aim to be concise rather than verbose.
 - We recognise that jargon is unavoidable, but we try not to make things more difficult than absolutely necessary for people from other sectors to understand.
 - If a term we use in a technical sense has an agreed meaning in ordinary spoken English, we align our technical definition with its commonly accepted meaning as far as possible.
 - If a term we use has an established meaning in ecology and biodiversity science or in the environmental sector more broadly, but needs a more precise or specific definition in our context, we align our technical definition with the established meaning as far as possible.
 - We avoid cryptic short-hand terms and acronyms where possible, even if it means using a few more syllables or words.

4. We aim to be consensus driven.
 - The terms and definitions in the Lexicon, and the concepts they represent, have been consultatively developed and shaped by the spatial biodiversity assessment, prioritisation and planning community of practice in South Africa, often over many years involving a great deal of patient discussion.
 - Sufficient consistency is supported by sufficient consensus, not expecting 100% consensus in every case (see Principle 2).
 - A balance needs to be found between stability on the one hand and ongoing refinement of terms and concepts on the other. Changes in terms that have become established should have a sound rationale and not be gratuitous, which just creates unnecessary work and confusion. At the same time, there should always be scope for iteration and refinement if genuinely needed to support coherent thinking and effective practice. Any member of the community of practice should be able to draw attention to terms or definitions that need rethinking or adjustment.
 - The existence of SANBI as an entity that has a mandate to convene practitioners across different organisations and to establish norms and guidelines is a key success factor in enabling this consensus-based approach. The existence of broadly based national-level processes such as the National Biodiversity Assessment, which “force” those involved to align their thinking periodically, are also very useful.
 - The effectiveness of the Lexicon in practice depends on co-operation from a wide group of people to draw on it in their daily work, and the basis for this co-operation is laid through the consensus-driven approach.

5. Our language should be **context sensitive**, in other words appropriate to the socio-economic and policy context in which we work.
 - The biodiversity sector is part of South Africa’s complex society, and as such we aim to demonstrate the relevance of biodiversity for development and the contribution of biodiversity assets and ecological infrastructure to national goals, such as inclusive growth, job creation and reducing poverty.
 - This means that our language should facilitate mainstreaming biodiversity i.e. the integration of biodiversity priorities and concerns into the policies, plans and decision-making of other sectors. At the very least, the language we use should not obstruct mainstreaming efforts.

1.3 Scope and structure of the Lexicon

The focus of the Lexicon is primarily on terms related to spatial biodiversity assessment, prioritisation and planning that are used in a technical sense and/or in the related policy, legislative and implementation context. The intention is not to provide a comprehensive list of all terms used in the biodiversity sector. This intention is unchanged from the first edition.

The Lexicon covers all realms: terrestrial, freshwater, estuarine and marine. There has been substantial development in coastal and marine spatial biodiversity assessment, prioritisation and planning since the first edition was published, so there are several new terms related to the marine realm and the coast.

In addition to the expanded scope related to the marine realm and the coast, other notable changes include:

- A shift from referring to “biodiversity assessment and biodiversity planning” to the longer phrase “spatial biodiversity assessment, prioritisation and planning” – these terms are explained in Sections 2 and 3, with a new diagram that shows the relationships among them and examples of each (Figure 1 in Section 3).
- Inclusion of more terms related to the South African National Ecosystem Classification System (SA-NECS) that has been formalised over the last several years.
- Inclusion of terms from the Red List of Ecosystems and Red List of Species.
- Inclusion of terms related to new spatial biodiversity assessment and prioritisation products, such as Key Biodiversity Areas (KBAs), Ecologically and Biologically Significant Marine Areas (EBSAs) and Essential Life Support Action Areas (ELSAAs).
- Further refinement of terms related to ecological condition.
- Greater focus on terms related to ecological infrastructure.
- Inclusion of some terms that are used in ecology and biodiversity science more broadly, when it is especially important to be clear about their meaning for spatial biodiversity assessment, prioritisation and planning (e.g. catchment, pressure) or when they are used in a more specific or precise way that might be different from general use (e.g. coast / coastal zone).

The Lexicon does not include technical terms used in related sectors that may come up in the context of spatial biodiversity assessment, prioritisation and planning but that “belong” clearly to another sector, emanating from its policy and legislative context. Examples include terms from:

- The water sector, such as Present Ecological State and Resource Quality Objectives.
- Land-use planning, such as Spatial Development Frameworks and Land Use Schemes.
- Environmental management, such as the mitigation hierarchy and the Environmental Screening Tool.
- Marine Spatial Planning, such as Marine Area Plans.
- The climate change sector, such as Ecosystem-based Adaptation and Nature-based Solutions.

The Lexicon does not include terms that are specific to Natural Capital Accounting, particularly ecosystem accounting. However, many of the terms here are useful for ecosystem accounting, especially those related to ecosystem types, ecosystem extent and ecological condition (which is referred to as “ecosystem condition” in the global standard for ecosystem accounting).

The Lexicon is structured as follows:

- **Section 2** consists of a table of common terms related to spatial biodiversity assessment, prioritisation and planning, in alphabetical order. A definition is given for each term, as well as additional explanatory information, and notes on common points of confusion that tend to arise and on what to avoid. Each entry includes links to relevant references and related terms. References are in most cases grey literature, usually policy or planning-related documents. We have not attempted to be comprehensive in the references provided or to provide academic references or papers. The left-most column indicates whether the entry is unchanged since the first edition, has been revised or updated, or is new.
- **Section 3** sets out clusters of related terms from the table in Section 2, as it is not always possible to get a good sense of these groups when the terms appear in alphabetical order.

- **Section 4** lists terms to avoid, as well as the alternative preferred term, especially when writing in a policy- or implementation-related context.
- **Section 5** briefly describes some other naming conventions for which consistency is preferable.

1.4 What's new in the second edition?

- The number of terms has increased from 119 to 184, and many terms have been revised or updated.
 - 27 terms are unchanged. These are labelled “no change” in the left-most column. In some cases there have been minor adjustments to wording in these entries but no substantive changes have been made.
 - 88 terms have been revised or updated. “Revised” means that either the definition or the accompanying information has changed significantly, or (usually) both. “Updated” means that information about a time-bound project or process has been brought up to date.
 - 64 new terms have been added.
 - 5 terms have been replaced by newer terms but the older term has been retained in the table for completeness.
 - 3 terms have been removed.¹
- The structure of the table in Section 2 has been streamlined, based on feedback from users of the first edition.
- Some entries provide two definitions – a shorter one and a longer one. The meanings are equivalent, and the context should dictate which is more useful and appropriate to use.
- Additional clusters of related terms have been included in Section 3, related to the broadening of the scope as outlined above.

1.5 Related resources

Related South African resources include:

- SANBI's Biodiversity Advisor website (<http://biodiversityadvisor.sanbi.org>)
- SANBI's Biodiversity GIS website (<http://bgis.sanbi.org>)
- [Technical Guidelines for CBA Maps](#)
- National Biodiversity Assessment (<http://nba.sanbi.org.za/>)
- [Good Practice Guide for Policy Advice Practitioners](#) (forthcoming from SANBI)

Related global resources include:

- [Global Ecosystem Typology](https://global-ecosystems.org/) (<https://global-ecosystems.org/>)
- [Mapping Biodiversity Priorities](#)
- [Red List of Ecosystems Guidelines](#)
- [Red List of Species Guidelines](#)
- [KBA Guidelines](#)
- EBSA website (<https://www.cbd.int/ebsa/resources>)
- ELSA website (<https://unbiodiversitylab.org/en/maps-of-hope/>)

¹ These are: Guideline for Bioregional Plans – now in the references column in the entry on bioregional plans; biodiversity offset-related stewardship – now dealt with in the entry on biodiversity offsets; private protected area – no longer used.

2 Terms, definitions and related information (in alphabetical order)

Note on acronyms: If an acronym is appropriate to use for a particular term, it is included in brackets after the term.

Note on capitalisation: If a term is capitalised in the first column, it should always be capitalised. If a term starts with a small letter in the first column, it should not be capitalised in ordinary use.

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	1. agriculture	Includes extensive agriculture such as rangelands, and intensive agriculture such as cultivation.	<p>This definition is from the perspective of land cover or land use, rather than from the perspective of classifying economic activity. For spatial biodiversity assessment, prioritisation and planning, we are interested in the ecological impacts of different forms of land cover and land use.</p> <p>Some forms of extensive agriculture can be compatible with natural or near-natural ecological condition if appropriately managed, while intensive agriculture usually results in irreversible modification.</p>	It is usually important to be more specific than simply referring to “agriculture”. In particular, avoid using the term “agriculture” to refer only to intensive agriculture or cultivation.		<ul style="list-style-type: none"> - <i>cultivation</i> - <i>ecological condition</i> - <i>extensive agriculture</i> - <i>intensive agriculture</i> - <i>rangelands</i>
NEW TERM	2. amalgamated national CBA and ESA layer	A spatial layer of CBAs and ESAs compiled from the most up-to-date publicly available CBA Maps across the country.	This spatial layer has been developed primarily for DFFE’s Environmental Screening Tool, which is used in environmental authorisation processes. The amalgamated national CBA and ESA layer is curated by SANBI and updated annually.		https://screening.environment.gov.za	<ul style="list-style-type: none"> - <i>CBA Map</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>Ecological Support Area (ESA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	3. aquatic ecosystem	Any aquatic ecosystem, including inland aquatic, estuarine and marine ecosystems.	“Inland aquatic ecosystem” refers specifically to rivers, freshwater lakes and inland wetlands, but not estuaries or marine ecosystems.	“Aquatic ecosystem” is sometimes used as shorthand for inland aquatic ecosystems. However, for clarity, it is preferable to use “inland aquatic ecosystem” when referring to ecosystems in the freshwater realm, and to use “marine ecosystem” or “estuarine ecosystems” when referring to ecosystems in those realms.	South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	- <i>estuarine realm</i> - <i>freshwater realm</i> - <i>inland aquatic ecosystem</i> - <i>marine realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>
NEW TERM	4. benefits of biodiversity and ecological infrastructure	All the benefits that humanity obtains from biodiversity and natural or semi-natural ecosystems.	A general term that encompasses many (but not all) ecosystem services and “nature’s contributions to people”. The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) term “nature’s contributions to people” (which also includes negative contributions), is an effort to find inclusive terminology that encompasses the diverse world views on the human-nature relationship and to incorporate non-monetary values into the discourse.	Not to be used synonymously with “ecosystem services”. The term “ecosystem services” includes services from intensively modified ecosystem types such as cultivated land. Provisioning services (such as crops) from these intensively modified ecosystem types would not be considered benefits of biodiversity or ecological infrastructure, although biodiversity and ecological infrastructure might support their production (for example, through regulating services such as pollination). Provisioning services from intensively modified ecosystem types often constitute major pressures on biodiversity rather than being a benefit of biodiversity.	Compendium of Benefits of Biodiversity (SANBI 2019b) IPBES glossary (IPBES, 2022)	- <i>biodiversity</i> - <i>ecological infrastructure</i> - <i>ecosystem services</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	5. biodiversity	<p>Short definition: The diversity of genes, species and ecosystems on Earth, and the ecological and evolutionary processes that maintain this diversity.</p> <p>Longer definition: The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; includes diversity within species, between species and of ecosystems.</p>	<p>The short definition is used in the National Biodiversity Assessment.</p> <p>The longer definition comes from Article 2 of the Convention on Biological Diversity (CBD) and is also used in the Biodiversity Act.</p> <p>Each of them may be appropriate in different contexts.</p>	<p>Biodiversity does not refer only to species diversity. It includes ecosystem diversity, species diversity and genetic diversity.</p> <p>Avoid using the term “biodiversity” when referring only to “species diversity”. The conflation of biodiversity and species diversity tends to be more prevalent in Europe and North America than in South Africa.</p>	<p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	-

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	6. Biodiversity Act	The National Environmental Management: Biodiversity Act (Act 10 of 2004), as amended.	<p>In formal documents, the name of the Act can be written in full the first time it is used, followed by “hereafter referred to as the Biodiversity Act” (either as a footnote or in brackets).</p> <p>The Biodiversity Act is part of a set of subordinate legislation to the National Environmental Management Act (NEMA) (Act 107 of 1998) collectively known as specific environmental management Acts (SEMAs). They also include the Protected Areas Act, Air Quality Act, Integrated Coastal Management Act and the Waste Act.</p>	Often referred to as NEMBA. However, be aware that the acronym “NEMBA” is not meaningful to most people outside the biodiversity sector, so depending on the audience it is often better to say “the Biodiversity Act”.	National Environmental Management: Biodiversity Act (Act 10 of 2004)	- <i>Protected Areas Act</i>
REVISED	7. Biodiversity Agreement	An agreement concluded as part of a biodiversity stewardship programme, based on contract law and not recognised in terms of either the Protected Areas Act or the Biodiversity Act.	<p>One of several options within biodiversity stewardship category 2: conservation areas.</p> <p>Contributes to the conservation estate but not the protected area estate.</p>		Biodiversity Stewardship Guideline (SANBI 2018b)	- <i>biodiversity stewardship</i> - <i>conservation area</i>
REPLACED	8. biodiversity assessment <i>Older term.</i> Rather use: spatial biodiversity assessment	See <i>spatial biodiversity assessment</i>	The shift from using the term “biodiversity assessment” to preferring “spatial biodiversity assessment” has come about together with greater clarity on the distinctions between spatial biodiversity assessment, prioritisation and planning. In the case of all these terms, including “spatial” helps with clarity of meaning.	<p>Because a biodiversity assessment could take a range of forms, it is preferable to specify “<i>spatial</i> biodiversity assessment” where applicable.</p> <p>The National Biodiversity Assessment includes a range of spatial assessments related to biodiversity and also some assessments that are not spatial.</p>		- <i>spatial biodiversity assessment</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	9. biodiversity asset	Species, ecosystem or other biodiversity-related resource that directly contributes to socio-economic development.	Often used as part of the phrase “biodiversity assets and ecological infrastructure”.		National Biodiversity Assessment 2018 (SANBI 2019a)	- <i>ecological infrastructure</i> - <i>ecological infrastructure asset</i>
NEW TERM	10. biodiversity data	A collection of facts, records or measurements about biodiversity (species, ecosystems or genes) that is gathered from observations, samples, remote sensing, models or other sources.	<p>In the context of spatial biodiversity assessment, prioritisation and planning, biodiversity data are ideally spatial, that is, linked to a geographic location (preferably at a fine spatial scale) and able to be presented on a map.</p> <p>Foundational biodiversity data are the basis for all spatial biodiversity assessment, prioritisation and planning, and include data such as species occurrences, land cover data, or maps of ecosystem types and ecological processes.</p> <p>Biodiversity data needs to be organised and accessible (for example in databases or spatial datasets) to become useful.</p>	<p>It can be useful to distinguish between biodiversity data and biodiversity information. It is usually biodiversity information, derived from biodiversity data, that is used to inform policy and decision-making rather than the underlying biodiversity data itself.</p> <p>A spatial dataset is any dataset that identifies specific geographic locations or areas for the values or records that have been collected or measured. Spatial data layers are the mechanism used to display spatial datasets in a GIS programme, usually with similar elements in a single layer.</p>		- <i>biodiversity information</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	11. biodiversity feature	An element of biodiversity included as part of an input layer in a spatial biodiversity assessment or plan. A biodiversity feature could be, for example, an ecosystem type, a species occurrence or population, a special habitat, or an ecological corridor.	<p>Biodiversity targets should be set for all biodiversity features included in a spatial biodiversity plan.</p> <p>In a spatial biodiversity assessment, one or more thresholds may be set in relation to biodiversity features.</p>		Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>biodiversity threshold</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity plan</i>
NEW TERM	12. biodiversity information	Information derived from biodiversity data that have been structured, processed, analysed and presented to be useful and meaningful in a particular context.	<p>Spatial biodiversity assessment, prioritisation and planning often result in biodiversity information that is presented in the form of maps. These maps should preferably be accompanied by clear messages and guidance on implementation.</p> <p>Biodiversity information can be used to inform policy, planning and decision-making.</p>	It can be useful to distinguish between biodiversity information and the underlying biodiversity data on which the information is based. It is usually the derived biodiversity information that is used to inform policy and decision-making, rather than biodiversity data itself.		<ul style="list-style-type: none"> - <i>biodiversity data</i>
REVISED	13. Biodiversity Management Agreement (BMA)	An agreement entered into in terms of the Biodiversity Act between the Minister or MEC and the implementer of a Biodiversity Management Plan or an aspect thereof.	<p>One of several options in biodiversity stewardship category 2: conservation areas.</p> <p>A BMA can be entered into only in relation to a Biodiversity Management Plan published in terms of the Biodiversity Act.</p> <p>A BMA need not necessarily be linked to a biodiversity stewardship programme.</p>		<p>Biodiversity Stewardship Guideline (SANBI 2018b)</p> <p>National Environmental Management: Biodiversity Act (Act 10 of 2004)</p>	<ul style="list-style-type: none"> - <i>Biodiversity Management Plan (BMP)</i> - <i>biodiversity stewardship</i> - <i>biodiversity stewardship agreement</i> - <i>biodiversity stewardship category</i> - <i>conservation area</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	14. Biodiversity Management Plan (BMP)	A plan aimed at ensuring the long-term survival in nature of an indigenous species, a migratory species or an ecosystem, published in terms of the Biodiversity Act.	<p>A BMP may be developed by any person, organisation or organ of state desiring to contribute to biodiversity management.</p> <p>The Minister may enter into a Biodiversity Management Agreement in relation to the implementation of all or part of a BMP.</p> <p>Biodiversity Management Plan for Species is abbreviated as BMP-S.</p> <p>Biodiversity Management Plan for Ecosystem is abbreviated as BMP-E.</p>		<p>Norms and Standards for Biodiversity Management Plans for Species (DEAT 2009a)</p> <p>Norms and Standards for Biodiversity Management Plans for Ecosystems (DEA 2014)</p>	- <i>Biodiversity Management Agreement (BMA)</i>

<p>15. biodiversity offset</p>	<p>An intervention that results in increased protection and appropriate management of biodiversity to counterbalance residual negative impacts on biodiversity of an activity for which authorisation or approval has been granted.</p> <p>Full definition from National Biodiversity Offset Guideline: “The measurable outcome of compliance with a formal requirement contained in an environmental authorisation to implement an intervention that has the purpose of counterbalancing the residual negative impacts of an activity, or activities, on biodiversity, through increased protection and appropriate management, after every effort has been made to avoid</p>	<p>Implemented in terms of the National Environmental Management Act (NEMA) as part of the mitigation hierarchy for environmental management.</p> <p>Biodiversity offsets are the last option in the mitigation hierarchy and should be considered only after every effort has been made to avoid and minimise impacts, and rehabilitate affected areas.</p> <p>In the South African context, the design and implementation of biodiversity offsets relies heavily on spatial biodiversity assessment, prioritisation and planning, to identify when a biodiversity offset is required and to determine the size and location of the biodiversity offset receiving area.</p> <p>A biodiversity offset may be required as a condition of an environmental authorisation granted in terms of NEMA but could also be required as a condition of other types of regulatory approvals, such as water use licences, licences in terms of the National Forests Act and development rights in terms of the Spatial Planning and Land Use Management Act (SPLUMA).</p> <p>Biodiversity offsets may be achieved through biodiversity stewardship to secure the long-term protection and management of the biodiversity offset receiving area.</p>	<p>Avoid using “offsets” as shorthand for “biodiversity offsets”, unless the context makes it extremely clear that the type of offset referred to is a biodiversity offset. This is because biodiversity offsets are a subset of environmental offsets, which include other types of offsets e.g. air pollution or carbon offsets, so “offsets” on its own can be ambiguous. There are also non-environmental types of offsets such as industrial participation offsets.</p> <p>Preferably avoid using an acronym. If an acronym is unavoidable use “BDO”.</p>	<p>National Biodiversity Offset Guideline (DFFE 2022)</p>	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity prioritisation</i>
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	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED		and minimise impacts, and rehabilitate affected areas.”				
	16. biodiversity partnership area	A non-contractual agreement entered into as part of a biodiversity stewardship programme.	<p>The third of three categories of biodiversity stewardship options. Category 1 is protected areas, and category 2 is conservation areas.</p> <p>An informal, catch-all for the lowest category of biodiversity stewardship. Includes all area-based conservation mechanisms that are not recognised in terms of contract law, property law, the Biodiversity Act or the Protected Areas Act and that do not require an agreement to be in place to specifically manage biodiversity, although this does not preclude agreements under this category.</p> <p>Biodiversity partnership areas contribute to neither the conservation estate nor the protected area estate, but can be the focus of extension work to bring them into higher biodiversity stewardship categories as appropriate.</p>	<p>Avoid the acronym “BPA”.</p> <p>Stick to lower case “biodiversity partnership areas” not “Biodiversity Partnership Areas”. Like protected areas and conservation areas, “biodiversity partnership areas” is a broad category consisting of different specific types of agreement. The specific types of biodiversity partnership area, like the specific types of protected area, could be capitalised.</p> <p>In earlier formulations of different types of biodiversity stewardship agreements, Biodiversity Partnership Areas (with capital letters) were one specific form of agreement rather than a category that includes a range of options.</p>	<p>Biodiversity Stewardship Guideline (SANBI 2018b)</p>	<p>- <i>biodiversity stewardship</i></p> <p>- <i>biodiversity stewardship agreement</i></p> <p>- <i>biodiversity stewardship category</i></p>
NO CHANGE	17. biodiversity pattern	The compositional and structural aspects of biodiversity, at the genetic, species or ecosystem level.	Often used as part of the phrase “biodiversity pattern and ecological processes”. One of the principles of systematic biodiversity planning is to ensure that a representative sample of all biodiversity pattern is conserved.	Avoid using the term “pattern” as shorthand for biodiversity pattern, as it has multiple meanings in different contexts.		<p>- <i>biodiversity pattern and ecological processes</i></p> <p>- <i>ecological processes</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	18. biodiversity pattern and ecological processes	The combination of the compositional, structural and functional aspects of biodiversity, at the genetic, species or ecosystem level.		Avoid using the phrase “pattern and process” as shorthand for biodiversity pattern and ecological processes, as its meaning is unclear given the multiple possible meanings of both the terms “pattern” and “process”.		- <i>biodiversity pattern</i> - <i>ecological processes</i>
REPLACED	19. biodiversity plan <i>Older term.</i> Rather use: spatial biodiversity plan	See <i>spatial biodiversity plan</i> .	The shift from using the term “biodiversity plan” to preferring “spatial biodiversity plan” has come about together with greater clarity on the distinctions between spatial biodiversity assessment, prioritisation and planning. In the case of all these terms, including “spatial” helps with clarity of meaning.	Because a biodiversity plan could take a range of forms, it is preferable to specify “ <i>spatial biodiversity plan</i> ” where applicable.		- <i>spatial biodiversity plan</i>
REPLACED	20. biodiversity planning <i>Older term.</i> Rather use: spatial biodiversity planning	See <i>spatial biodiversity planning</i> .	The shift from using the term “biodiversity planning” to preferring “spatial biodiversity planning” has come about together with greater clarity on the distinctions between spatial biodiversity assessment, prioritisation and planning. In the case of all these terms, including “spatial” helps with clarity of meaning.	Also referred to internationally as “conservation planning”. See further notes in <i>spatial biodiversity planning</i> .		- <i>spatial biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	21. biodiversity priority area	Area or site in the landscape or seascape that is important for conserving a viable representative sample of ecosystem types and species or for maintaining ecological processes and functioning or both.	<p>Biodiversity priority areas are identified through spatial biodiversity planning, which uses a systematic biodiversity planning approach and should be based on the best available data and science. They are represented in the resulting spatial biodiversity plan.</p> <p>Biodiversity priority areas include the following:</p> <ul style="list-style-type: none"> ○ Critical Biodiversity Areas (CBAs) (all realms) ○ Ecological Support Areas (ESAs) (all realms) ○ Flagship free-flowing rivers ○ Freshwater Ecosystem Priority Areas (FEPAs) ○ Priority estuaries ○ Protected areas <p>The different priority areas are not mutually exclusive and may overlap in some cases, particularly between different realms (for example, a FEPA may also be a CBA). They should be seen as complementary, with overlaps reinforcing the importance of an area or site.</p> <p><i>Note:</i> This definition of biodiversity priority areas is narrower and more specific than previously. It does not necessarily include:</p> <ul style="list-style-type: none"> ○ All areas that are important from an ecological infrastructure perspective; ○ All areas assessed as important for biodiversity based on global assessment frameworks. 	<p>Avoid the acronym “BPA”. Stick to lower case “biodiversity priority areas” not “Biodiversity Priority Areas”.</p> <p>Avoid the term “high biodiversity areas” or “areas of high biodiversity”, both of which are grammatically incorrect.</p> <p>Avoid the term “areas of high biodiversity <i>value</i>” as it is often taken to refer to value in monetary terms. Rather use “areas of high biodiversity <i>importance</i>”.</p> <p>Avoid “priority biodiversity areas”.</p> <p>Avoid the term “sensitive” or “sensitivity” as a substitute for importance. A site of high biodiversity importance need not be sensitive to impacts, and sites that are sensitive to impacts need not be of high biodiversity importance.</p> <p>The narrower definition of biodiversity priority areas means that this term is not a catch-all for any area identified as important in spatial biodiversity assessment or prioritisation or in mapping of ecological infrastructure assets.</p>		<ul style="list-style-type: none"> - <i>Critical Biodiversity Area (CBA)</i> - <i>Ecological Support Area (ESA)</i> - <i>free-flowing river</i> - <i>Freshwater Ecosystem Priority Area (FEPA)</i> - <i>priority estuary</i> - <i>protected area</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	22. biodiversity sector plan	A map of Critical Biodiversity Areas and Ecological Support Areas accompanied by contextual information, land- and resource-use guidelines and supporting GIS data. The map must be produced using the systematic biodiversity planning approach.	<p>A biodiversity sector plan is usually developed for a district or metropolitan municipality, but could be developed for a province or for a local municipality. It represents the biodiversity sector's input into planning and decision-making in a range of other sectors.</p> <p>A biodiversity sector plan may be formally published as a bioregional plan in terms of the Biodiversity Act, following the required consultation process and alignment with relevant municipal plans.</p>	A biodiversity sector plan can sometimes be produced as a stepping stone towards the publication of a bioregional plan. However, it can also be a legitimate end-product in its own right. The decision about whether to publish a biodiversity sector plan as a bioregional plan depends on a range of institutional and other factors and is best made by the province or municipality concerned.	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>bioregional plan</i> - <i>CBA Map</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	23. biodiversity stewardship	An approach to securing land in biodiversity priority areas through entering into agreements with private or communal landowners, led by conservation authorities and supported by conservation NGOs.	<p>The objective of biodiversity stewardship is to conserve and manage biodiversity priority areas through voluntary agreements with landowners and communities. This may involve formal protection, management and restoration of terrestrial and aquatic ecosystems.</p> <p>In all cases the landowner retains title to the land, and the primary responsibility for management remains with the landowner, with technical advice and assistance provided by a conservation authority and/or conservation NGO.</p> <p>There are three broad categories of biodiversity stewardship agreements:</p> <ul style="list-style-type: none"> ○ Category 1: Protected areas ○ Category 2: Conservation areas ○ Category 3: Biodiversity partnership areas <p>Detailed information about biodiversity stewardship is available in the Biodiversity Stewardship Guideline.</p>	<p>Avoid using just the term “stewardship” when referring to biodiversity stewardship. “Stewardship” is a broad term referring to management, care or wise use of something.</p> <p>Note that earlier formulations of the different types of biodiversity stewardship agreements have been simplified to three broad categories, each of which includes several options.</p>	<p>Biodiversity Stewardship Guideline (SANBI 2018b)</p> <p>Factsheet on Biodiversity Stewardship (SANBI 2015)</p>	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>biodiversity partnership area</i> - <i>conservation area</i> - <i>protected area</i> - <i>biodiversity stewardship agreement</i> - <i>biodiversity stewardship category</i>
REVISED	24. biodiversity stewardship agreement	An agreement entered into between a landowner (or landowners) and a conservation authority (or in some cases an NGO) as part of a biodiversity stewardship programme.	Biodiversity stewardship agreements fall into one of three categories. See <i>biodiversity stewardship category</i> .	See <i>biodiversity stewardship category</i> .	<p>Biodiversity Stewardship Guideline (SANBI 2018b)</p> <p>Factsheet on Biodiversity Stewardship (SANBI 2015)</p>	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>biodiversity stewardship category</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	25. biodiversity stewardship category	One of three categories of agreements entered into between a landowner (or landowners) and a conservation authority (or in some cases an NGO) as part of a biodiversity stewardship programme.	<p>The biodiversity stewardship categories are:</p> <ul style="list-style-type: none"> ○ Category 1: Protected areas ○ Category 2: Conservation areas ○ Category 3: Biodiversity partnership areas <p>The categories provide an overarching framework, with general criteria and outcomes set out for each category. The legal mechanism for category 1 is the Protected Areas Act and for category 2 is the Biodiversity Act, contract law or property law. Category 3 is not legally binding.</p> <p>Within each category is a range of options for biodiversity stewardship agreements, which confer different benefits on landowners and require different levels of restriction on land use. Detailed information about the biodiversity stewardship categories and options is available in the Biodiversity Stewardship Guideline.</p>	<p>There is sometimes a misperception that biodiversity stewardship is “informal” and does not contribute to the protected area estate. However, biodiversity stewardship contracts in category 1 (such as Nature Reserves and Protected Environments) have <i>equivalent legal status</i> to state-owned protected areas.</p> <p>Avoid referring to “protected areas and biodiversity stewardship” as though these are separate from each other. Protected areas declared through biodiversity stewardship programmes have made a major contribution to expansion of the protected area estate over the past two decades.</p>	<p>Biodiversity Stewardship Guideline (SANBI 2018b)</p> <p>Factsheet on Biodiversity Stewardship (SANBI 2015)</p>	<ul style="list-style-type: none"> - <i>Biodiversity Act</i> - <i>biodiversity partnership area</i> - <i>conservation area</i> - <i>protected area</i> - <i>Protected Areas Act</i>

<p>26. biodiversity target</p>	<p>A quantitative target for an ecosystem type, species or ecological process that sets the minimum amount needed to ensure the representation and persistence of biodiversity, used in spatial biodiversity planning.</p> <p><i>For ecosystems:</i> The minimum proportion of each ecosystem type that needs to be kept in natural or near-natural ecological condition in the long term to maintain viable representative samples of all ecosystem types and the majority of species associated with them. Expressed as a percentage of the historical extent of an ecosystem type (measured as area, length or volume).</p> <p><i>For species:</i> The minimum number of individuals in a population required</p>	<p>In the systematic approach to spatial biodiversity planning, biodiversity targets for different biodiversity features are an essential input to the identification of biodiversity priority areas. For example, a portfolio of CBAs, together with protected areas, must collectively meet biodiversity targets for ecosystem types and species.</p> <p>Biodiversity targets may also inform thresholds used in spatial biodiversity assessment. For example, in the National Biodiversity Assessment, biodiversity targets for ecosystem types are used in setting thresholds for the assessment of Ecosystem Protection Level.</p>	<p>Avoid the term “conservation target” or “biodiversity conservation target”, as the meaning of these terms is unclear. For example, they could be confused with “protected area target”.</p> <p>Not to be confused with “protected area target”. Biodiversity targets are based on science and relate to particular biodiversity features, whereas protected area targets are generally determined by policy commitments (although they may also derive from science).</p> <p>Not to be confused with biodiversity thresholds used in spatial biodiversity assessments, although in some cases biodiversity targets could be used in setting thresholds.</p> <p>In the NSBA 2004 and NBA 2011, biodiversity targets for ecosystem types were used as one of the thresholds in the assessment of Ecosystem Threat Status, but this was before the IUCN Red List of Ecosystems Guidelines were available. In the NBA 2018, biodiversity targets were decoupled from the thresholds used for Ecosystem Threat Status assessment.</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>biodiversity threshold</i> - <i>Ecosystem Protection Level</i> - <i>historical extent</i> - <i>protected area target</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i>
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	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED		to ensure the viability and persistence of that population, or the minimum number of populations of a species required to ensure the viability and persistence of that species, within a particular landscape. context or defined in a provincial, national, continental or global conservation programme or strategy.				
	27. biodiversity threshold	A quantitative threshold used in spatial biodiversity assessment, such as the assessment of threat status of ecosystem types and species based on the IUCN Red List of Ecosystems or Red List of Species.	The IUCN's Guidelines for the application of Red List Categories and Criteria use a series of thresholds to determine threat status of an ecosystem type or species. The Guidelines use the term "thresholds" rather than "biodiversity thresholds", but in the South African context it makes sense to refer to these Red List thresholds as biodiversity thresholds.	Not to be confused with biodiversity targets that are used in spatial biodiversity planning. In the NSBA 2004 and NBA 2011, biodiversity targets for ecosystem types were used as one of the thresholds in the assessment of Ecosystem Threat Status, but this was before the IUCN Red List of Ecosystems Guidelines were available. In the NBA 2018, biodiversity targets were decoupled from the thresholds used for Ecosystem Threat Status assessment.	Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017) IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Threat Status</i> - <i>Endangered (EN)</i> - <i>Species Threat Status</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	28. biogeographical region	A broad region subjected to similar ecological processes with similar species assemblages.	Used in the estuarine and marine realms, roughly equivalent to biome in the terrestrial realm and ecoregion in the freshwater realm. Second hierarchical level in the SA-NECS. Equivalent to Level 2 in the Global Ecosystem Typology.		South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	- <i>biome</i> - <i>ecoregion</i> - <i>ecosystem type</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>
NEW TERM	29. biome	A large biogeographical area based on prevailing climatic factors and dominant forms of plant life.	Used in the terrestrial realm, roughly equivalent to ecoregion in the freshwater realm and biogeographical region in the estuarine and marine realms. Second hierarchical level in the SA-NECS. Equivalent to Level 2 in the Global Ecosystem Typology. Biomes broadly correspond with climatic regions, as availabilities of light, water, soil nutrients and temperature strongly influence plant establishment and survival, although other environmental controls, such as biogeography, are sometimes important.		South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	- <i>bioregion</i> - <i>ecoregion</i> - <i>ecosystem type</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	30. bioregion	A classification level between biome and ecosystem type in the classification hierarchy for the terrestrial realm, defined ecologically based on dominant landscape-scale attributes or biological data.		The term bioregion as used in the classification hierarchy for ecosystem types should not be confused with the term bioregion as used in the Biodiversity Act in relation to bioregional plans. In the context of the Biodiversity Act, a “bioregion” is the area for which a spatial biodiversity plan may be formally published. The legal meaning of “bioregion” in the Biodiversity Act is thus quite different from its ecological meaning. The context in which the term is used will usually make it clear which meaning is intended.	South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	- <i>biome</i> - <i>ecoregion</i> - <i>ecosystem type</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	31. bioregional plan	<p>A plan published in terms of the Biodiversity Act that includes a CBA Map accompanied by land-use guidelines.</p> <p>A bioregional plan is usually developed for a district or metropolitan municipality.</p>	<p>Bioregional plans are developed in accordance with the Guideline for Bioregional Plans, which was published in 2009 in terms of the Biodiversity Act. They must be based on an underlying spatial biodiversity plan developed using a systematic biodiversity planning approach and best available science. The development of the plan is usually led by the relevant provincial conservation authority.</p> <p>A bioregional plan represents the biodiversity sector's input into planning and decision-making in a range of other sectors, such as land-use planning, environmental authorisations and natural resource management.</p> <p>A bioregional plan that has not yet been published in the Government Gazette in terms of the Biodiversity Act is referred to as a <i>biodiversity sector plan</i>. In order to be published as a bioregional plan, the CBA Map must go through a consultation process to ensure it is consistent with other relevant municipal plans and frameworks. Once a bioregional plan has been published, it must be taken into account in land-use planning and decision-making.</p>	<p>Use “<u>bioregional plan</u>” to refer to bioregional plans in general; “<u>Bioregional Plan</u>” only when a particular bioregional plan is being referred to e.g. West Rand District Bioregional Plan.</p> <p>Not to be confused with “bioregional programme”, which refers to a multi-partner programme at the biome level, for example, Cape Action for People and the Environment (CAPE).</p> <p>Preferably avoid using an acronym. If unavoidable, the acronym should be BRP.</p>	<p>Guideline for Bioregional Plans (DEAT 2009b)</p>	<ul style="list-style-type: none"> - <i>biodiversity sector plan</i> - <i>CBA Map</i> - <i>Biodiversity Act</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	32. catchment	The land area from which water runs off into a specified wetland or aquatic ecosystem; a drainage basin.	<p>There are 25 primary catchments in South Africa that are sub-divided into increasingly smaller secondary, tertiary, quaternary and quinary catchments. Sub-quaternary or quinary catchments may be used as planning units in spatial biodiversity planning (for example, they were used in the identification of Freshwater Ecosystem Priority Areas).</p> <p>At the time of writing, there was an agreed delineation of quaternary catchments for South Africa, of which the Department of Water and Sanitation is the custodian. However, an agreed delineation of quinary catchments was still in the process of being finalised.</p>	<p>Quaternary catchments can be sub-divided into smaller units based on either hydrology or altitude, giving different results. The terms “sub-quaternary” and “quinary” have sometimes been used interchangeably and sometimes to distinguish between hydrological sub-division of quaternary catchments (into sub-quaternaries) and altitudinal sub-division (into quinary).</p> <p>Because there has been ambiguity associated with these terms, it is useful to be explicit about which set of sub-quaternary or quinary catchments is being used in a particular spatial biodiversity prioritisation or plan.</p>	Classification system for wetlands and other aquatic ecosystems in South Africa (Ollis et al. 2013)	- <i>spatial biodiversity planning</i>
NO CHANGE	33. CBA Irreplaceable or CBA 1	A CBA that is irreplaceable or near-irreplaceable for meeting biodiversity targets.	<p>CBAs are one of five broad categories on a CBA Map. They may be divided into CBA Irreplaceable (CBA 1) and CBA Optimal (CBA 2).</p> <p>The designation of an area or site as CBA Irreplaceable or CBA 1 means that there are no or very few other spatial options for meeting biodiversity targets for the features associated with that area or site.</p>	<p>Preferably CBA 1 (with a space) rather than CBA1.</p> <p>Avoid using the term “mandatory” in any way in relation to these areas (this was used in some older spatial biodiversity plans).</p>	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>CBA Map</i> - <i>CBA Natural</i> - <i>CBA Optimal or CBA 2</i> - <i>CBA Restore</i> - <i>Critical Biodiversity Area (CBA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	34. CBA Map	<p>Short definition: A spatial plan for conserving biodiversity and maintaining an ecologically well-functioning landscape or seascape.</p> <p>Longer definition: A spatial biodiversity plan that identifies priority areas for conserving ecosystems and species and maintaining ecological functioning at the landscape or seascape level.</p>	<p>The term “CBA Map” is used as shorthand for “map of Critical Biodiversity Areas and Ecological Support Areas”.</p> <p>A CBA Map has five broad categories:</p> <ul style="list-style-type: none"> ○ Protected Areas ○ Critical Biodiversity Areas (CBA) ○ Ecological Support Areas (ESA) ○ Other Natural Areas (ONA) ○ No Natural Remaining (NNR) <p>CBA Maps should be developed using a systematic biodiversity planning approach, closely following the Technical Guidelines for CBA Maps. Protected areas, CBAs and ESAs are considered biodiversity priority areas.</p> <p>Land-based CBA Maps have been developed at the provincial or metropolitan level for well over a decade and often form the basis for biodiversity sector plans or bioregional plans. The first Coastal and Marine CBA Map for South Africa’s mainland maritime domain was completed in 2022 and forms the basis for the National Coastal and Marine Spatial Biodiversity Plan (NCMSBP).</p>	<p>CBA <u>Map</u> not CBA <u>map</u>.</p> <p>Land-based CBA Maps should ideally integrate the terrestrial, freshwater and estuarine realms. However, at the time of writing some provinces still had separate terrestrial and aquatic CBA Maps.</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>amalgamated national CBA and ESA layer</i> - <i>biodiversity sector plan</i> - <i>bioregional plan</i> - <i>biodiversity priority area</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>Ecological Support Area (ESA)</i> - <i>No Natural Remaining (NNR)</i> - <i>Other Natural Area (ONA)</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	35. CBA Natural	A CBA that is in good ecological condition (natural or near-natural).	<p>CBAs are one of five broad categories on a CBA Map. They may be divided into CBA Natural and CBA Restore.</p> <p>The distinction between CBA Natural and CBA Restore is made in the National Coastal and Marine CBA Map. It may also be useful for land-based CBA Maps in cases where it is considered important to distinguish between CBAs that are in good ecological condition and those that are in fair or poor ecological condition and should preferably be restored.</p> <p>CBA Natural may include both irreplaceable and optimal CBAs i.e. could be subdivided into CBA 1 Natural and CBA 2 Natural.</p>		<p>National Coastal and Marine Spatial Biodiversity Plan (Harris et al. 2022)</p> <p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - CBA Map - CBA Irreplaceable or CBA 1 - CBA Optimal or CBA 2 - CBA Restore - Critical Biodiversity Area (CBA) - ecological condition
REVISED	36. CBA Optimal or CBA 2	<p>Short definition: A CBA that has been selected as the best option for meeting biodiversity targets.</p> <p>Longer definition: A CBA that has been selected as the best option for meeting biodiversity targets based on complementarity, spatial efficiency, connectivity and/or avoidance of conflict with other uses.</p>	<p>CBAs are one of five broad categories on a CBA Map. They may be divided into CBA Irreplaceable (CBA 1) and CBA Optimal (CBA 2).</p> <p>The designation of an area or site as CBA Optimal or CBA 2 means that there are other areas or sites where biodiversity targets for the features associated with that area or site could be met, but that those areas or sites would result in a less spatially efficient plan (i.e. the total area of all CBAs would be larger).</p>	<p>CBA 2 (with a space) rather than CBA2 (no space).</p> <p>Avoid “CBA Best Design”. The term “best design” may be used in an explanatory description of these areas.</p> <p>Some older CBA Maps use the term “CBA Important” rather than “CBA Optimal”, with the same meaning.</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - CBA Map - CBA Irreplaceable or CBA 1 - CBA Natural - CBA Restore - Critical Biodiversity Area (CBA)

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	37. CBA Restore	<p>Short definition: A CBA that is no longer in good ecological condition and should be restored.</p> <p>Longer definition: A CBA that is no longer in good ecological condition and should preferably be restored to a condition consistent with retaining its associated biodiversity features.</p>	<p>CBA's are one of five broad categories on a CBA Map. They may be divided into CBA Natural and CBA Restore.</p> <p>The distinction between CBA Natural and CBA Restore is made in the National Coastal and Marine CBA Map. It may also be useful for land-based CBA Maps in cases where it is considered important to distinguish between CBAs that are in good ecological condition and those that are in fair or poor ecological condition and should preferably be restored.</p> <p>CBA Restore may include both irreplaceable and optimal CBAs i.e. could be subdivided into CBA 1 Restore and CBA 2 Restore.</p>	<p>The first edition of the Technical Guidelines for CBA Maps allowed for an extremely narrow range of circumstances in which it was appropriate to select a site or area not in good ecological condition as a CBA, so it was not considered necessary to allow for a “CBA Restore” map category. This was in the context of land-based spatial biodiversity plans. In a marine context, there is a larger set of circumstances in which it may be necessary and appropriate to select a site or area in fair or even poor ecological condition as a CBA, so it was useful to introduce the option of a “CBA Restore” map category.</p>	<p>National Coastal and Marine Spatial Biodiversity Plan (Harris et al. 2022)</p> <p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>CBA Irreplaceable or CBA 1</i> - <i>CBA Map</i> - <i>CBA Natural</i> - <i>CBA Optimal or CBA 2</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>ecological condition</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	38. coast / coastal zone	A cross-realm zone that extends from the land into the sea, the specific boundaries of which depend on the context in which it is being used and typically differ in legal, planning and assessment contexts.	<p>In the SA-NECS, the coast is not seen as a realm in its own right but rather as <i>cross-realm</i> or a <i>cross-realm zone</i> made up of ecosystem types from the terrestrial and marine realms that are influenced by both land and sea as well as all estuarine ecosystems.</p> <p>Some inland aquatic ecosystems may also be considered part of the coastal zone. At the time of writing these coastal inland aquatic ecosystems had not yet been systematically identified.</p>	<p>There are many different ways to conceptualise and map the coast for different purposes. For example, the coastal zone as defined in the Integrated Coastal Management Act uses fixed buffer distances from the high-water mark. No spatial extent is definitively tied to the coast or coastal zone.</p> <p>This means that in the context of spatial biodiversity assessment, prioritisation and planning, it is always important to be specific about which definition and delineation of the coast or coastal zone is being used.</p> <p>For spatial biodiversity <u>assessment</u> in South Africa, the <i>ecologically determined coastal zone</i> is typically used. Spatial biodiversity <u>prioritisation and planning</u> may require a different extent, e.g., tied more closely to administrative or other boundaries.</p>	<p>National Biodiversity Assessment 2018: Volume 5 Coast (Harris et al. 2019a)</p> <p>South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)</p> <p>Harris et al. 2019b</p>	<ul style="list-style-type: none"> - <i>ecologically determined coastal zone</i> - <i>ecosystem type</i> - <i>estuarine realm</i> - <i>marine realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i> - <i>terrestrial realm</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	39. coastline	The land-sea interface.	<p>Because the landward extent of the sea moves constantly with waves and tides, <i>the coastline is not a fixed line on the shore</i>. Nevertheless, it must often be represented as a line in spatial biodiversity assessment, prioritisation and planning. How the coastline is delineated can substantially affect the outputs of spatial biodiversity assessment, prioritisation and planning for ecosystem types in the coastal zone.</p> <p>“Coastline” is sometimes used synonymously with “shoreline”, which is also a general term that does not refer to a specific boundary.</p>	<p>“Coastline” is a general term and does not refer to a specific line, such as the high-water mark, dune base, spring low tide mark, etc. It should not be used to describe the landward or seaward boundary of a planning or assessment domain (e.g., “up to the coastline”) because it is a non-specific term. There is no definitive coastline for use in all contexts.</p> <p>In the context of spatial biodiversity assessment, prioritisation and planning, the <i>dune base</i> should preferably be used to represent the coastline because it is ecologically defined and provides a seamless boundary between the terrestrial and marine realms. Use the phrase “up to the dune base” to describe the landward or seaward boundary of the planning or assessment domain.</p>	<p>National Biodiversity Assessment 2018: Volume 5 Coast (Harris et al. 2019a)</p> <p>Harris et al. 2019b</p>	<ul style="list-style-type: none"> - <i>coast / coastal zone</i> - <i>dune base</i> - <i>ecologically determined coastal zone</i> - <i>estuarine realm</i> - <i>marine realm</i> - <i>terrestrial realm</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	40. Collapsed (CO)	<p>An IUCN Red List category applied to ecosystems.</p> <p>An ecosystem type is Collapsed when it is virtually certain that its defining biotic or abiotic features are lost, and the characteristic native biota are no longer sustained.</p>	<p>The threat status of ecosystem types is assessed based on criteria and thresholds set out in IUCN Guidelines based on the best available evidence – see entry on <i>Red List of Ecosystems</i>.</p> <p>Collapsed (CO) is equivalent to Extinct (EX) under the IUCN Red List of Species.</p>		<p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 Synthesis Report (SANBI 2019a)</p>	<p>- <i>Ecosystem Threat Status</i></p> <p>- <i>Red List of Ecosystems</i></p>
REVISED	41. conservation	<p>Protection, management and/or restoration for explicit biodiversity conservation objectives.</p>	<p>The Convention on Biological Diversity uses the phrase “conservation and sustainable use”, distinguishing conservation from sustainable use. Sustainable use could include, for example, sustainable harvesting of biological resources or sustainably managed grazing, which would not necessarily be considered conservation.</p>	<p>Not to be conflated with “protection”, which is a more specific term that implies formal protection in terms of the Protected Areas Act. Conservation could include protection but need not necessarily do so.</p>		<p>- <i>protection</i></p>
NO CHANGE	42. conservation agency	<p>A national or provincial organ of state whose main mandate is conservation. Includes SANParks, iSimangaliso Wetland Park Authority, and provincial conservation agencies.</p>	<p>In some provinces, the provincial environmental affairs department has established a stand-alone agency in terms of provincial legislation, with delegated responsibility for conservation-related matters. Some provincial conservation agencies have a mandate to work only within protected areas; others have a mandate to work throughout the province concerned.</p>	<p>Not to be confused with the broader term “conservation authority”. Conservation authorities include conservation agencies as well as provincial departments with the mandate for environmental affairs in provinces where a conservation agency does not exist.</p>		<p>- <i>conservation authority</i></p> <p>- <i>provincial conservation authority</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	43. conservation area	An area of land or sea not formally protected in terms of the Protected Areas Act but managed for biodiversity conservation.	<p>Conservation areas have less long-term security than protected areas and are considered a less strong form of protection. They contribute towards the conservation estate but not the protected area estate.</p> <p>Biodiversity stewardship Category 2 is conservation areas. There is no fixed set of sub-categories or types of conservation areas, but they can include: Biodiversity Management Agreements; Biodiversity Agreements; conservation servitudes; sites related to various business and biodiversity initiatives; conservation agreements. Botanical gardens are also considered conservation areas.</p> <p>A conservation area has the following characteristics:</p> <ul style="list-style-type: none"> ○ It is a geographically defined area of biodiversity importance. ○ It is governed, and thereby is under the authority of a specific entity or individual. ○ It is managed for its biodiversity values, either directly or as part of a broader landscape management system. ○ A formal agreement provides the foundation of an intention to conserve the area over the long term. 	<p>Not to be used when referring to “protected area”.</p> <p>Avoid “informal protected areas” when referring to conservation areas – protected areas are formal by definition, so there is no such thing as an informal protected area.</p> <p>There is a link, but currently not a one-to-one relationship, between conservation areas and Other Effective area-based Conservation Measures (OECMs). Some conservation areas may qualify as OECMs, and there may be sites that qualify as OECMs that are not conservation areas. As further work on OECMs is undertaken in South Africa, the definitions of conservation areas and OECMs may become more closely aligned.</p> <p>According to the Biodiversity Stewardship Guideline, Biosphere Reserves are considered to be part of biodiversity stewardship Category 3 (biodiversity partnership areas) and are not considered conservation areas.</p>	<p>Biodiversity Stewardship Guideline (SANBI 2018b)</p>	<ul style="list-style-type: none"> - <i>Biodiversity Agreement</i> - <i>Biodiversity Management Agreement (BMA)</i> - <i>biodiversity partnership area</i> - <i>biodiversity stewardship</i> - <i>biodiversity stewardship category</i> - <i>conservation estate</i> - <i>Other Effective area-based Conservation Measure (OECM)</i> - <i>protected area</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	44. conservation authority	A national or provincial organ of state whose mandate includes conservation but may be broader than conservation.	A summary term for all organs of state that deal with conservation as their core mandate or as part of their mandate.	Not to be confused with the narrower term “conservation agency”. Conservation authorities include national and provincial conservation agencies as well as provincial departments with the mandate for environmental affairs in provinces where a conservation agency does not exist.		- <i>conservation agency</i> - <i>provincial conservation authority</i>
NO CHANGE	45. conservation estate	An inclusive term referring to all protected areas and all conservation areas.		Not to be used when referring to “protected area estate”. Avoid “conservation area estate”.		- <i>conservation area</i> - <i>protected area</i> - <i>protected area estate</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	46. contemporary extent	The mapped extent (geographic distribution) of an ecosystem type at a current or recent date.	<p>Compare with “historical extent”. The contemporary extent of an ecosystem type excludes areas where the historical distribution of the underlying natural ecosystem type has been converted to an anthropogenic land use/cover class (e.g. cultivation) or sea use class (e.g. harbours).</p> <p>Mapping contemporary extent requires judgement calls as to the cut-off point between <i>decline in ecological condition</i> of a natural, near-natural or semi-natural ecosystem type and <i>conversion</i> of a natural, near-natural or semi-natural ecosystem type to an anthropogenic (intensively modified) class. Decline in condition does not in itself result in reduction in extent, whereas conversion does result in reduction in extent.</p> <p>In the terrestrial realm, severely or critically modified areas are generally considered to have been converted. In the freshwater, estuarine and marine realms the dividing line between decline in condition and reduction in extent is less clear.</p>	Reduction in extent of an ecosystem type is mapped independently of mapping its historical extent. Reduction in extent can be mapped through a range of means including land-cover mapping, land cover change analysis or cumulative-pressure mapping.		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>historical extent</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	47. contract protected area	A protected area declared through a contractual arrangement between a conservation authority and private or communal landowner(s), who retain ownership of the land. Contract protected areas may form part of biodiversity stewardship programmes, but need not necessarily.	<p>For contract protected areas declared through biodiversity stewardship programmes, the landowner becomes the management authority of the protected area. In other cases, the conservation authority may take over the management of the land. In the case of contract National Parks, SANParks <u>must</u> be appointed as the management authority in terms of the Protected Areas Act; however, management actions can be delegated back to the landowner.</p> <p>Contract protected areas are highlighted as an important mechanism for protected area expansion in the NPAES.</p>			<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>protected area</i> - <i>state-owned protected area</i>
REVISED	48. Critical Biodiversity Area (CBA)	An area that must be maintained in, or restored to, natural or near-natural ecological condition in order to conserve a viable representative sample of all ecosystem types and species and maintain ecologically functional landscapes or seascapes.	<p>One of five main categories on a CBA Map, and a type of biodiversity priority area.</p> <p>CBA's are identified using systematic biodiversity planning in a configuration that is complementary, efficient and avoids conflict with other uses where possible.</p> <p>CBA's together with protected areas should collectively meet biodiversity targets for all ecosystem types and species (though there may be instances where targets for certain species are met in ESAs).</p> <p>CBA's may be divided into sub-categories:</p> <ul style="list-style-type: none"> o CBA 1 and CBA 2 o CBA Natural and CBA Restore 		Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>CBA Irreplaceable or CBA 1</i> - <i>CBA Map</i> - <i>CBA Natural</i> - <i>CBA Optimal or CBA 2</i> - <i>CBA Restore</i> - <i>Ecological Support Area (ESA)</i> - <i>No Natural Remaining (NNR)</i> - <i>Other Natural Area (ONA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	<p>49. Critically Endangered (CR)</p>	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>An ecosystem type is Critically Endangered when it is considered to be at an extremely high risk of collapse.</p> <p>A species is Critically Endangered when it is considered to be at extremely high risk of extinction.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of ecosystem types and species is assessed based on criteria and thresholds set out in IUCN Guidelines, using the best available evidence – see entries on <i>Red List of Ecosystems</i> and <i>Red List of Species</i>.</p> <p>Critically Endangered, Endangered and Vulnerable ecosystem types or species are collectively termed “threatened”.</p>	<p>The Biodiversity Act defines a Critically Endangered ecosystem as “ecosystems that have undergone severe degradation of ecological structure, function or composition as a result of human intervention and are subject to an extremely high risk of irreversible transformation” (section 52(2)(a)). This is a legal definition rather than an ecological definition. For biodiversity assessment, prioritisation and planning purposes, the ecological definition (left) should be used.</p>	<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019)</p>	<ul style="list-style-type: none"> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>biodiversity threshold</i> - <i>Ecosystem Threat Status</i> - <i>Endangered (EN)</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i> - <i>threatened ecosystem</i> - <i>threatened species</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	50. critically modified <i>Previously:</i> Irreversibly modified	A detailed ecological condition class in which the ecosystem has been modified completely, with an almost complete loss of composition and structure relative to a reference condition of natural. All or most ecosystem function has been destroyed and the changes are irreversible.	Falls within the broad ecological condition class “intensively modified” or “poor ecological condition”, which also includes “heavily modified” and “severely modified”. Equivalent to: <ul style="list-style-type: none"> ○ DWS’s Present Ecological State category F (critically/extremely modified) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of >90% (very severely degraded) and does not contribute to remaining extent under Criterion A Examples include: parking lot, mine, harbour wall. (In the terrestrial realm: the surface is impermeable.) Can apply to a site or an ecosystem.	Avoid “low ecological condition”. Avoid the term “transformed” to describe ecosystems or sites that have been critically modified. Transformation is a widely held positive socio-economic goal in South Africa, so it creates confusion if the biodiversity sector uses it to describe something negative or undesirable. The NBA 2018 made the change from “irreversibly modified” to “critically modified”, as part of the process of aligning ecological condition terms across realms.		- <i>ecological condition</i> - <i>heavily modified</i> - <i>intensively modified</i> - <i>irreversibly modified</i> - <i>poor ecological condition</i> - <i>severely modified</i>
REVISED	51. cultivation	A form of intensive agriculture, including dryland and irrigated field crops, orchards and vineyards and horticulture. Can be for commercial or subsistence purposes.	Sometimes called croplands, although the meaning of croplands is narrower. In South African ecosystems, cultivation is considered to result in an ecological condition of intensively modified.	Not to be used interchangeably with “agriculture”. “Agriculture” is a much broader term that includes cultivation and other forms of intensive and extensive agriculture.		- <i>agriculture</i> - <i>extensive agriculture</i> - <i>intensive agriculture</i> - <i>intensively modified</i> - <i>rangelands</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	52. Data Deficient (DD)	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>An ecosystem type or species is Data Deficient when there is inadequate information to make a direct or indirect assessment of its risk of extinction (species) or collapse (ecosystems).</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>Assigning ecosystem types or species to this category indicates that their situation has been reviewed, but that more information is required to determine their threat status.</p>		<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019)</p>	<ul style="list-style-type: none"> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>Ecosystem Threat Status</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i>
NEW TERM	53. degradation <i>In most cases rather use: decline in ecological condition</i>	<p>Decline in the composition, structure and/or function of an ecosystem, as a result of directly or indirectly human-caused pressures, relative to an appropriate baseline.</p>	<p>There are many definitions of degradation. This definition is based on a biodiversity perspective and focuses specifically on ecosystems. It draws on Red List of Ecosystems and Key Biodiversity Area conceptions of degradation.</p> <p>This definition differs substantially from the IPBES and UNCCD definitions of degradation in that it does not include a focus on decline or reduction in ecosystem services or productivity.</p> <p>It is useful to include a definition of degradation in the Lexicon as the term is used in the names of ecological condition categories in the marine realm, although not in other realms.</p>	<p>Care should be taken in using the term degradation as it has different meanings from different perspectives. For example, a farmer may consider a wheat field to be healthy and not degraded, while from a biodiversity perspective it is intensively modified and thus might be seen as highly degraded.</p> <p>In the biodiversity assessment, prioritisation and planning context in South Africa it is generally clearer and more useful to talk about decline in ecological condition in terms of degrees of modification from a reference condition of natural rather than degradation.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	54. development	A broad socio-economic goal, encompassing social and economic factors.	<p>Biodiversity assets and ecological infrastructure can directly support the achievement of national development goals, which include inclusive economic growth and reducing poverty and unemployment.</p> <p>Biodiversity and development can thus go hand in hand, especially with careful spatial planning that allows for natural and semi-natural areas to persist within a matrix of more intensive land and sea uses. Spatial biodiversity planning is essential to support this.</p>	<p>Avoid using the term “development” to refer to all land uses and sea uses that are not compatible with the conservation or management of biodiversity.</p> <p>Avoid talking about conserving biodiversity and socio-economic development as though they were conflicting goals that need to be traded off against each other. Language such as “balancing” conservation and development implies such a trade-off and should be avoided.</p>		<ul style="list-style-type: none"> - <i>agriculture</i> - <i>timber plantations</i> - <i>urban area / urban development</i> - <i>urbanisation</i>
NEW TERM	55. dune base	The decadal scale high-water mark.	<p>Often used to represent the coastline in spatial biodiversity assessment, prioritisation or planning because it is ecologically defined and provides a seamless boundary between the terrestrial and marine realms.</p> <p>The dune base was delineated for the NBA 2018.</p>	See entry for <i>coastline</i> .	National Biodiversity Assessment 2018: Volume 5 Coast (Harris et al. 2019a)	<ul style="list-style-type: none"> - <i>coast / coastal zone</i> - <i>ecologically determined coastal zone</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	56. ecological condition	The degree to which the composition, structure and function of an area or biodiversity feature has been modified from a reference condition of natural.	<p>At a broad level, ecological condition is assessed as natural, semi-natural or intensively modified. These broad ecological condition categories can be broken down into more detailed categories.</p> <p>Terms related to ecological condition have evolved differently in different realms, and, while there has been substantial convergence, a few differences remain. The terms included in the Lexicon reflect the near-convergence achieved through the National Biodiversity Assessment.</p> <p>There has been debate about whether it is appropriate to use the value-laden terms “good, fair, poor” to describe ecological condition. Where the context is clearly a biodiversity perspective, good, fair and poor can be appropriate terms to describe ecological condition.</p>	<p>Avoid the terms “high, medium and low” in relation to ecological condition.</p> <p>Avoid the term “health” to refer to ecological condition. Many ecosystems that are considered severely or critically modified from an ecological perspective may nevertheless be considered “healthy” from other perspectives (for example, an cultivated field or a park in an urban setting).</p> <p>The use of a <i>reference</i> condition of natural does not imply that the <i>desired</i> or recommended condition for all ecosystems is natural, nor that the reference condition is a static ideal that is unchanging. It is simply a reference point from which to judge the degree of modification.</p>		<ul style="list-style-type: none"> - <i>critically modified</i> - <i>degradation</i> - <i>fair ecological condition</i> - <i>good ecological condition</i> - <i>heavily modified</i> - <i>intensively modified</i> - <i>moderately modified</i> - <i>natural</i> - <i>near-natural</i> - <i>poor ecological condition</i> - <i>semi-natural</i> - <i>severely modified</i>

Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">REVISED</p> <p>57. ecological infrastructure</p>	<p>Naturally functioning ecosystems that provide valuable services to people and the economy.</p>	<p>Ecological infrastructure is the nature-based equivalent of built infrastructure, and is just as important for providing services and underpinning economic development.</p> <p>Ecological infrastructure often supports and enhances built infrastructure. For example, catchments that provide clean water are just as critical for water security as the dams that hold the water. Natural vegetation along coastal dunes protects coastal settlements from the effects of tidal surges and mudslides during storms.</p> <p>Ecological infrastructure need not be in natural or near-natural ecological condition but should retain at least some of its ecological functioning. This usually requires it to be in at least semi-natural ecological condition.</p> <p>The concept of ecological infrastructure helps to focus attention on the integrity of the underlying stock of ecosystem assets that deliver ecosystem services, rather than simply on the flow of services. One ecological infrastructure asset may deliver several ecosystem services.</p> <p>The benefits of ecological infrastructure fall into broad categories (not mutually exclusive) such as water security, food security, disaster risk reduction, the biodiversity economy. In most cases these benefits also contribute to climate change adaptation.</p>	<p>Referred to as “natural infrastructure” in some countries.</p> <p>Not to be confused with “green infrastructure”, which is a broader term that can include elements of built infrastructure. Ecological infrastructure is a subset of green infrastructure. Green infrastructure that is built to mimic ecological infrastructure (such as artificial wetlands) is “artificial ecological infrastructure”.</p> <p>Not to be confused with “natural capital”, which is a broader term that includes abiotic resources such as air and minerals.</p> <p>The concept of ecological infrastructure is inherently utilitarian, and the definition therefore does not include supporting biodiversity.</p> <p>Not all ecosystem services flow from ecological infrastructure. For example, intensively modified areas that generate provisioning ecosystem services (such as cultivated areas or timber plantations) are not considered to be ecological infrastructure.</p> <p>Use the acronym “EI” with caution (except in “EI Map”). In ordinary text it is usually better to write ecological infrastructure in full.</p>	<p>Factsheet on Ecological Infrastructure (SANBI 2013)</p> <p>Compendium of Benefits of Biodiversity (SANBI 2019b)</p>	<ul style="list-style-type: none"> - <i>benefits of biodiversity</i> - <i>ecological infrastructure asset</i> - <i>Ecological Infrastructure Map (EI Map)</i> - <i>ecosystem services</i> - <i>investment in ecological infrastructure</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	58. ecological infrastructure asset	A feature in the landscape or seascape that directly supplies one or more services or benefits to people and the economy.	<p>Examples of ecological infrastructure assets include wetlands, rivers, riparian areas, water source areas, rangelands, estuaries, coastal dunes, beaches, mangroves, kelp forests, reefs. The National Biodiversity Assessment 2018 identified “small high-value ecosystem types that provide disproportionate benefits to people”, all of which constitute ecological infrastructure assets.</p> <p>It is often easier to spatially delineate ecological infrastructure assets than ecosystem services. This makes the concept of ecological infrastructure assets useful for spatial assessment, prioritisation and planning.</p>	Not all natural or semi-natural areas automatically constitute ecological infrastructure. There has to be a direct link to provision of a service or benefit.	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity asset</i> - <i>Strategic Water Source Area (SWSA)</i> - <i>investment in ecological infrastructure</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	59. Ecological Infrastructure Map (EI Map)	A map of ecological infrastructure assets.	<p>Dedicated maps of ecological infrastructure assets are relatively new compared with CBA Maps. At the time of writing, work was underway on approaches to delineating ecological infrastructure assets and compiling them into a map product.</p> <p>EI Maps could reflect a particular theme, such as EI assets for water security or EI assets for the biodiversity economy, or they could consolidate EI assets across several themes.</p> <p>An important distinction between CBA Maps and EI Maps is that CBA Maps have primarily a conservation focus and can reflect a range of values of biodiversity, while EI Maps have by definition a strictly utilitarian focus.</p>	<p>In mapping ecological infrastructure assets, two approaches are possible: 1) mapping the “full basket” of assets, including those that may not currently be in use or may provide a relatively low level of services, and 2) mapping only those assets that are most productive. Either way, a subset of assets may then be selected as “critical ecological infrastructure assets” based on the degree of dependency on or demand for the services they provide. A further step may be to prioritise among critical ecological infrastructure assets those most urgently in need of maintenance or restoration.</p> <p>At the time of writing, work was underway to operationalise and apply these concepts.</p> <p>CBA Maps may include some ecological infrastructure features (especially in the ESA map category) but are not intended to map ecological infrastructure comprehensively.</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>ecological infrastructure</i> - <i>ecological infrastructure asset</i> - <i>investment in ecological infrastructure</i> - <i>Strategic Water Source Area (SWSA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	60. ecological processes	The functions and processes that operate to maintain and generate biodiversity.	<p>One of the principles of systematic biodiversity planning is to ensure persistence of biodiversity, which requires that ecological processes be considered in identifying biodiversity priority areas. To include ecological processes in a spatial biodiversity plan, their spatial components need to be identified and mapped. These spatial components of ecological processes often include ecological corridors at various spatial scales.</p> <p>Sometimes used as shorthand for “ecological and evolutionary processes”. Often used as part of the phrase “biodiversity pattern and ecological processes”.</p>	Avoid using the term “process” as shorthand for ecological processes, as it has multiple meanings in different contexts. For example, use “biodiversity pattern and ecological processes” rather than shortening to “pattern and process”, the meaning of which would be unclear to many people.	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity pattern</i> - <i>biodiversity pattern and ecological processes</i> - <i>systematic biodiversity planning</i>
REVISED	61. Ecological Support Area (ESA)	An area that must be maintained in at least semi-natural ecological condition, or where further deterioration in ecological condition must be avoided, to support the conservation of ecosystems and species and maintain ecologically functional landscapes or seascapes.	<p>One of five main categories on a CBA Map, and a type of biodiversity priority area.</p> <p>ESAs are identified using systematic biodiversity planning in a configuration that is spatially efficient and avoids conflict with other land uses where possible. In general, they are selected because they play an important role in maintaining ecological processes, either in support of a specific protected area or CBA or in the landscape or seascape more broadly. In a few instances they may be selected to meet targets for certain species where it is not possible to meet those targets in CBAs. They may also play an ecological infrastructure role.</p>	ESAs may include some ecological infrastructure assets but they are not intended to represent ecological infrastructure comprehensively.	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>CBA Map</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>ESA 1</i> - <i>ESA 2</i> - <i>No Natural Remaining (NNR)</i> - <i>Other Natural Area (ONA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	62. ecologically determined coastal zone	All ecosystem types influenced by both the land and sea, spanning semi-coastal and coastal vegetation, through estuaries and shores, to the seaward edge of the inner shelf, bays and river-influenced marine ecosystem types.	<p>This is an ecological definition of the coast, based on the characteristics of ecosystem types. It is used in the National Biodiversity Assessment as the basis for indicators and statistics for the coast.</p> <p>The ecologically determined coastal zone is made up of some ecosystem types from the terrestrial realm, some ecosystem types from the marine realm and all estuarine ecosystem types. They are “tagged” as coastal ecosystem types based on the fact that they are influenced by both land and sea.</p>	<p>The ecologically determined coastal zone is used for spatial biodiversity assessment. For spatial biodiversity prioritisation and planning, the coast should be delineated to support the purpose of the prioritisation or plan concerned.</p> <p>“Ecologically determined coast” is an acceptable shortened form of “ecologically determined coastal zone”. In the context of a particular document it is probably best to stick to one or the other and not use them interchangeably.</p> <p>Avoid accidentally using “ecologically <u>defined</u> coastal zone”.</p>	<p>National Biodiversity Assessment 2018: Volume 5 Coast (Harris et al. 2019a)</p> <p>Harris et al. 2019b</p>	<ul style="list-style-type: none"> - <i>coast / coastal zone</i> - <i>coastline</i> - <i>estuarine realm</i> - <i>marine realm</i> - <i>terrestrial realm</i>
NEW TERM	63. ecologically determined seashore	The zone that comprises the backshore (made up of seashore vegetation types) and shores, within which sand is mobile.	<p>The four seashore vegetation types represent the primary dunes (backshore) from the dune base to the scrub-thicket break. Shores are intertidal ecosystem types that extend from the dune base to the back of the surf zone. Together, the backshore and shores form the seashore, equivalent to the littoral active zone where sand moves naturally between the dunes and the surf zone by wind- and wave-driven processes.</p> <p>The ecologically determined seashore forms part of the ecologically determined coastal zone.</p>	<p>This is an ecological definition of the seashore, different from the definition in the Integrated Coastal Management Act. It has a specific delineation and should not be used in a general context.</p> <p>Not to be used synonymously with “shore”, which is the term describing intertidal ecosystem types. It is also not to be used as a synonym for the coast, coastal zone, coastline or shoreline.</p>	<p>Harris et al. 2019a</p> <p>Harris et al. 2019b</p>	<ul style="list-style-type: none"> - <i>coast / coastal zone</i> - <i>coastline</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	64. Ecologically or Biologically Significant Marine Area (EBSA)	A marine area of high biodiversity importance, identified based on a global standard.	<p>EBSAs are identified using a set of seven criteria established by the Convention on Biological Diversity based on (1) uniqueness or rarity, (2) special importance for life history stages, (3) importance for threatened species or habitats, (4) vulnerability, fragility, sensitivity or slow recovery, (5) biological productivity, (6) biological diversity, or (7) naturalness. They are then delineated and described.</p> <p>23 EBSAs have been identified, delineated and described, either partly or fully, within South Africa's national jurisdiction.</p> <p>There is general similarity in the intention and approach for identifying EBSAs and Key Biodiversity Areas (KBAs).</p>		<p>Ecologically or Biologically Significant Marine Areas in the Benguela Current Large Marine Ecosystem: BCLME Region, Technical Report (2020)</p> <p>http://cmr.mandela.ac.za/EBSA-Portal</p>	<ul style="list-style-type: none"> - <i>Key Biodiversity Area (KBA)</i> - <i>marine realm</i>
NEW TERM	65. ecoregion	A relatively large area of land or water, containing characteristic, geographically distinct assemblages of natural communities and species.	<p>Used in the freshwater realm, roughly equivalent to biome in the terrestrial realm and biogeographical region in the estuarine and marine realms. River ecoregions for South Africa were developed by Kleynhans et al., 2005, based on physiography, climate, geology, soils and potential natural vegetation.</p> <p>Second hierarchical level in the SA-NECS. Equivalent to Level 2 in the Global Ecosystem Typology.</p>	This definition of ecoregion is conceptually aligned with the definition in WWF's Ecoregions of the World. However, international top-down mapping processes (such as that used to develop WWF's map of ecoregions) do not result in the same map of ecoregions used for the freshwater realm in the SA-NECS, which is always preferable to use in a national context.	<p>South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)</p> <p>Classification system for wetlands and other aquatic ecosystems in South Africa (Ollis et al. 2013)</p>	<ul style="list-style-type: none"> - <i>biome</i> - <i>biogeographical region</i> - <i>ecosystem type</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	66. ecosystem	A dynamic complex of animal, plant and micro-organism communities and their non-living environment interacting as a functional unit.	<p>This definition is used both by the Convention on Biological Diversity and in the Biodiversity Act.</p> <p>Ecosystems can be delineated (mapped) at a range of spatial scales and can be grouped and classified into different ecosystem types based on shared characteristics.</p> <p>Ecosystem diversity is one of three components of biodiversity, along with species and genetic diversity.</p>	Not to be confused with or used interchangeably with “ecosystem type” – see discussion under <i>ecosystem type</i> .		<ul style="list-style-type: none"> - <i>ecosystem type</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>
NO CHANGE	67. ecosystem of special concern	An ecosystem that warrants special conservation attention.	<p>Includes: threatened ecosystems; ecosystems identified as biodiversity priority areas; ecosystems that play an important role as ecological infrastructure; ecosystems that are identified as priorities for protected area expansion; ecosystems in buffers or corridors linked to protected areas; ecosystems likely to be important for ecosystem-based adaptation to climate change.</p> <p>The term “ecosystems of special concern” is used in the Norms and Standards for Biodiversity Management Plans for Ecosystems (BMP-E) (DEA 2014), as a first filter for identifying ecosystems that might be appropriate for the development of BMP-Es.</p>		Norms and Standards for Biodiversity Management Plans for Ecosystems (BMP-E) (DEA 2014)	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>threatened ecosystem</i> - <i>Biodiversity Management Plan (BMP)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	68. Ecosystem Protection Level	Indicator of the extent to which ecosystem types are represented in the current protected area network.	<p>One of two national headline indicators for ecosystems, assessed for all ecosystem types in South Africa as part of the National Biodiversity Assessment. A form of spatial biodiversity assessment.</p> <p>The assessment is based on the proportion of the biodiversity target for each ecosystem type that is included in one or more protected areas. Ecosystem types are allocated to one of the following categories:</p> <ul style="list-style-type: none"> ○ Well Protected ○ Moderately Protected ○ Poorly Protected ○ Not Protected <p>Not Protected, Poorly Protected and Moderately Protected ecosystem types are collectively referred to as under-protected.</p>	<p>Avoid “ecosystem protection status”, “protection status”, “conservation status”.</p> <p>Shortening to “protection level” is acceptable when the sentence or context makes it clear that this is in relation to ecosystems.</p> <p>“Ecosystem Protection Level” is capitalised because it is the formal name of an indicator.</p>	<p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<p>- <i>Ecosystem Threat Status</i></p> <p>- <i>ecosystem type</i></p> <p>- <i>Moderately Protected</i></p> <p>- <i>Not Protected</i></p> <p>- <i>Poorly Protected</i></p> <p>- <i>spatial biodiversity assessment</i></p> <p>- <i>under-protected</i></p> <p>- <i>Well Protected</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	69. ecosystem services	The contributions of ecosystems to human well-being.	<p>Three categories of ecosystem services are generally recognised:</p> <ul style="list-style-type: none"> ○ provisioning services ○ regulating services ○ cultural services <p>A fourth category, supporting services, is sometimes recognised, but is not used in the Common International Classification of Ecosystem Services (CICES), which is the most widely accepted classification of ecosystem services.</p> <p>Ecosystem services can flow from natural, semi-natural or intensively modified ecosystems. For example, crops from intensively cultivated areas are considered an ecosystem service.</p>	<p>Avoid “ecosystem goods and services”, which is an older term that has been shortened to “ecosystem services”, with “goods” implied.</p> <p>“Nature’s Contributions to People” is a term introduced by IPBES. It has a broader meaning than ecosystem services, encompassing a wider set of values of biodiversity.</p> <p>Note that “ecosystem services” is an inherently utilitarian term. It is not intended to capture non-use values of biodiversity.</p> <p>Flows of ecosystem services, especially provisioning services, can be associated with a decline in ecological condition and loss of biodiversity. The use of the concept of ecological infrastructure helps to focus attention on those ecosystem services that flow from natural or semi-natural ecosystem types, and that can be compatible with conserving biodiversity.</p>	<p>Common International Classification of Ecosystem Services (CICES)</p>	<p>- <i>benefits of biodiversity and ecological infrastructure</i> - <i>ecological infrastructure</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	70. Ecosystem Threat Status	Indicator of how threatened an ecosystem type is, in other words the degree to which it is still intact or alternatively losing vital aspects of its function, structure or composition.	<p>One of two national headline indicators for ecosystems, assessed for all ecosystem types in South Africa as part of the National Biodiversity Assessment. A form of spatial biodiversity assessment.</p> <p>Assessed based on the categories and criteria of the IUCN Red List of Ecosystems. Ecosystem types are categorised as:</p> <ul style="list-style-type: none"> ○ Collapsed ○ Critically Endangered ○ Endangered ○ Vulnerable ○ Near Threatened ○ Least Concern <p>(The categories Data Deficient and Not Evaluated are not used in South Africa.)</p> <p>Critically Endangered, Endangered and Vulnerable ecosystem types are collectively referred to as threatened. Ecosystems assessed as threatened may be listed in terms of the Biodiversity Act.</p>	<p>Avoid “ecosystem status” or “conservation status”. The term “conservation status” is used in the IUCN Red List for Species, but it leads to confusion when used in relation to ecosystems as it is not clear whether “conservation status” refers to threat status or protection level.</p> <p>Shortening to “threat status” is acceptable when the context makes it clear that this is in relation to ecosystems.</p> <p>“Ecosystem Threat Status” is capitalised because it is the formal name of an indicator.</p>	<p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Protection Level</i> - <i>ecosystem type</i> - <i>Endangered (EN)</i> - <i>Least Concern (LC)</i> - <i>list of threatened ecosystems</i> - <i>listed ecosystem</i> - <i>Near Threatened (NT)</i> - <i>Red List of Ecosystems</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i> - <i>threatened ecosystem</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	71. ecosystem type	<p><i>Short definition:</i> A complex of organisms and their associated physical environment that share broadly similar ecological composition, structure and function.</p> <p><i>Longer definition:</i> A complex of organisms and their associated physical environment that are united by similar ecological processes, and that exhibit substantial differences in biotic structure and composition to that of other ecosystem types.</p>	<p>While all ecosystems in the landscape and seascape exist along a continuum of changing diversity, some parts of the landscape and seascape are more strongly influenced by a shared set of biotic and abiotic factors which make those elements of the system more functionally cohesive. These ecologically cohesive areas are often discernible and can be described by the main factors influencing the functioning, structure and species composition of each of these areas. This allows us to divide the continuum of diversity into different spatial units that can be assigned to different classes which we refer to as ecosystem types.</p> <p>Ecosystem types are nested within higher-level groupings in the South African National Ecosystem Classification System.</p> <p>Biodiversity targets are set for ecosystem types, and ecosystem types are foundational units for spatial biodiversity assessment, prioritisation and planning.</p>	<p>Not to be used interchangeably with “ecosystem”. The distinction between an ecosystem and an ecosystem type is important, as they represent different concepts. An ecosystem can be defined and mapped at any scale, from a garden pond to the planet as a whole, whereas “ecosystem type” is a much narrower and more specific concept.</p> <p>An ecosystem type is likely to be made up of many individual ecosystems. For example, a particular wetland might be considered an ecosystem; together with other wetlands with similar ecological characteristics it might make up a wetland ecosystem type. Conversely, an ecosystem delineated at a broad scale is likely to include individual occurrences of many different ecosystem types. For example, an ecosystem delineated at the landscape scale for a Biodiversity Management Plan might include patches of various vegetation types, river reaches representing various river ecosystem types, and several wetlands of different types.</p>	<p>South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)</p> <p>IUCN Global Ecosystem Typology (Keith et al. 2020)</p>	<ul style="list-style-type: none"> - <i>aquatic ecosystem</i> - <i>ecosystem</i> - <i>map of ecosystem types</i> - <i>National Vegetation Map (NVM)</i> - <i>National Wetland Map (NWM)</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	72. Endangered (EN)	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>An ecosystem type is Endangered when it is considered to be at a very high risk of collapse.</p> <p>A species is Endangered when it is considered to be at very high risk of extinction.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of ecosystem types and species is assessed based on criteria and thresholds set out in IUCN Guidelines, using the best available evidence – see entries on <i>Red List of Ecosystems</i> and <i>Red List of Species</i>.</p> <p>Critically Endangered, Endangered and Vulnerable ecosystem types or species are collectively termed “threatened”.</p>	<p>“Endangered” is one category of threatened ecosystems or threatened species. The term “endangered” is sometimes incorrectly used to mean “threatened” (e.g. “endangered species” is used when the intended meaning is “threatened species”, including Critically Endangered, Endangered and Vulnerable species).</p> <p>The Biodiversity Act defines Endangered ecosystems as “ecosystems that have undergone degradation of ecological structure, function or composition as a result of human intervention, although they are not critically endangered ecosystems” (Section 52(2)(b)). This is a legal definition rather than an ecological definition. For biodiversity assessment, prioritisation and planning purposes, the ecological definition (left) should be used.</p>	<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 Synthesis Report (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>biodiversity threshold</i> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Threat Status</i> - <i>ecosystem type</i> - <i>threatened ecosystem</i> - <i>threatened species</i> - <i>Vulnerable (VU)</i> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>spatial biodiversity assessment</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	73. ESA 1 <i>Alternative:</i> Ecological Support Area 1	An ESA that is in natural or semi-natural ecological condition.	<p>ESAs are one of five broad categories on a CBA Map. They may be divided into ESA 1 and ESA 2.</p> <p>In general, because ESAs are selected to support ecological functioning rather than to directly meet biodiversity targets for representing ecosystem types and species, it is sufficient for their ecological condition to be semi-natural (i.e. ecosystem processes and functioning largely intact even if species composition and structure has been modified).</p>	ESA 1 (with a space) rather than ESA1 (no space).	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>CBA Map</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>ecological condition</i> - <i>Ecological Support Area (ESA)</i>
NEW TERM	74. ESA 2 <i>Alternative:</i> Ecological Support Area 2	An ESA that is in an intensively modified ecological condition.	<p>ESAs are one of five broad categories on a CBA Map. They may be divided into ESA 1 and ESA 2.</p> <p>In general, intensively modified areas would not be selected as biodiversity priority areas. However, in some cases intensively modified areas retain sufficient ecological processes to play a significant role in maintaining ecologically functional landscapes, and it is important to avoid further intensification of land use or sea use. There are also a few instances in which intensively modified areas play an important role as habitat for species of special concern and may be selected to meet targets for those species.</p>	ESA 2 (with a space) rather than ESA2 (no space).	Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>CBA Map</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>ecological condition</i> - <i>Ecological Support Area (ESA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	75. Essential Life Support Action Area Map (ELSAA Map)	A spatial representation of integrated and optimised nature-based actions required to achieve South Africa's policy commitments at the nexus of biodiversity conservation, climate resilience and human well-being.	<p>Mapping Essential Life Support Areas (ELSAs) is an initiative of the United Nations Development Programme to help countries prioritise where to take action to protect, restore, avoid loss and reduce pressures on nature and adapt to climate change. South Africa was one of 12 pilot countries that tested the ELSA method in 2021-22. It involves identifying the top ten policy commitments, gathering spatial data to map them and then running a spatial prioritisation process. The policy commitments can be changed and the prioritisation rerun as necessary and appropriate.</p> <p>The global ELSA method has been adapted in South Africa to complement other spatial prioritisation and planning, and is known here as ELSAA to emphasise the focus on <u>Action</u>. The purpose of South Africa's ELSAA Map is to mobilise resources for nature-based actions that optimise efforts across several policy commitments.</p>	<p>The ELSAA Map does not replace the CBA Map, which remains the biodiversity sector's primary input into spatial planning and decision-making in a range of sectors.</p> <p>The ELSAA Map has a relatively coarse resolution of 1km² units, so it is not suited to making site-level decisions. However, it can be used to strategically plan and prioritise projects and programmes that are needed to meet national policy commitments.</p>	<p>Essential Life Support Action Areas (ELSAA) South Africa (SANBI 2022)</p> <p>https://unbiodiversitylab.org/en/maps-of-hope/</p>	<p>- <i>CBA Map</i></p> <p>- <i>spatial biodiversity prioritisation</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	76. Estuarine Functional Zone (EFZ)	The open water area of an estuary together with the associated floodplain, incorporating estuarine habitat (such as sand and mudflats, salt marshes, rock and plant communities) and key physical and biological processes that are essential for estuarine ecological functioning.	<p>The estuarine functional zone has been mapped for each of South Africa's 291 estuaries.</p> <p>The outline of the EFZ has also been coded into the terrestrial National Vegetation Map, wherein pieces of the terrestrial vegetation within the EFZ have been marked, and estuarine vegetation has been mapped and classified as such.</p>		South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	<ul style="list-style-type: none"> - <i>aquatic ecosystem</i> - <i>estuarine realm</i> - <i>priority estuary</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>
NEW TERM	77. estuarine realm	Includes all permanent coastal water bodies that are partially enclosed by land and that are either continuously or periodically open to the sea on decadal time scales, which extends inland as far as the upper limit of tidal action, salinity penetration or back-flooding under closed mouth conditions.	<p>One of four realms recognised in the SA-NECS, along with the terrestrial, freshwater and marine realms.</p> <p>The estuarine realm forms part of the ecologically determined coastal zone.</p> <p>Estuaries are identified in the NBA 2018 as high-value ecosystem types that function as crucial ecological infrastructure and provide disproportionate benefits to society relative to their size.</p>		South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	<ul style="list-style-type: none"> - <i>ecologically determined coastal zone</i> - <i>freshwater realm</i> - <i>marine realm</i> - <i>realm</i> - <i>terrestrial realm</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	78. Estuary Management Plan	A management plan for an estuary developed in terms of the National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008).	Priority estuaries identified in the National Estuary Biodiversity Plan should be prioritised for the development of Estuary Management Plans.		National Estuary Biodiversity Plan (Turpie et al. 2012)	- <i>estuarine realm</i> - <i>National Estuary Biodiversity Plan</i> - <i>priority estuary</i>
NO CHANGE	79. extensive agriculture	Agricultural production that uses small inputs of labour, capital and other inputs relative to the land area being farmed, and that, if appropriately managed, may be compatible with maintaining ecosystems in semi-natural or even near-natural ecological condition.	Often associated with rangelands. Includes extensive game ranching.	Not to be confused with “agriculture” as a whole, which includes intensive and extensive agriculture.		- <i>agriculture</i> - <i>cultivation</i> - <i>intensive agriculture</i> - <i>rangelands</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	80. Extinct (EX)	<p>An IUCN Red List category applied to species.</p> <p>A species is Extinct when there is no reasonable doubt that the last individual has died.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of species is assessed based on criteria and thresholds set out in IUCN Guidelines, using the best available evidence – see entry on <i>Red List of Species</i>.</p> <p>A species is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the species' life cycle and life form.</p> <p>Equivalent to Collapsed in the IUCN Red List of Ecosystems.</p>		<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<p>- <i>Collapsed (CO)</i></p> <p>- <i>Species Threat Status</i></p> <p>- <i>Red List of Species</i></p>
NEW TERM	81. Extinct in the Wild (EW)	<p>An IUCN Red List category applied to species.</p> <p>A species is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of species is assessed based on criteria and thresholds set out in IUCN Guidelines, using the best available evidence – see entry on <i>Red List of Species</i>.</p> <p>A species is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual.</p>		<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<p>- <i>Extinct (EX)</i></p> <p>- <i>Red List of Species</i></p> <p>- <i>Species Threat Status</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	82. fair ecological condition	A broad ecological condition class in which ecosystem function is predominantly unchanged even though composition and structure have been modified relative to a reference condition of natural.	<p>One of three broad ecological condition classes. Equivalent to the broad ecological condition class “semi-natural” or “moderately modified”.</p> <p>Equivalent to DWS Present Ecological State category C (moderately modified).</p> <p>Can apply to a site or an ecosystem.</p>	Depending on the context, it may be preferable to avoid the normative term “fair” and rather use “semi-natural” or “moderately modified”.		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>good ecological condition</i> - <i>moderately modified</i> - <i>poor ecological condition</i> - <i>semi-natural</i>
UPDATED	83. FEPA Map	A spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.	<p>Also called a map of FEPAs. Developed through the National Freshwater Ecosystem Priority Areas (NFEPA) project, using a systematic biodiversity planning approach.</p> <p>The national FEPA Map was cookie-cut to the (then) 19 Water Management Areas (subsequently amalgamated to six), hence FEPA Maps (plural).</p> <p>FEPA Maps show several map categories including:</p> <ul style="list-style-type: none"> ○ River FEPA ○ Wetland FEPA ○ Wetland Cluster ○ Fish Support Area ○ Upstream Management Area <p>At the time of writing, an update of NFEPA 2011, and thus FEPA Maps, was underway.</p>	FEPA Maps identify Important Fish Areas (previously called Fish Sanctuaries). Some River FEPAs and some Fish Support Areas are Important Fish Areas. They are identified as such by a fish symbol. Important Fish Areas for CR or EN fish species are marked with the red fish symbol, and Important Fish Areas for VU or NT fish species are marked with a black fish symbol.	<p>Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011)</p> <p>Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)</p>	<ul style="list-style-type: none"> - <i>Fish Support Area</i> - <i>Freshwater Ecosystem Priority Area (FEPA)</i> - <i>Important Fish Area</i> - <i>National Freshwater Ecosystem Priority Areas (NFEPA)</i> - <i>River FEPA</i> - <i>spatial biodiversity plan</i> - <i>systematic biodiversity planning</i> - <i>Upstream Management Area</i> - <i>Wetland Cluster</i> - <i>Wetland FEPA</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	84. Fish Support Area	A river reach that is essential for protecting threatened or near-threatened freshwater fish that are indigenous to South Africa, but that is not in good ecological condition (i.e. an Important Fish Area that is not in good ecological condition) OR a river reach that is important for migration of threatened or near-threatened fish species.	<p>One of several map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.</p> <p>At the time of writing, an update of NFEPA 2011, and thus FEPA Maps, was underway.</p>	<p>Avoid the acronym “FSA”.</p> <p>Not to be confused with Important Fish Areas. Important Fish Areas include some River FEPAs and some Fish Support Areas. Those Fish Support Areas that are Important Fish Areas are marked with a fish symbol on FEPA maps; those that are important for migration are not marked with a fish symbol.</p>	<p>Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011)</p> <p>Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)</p>	<ul style="list-style-type: none"> - <i>FEPA Map</i> - <i>Freshwater Ecosystem Priority Area (FEPA)</i> - <i>Important Fish Area</i> - <i>National Freshwater Ecosystem Priority Areas (NFEPA)</i> - <i>River FEPA</i> - <i>spatial biodiversity plan</i>
UPDATED	85. focus area for protected area expansion	Large, intact and unfragmented area of high biodiversity importance, suitable for the creation and expansion of large land-based protected areas, identified in the NPAES 2008.	The National Protected Area Expansion Strategy (NPAES) 2008 introduced this term. Forty-two focus areas for land-based protected area expansion were identified through spatial biodiversity prioritisation aimed at meeting protected area targets for all terrestrial ecosystem types, also taking into account the need to protect freshwater ecosystems and adaptation to climate change. It was not expected that the whole of these focus areas should be incorporated into the protected area network – they rather indicated areas where good opportunities exist for meeting ecosystem-level protected area targets together with other relevant objectives.	<p>Avoid “focal areas”.</p> <p>The NPAES 2018 took a different approach. It compiled priority areas for protected area expansion that had been identified through provincial protected area expansion prioritisation processes led by provincial conservation authorities, as well as several pre-existing priority areas for marine protected area expansion. So the 42 focus areas for protected area expansion identified in 2008 were not updated in 2018 but were rather replaced by a different set of priority areas for protected area expansion.</p>	<p>National Protected Area Expansion Strategy 2008 (RSA 2010)</p> <p>National Protected Area Expansion Strategy 2018 (DFFE 2018)</p>	<ul style="list-style-type: none"> - <i>Marine Protected Area (MPA)</i> - <i>National Protected Area Expansion Strategy (NPAES)</i> - <i>priority area for protected area expansion</i> - <i>protected area</i> - <i>protected area network</i> - <i>protected area target</i> - <i>protection</i> - <i>spatial biodiversity prioritisation</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	86. forest	In the context of spatial biodiversity assessment, prioritisation and planning, forest refers to indigenous forests mapped as the Forest biome in the National Vegetation Map.	Also called indigenous forest or the Forest biome. The Forest biome makes up less than 1% of South Africa's land area.	<p>Not to be confused with forestry (timber) plantations.</p> <p>The Food and Agriculture Organisation (FAO) definition of forest, which is often used in global contexts, is "land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ". This definition is based solely on structural characteristics and is not an ecological definition of forest. The Forest, Albany thicket and Savanna biomes in South Africa would meet this definition of forest. The FAO definition of forest is generally not appropriate for use in a spatial biodiversity assessment, prioritisation or planning context.</p>	<p>The Vegetation Map of South Africa, Lesotho and Swaziland (SANBI 2018a)</p> <p>South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)</p>	<p>- <i>National Vegetation Map (NVM)</i></p> <p>- <i>timber plantations</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	87. free-flowing river and flagship free-flowing river	A long stretch of river that has not been dammed, flowing undisturbed from its source to the confluence with another large river or to the sea. There are 63 remaining free-flowing rivers in South Africa. Of these, 19 have been identified as flagship free-flowing rivers , representing the different freshwater ecoregions of the country.	Free-flowing rivers and flagship free-flowing rivers were identified in the National Freshwater Ecosystem Priority Areas project (NFEPA).		Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011) Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)	- <i>National Freshwater Ecosystem Priority Areas (NFEPA)</i>
UPDATED	88. Freshwater Ecosystem Priority Area (FEPA)	A river reach or wetland that is required to meet biodiversity targets for freshwater ecosystem types. A Freshwater Ecosystem Priority Area can be either a River FEPA or a Wetland FEPA.	<p>River FEPAs and Wetland FEPAs are two of several map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.</p> <p>At the time of writing, an update of NFEPA 2011, and thus FEPA Maps, was underway.</p>	<p>Each River FEPA falls within a sub-quaternary catchment. The FEPA refers to the river reach, not the whole sub-quaternary catchment. One can refer to a River FEPA and its associated sub-quaternary catchment.</p> <p>Wetland FEPAs are not associated with particular sub-quaternary catchments and in NFEPA 2011 were of much lower certainty than River FEPAs, owing to limitations in the underlying National Wetland Map at the time.</p>	Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011) Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)	<ul style="list-style-type: none"> - <i>FEPA Map</i> - <i>Fish Support Area</i> - <i>Important Fish Area</i> - <i>National Freshwater Ecosystem Priority Areas (NFEPA)</i> - <i>River FEPA</i> - <i>spatial biodiversity plan</i> - <i>Upstream Management Area</i> - <i>Wetland FEPA</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	89. freshwater realm <i>Alternative:</i> inland aquatic realm	Includes all permanent and temporary waterbodies that are not directly connected to the oceans and are characterised by water regimes defined by frequency, duration, flow velocity, depth and extent of inundation.	Definition modified from the IUCN Global Ecosystem Typology (Keith et al. 2020). One of four realms recognised in the SA-NECS, along with the terrestrial, estuarine and marine realms. “Freshwater realm” is used in the broad sense, including saline inland aquatic ecosystems.	The term “inland aquatic realm” is sometimes used. The SA-NECS Handbook considers the terms freshwater realm and inland aquatic realm as equally valid alternatives. The NBA 2018 used the term “inland aquatic realm”, following the convention of the Ollis et al. (2013) classification terminology. However, the term “freshwater realm” is used throughout the SA-NECS Handbook as it is the term inland aquatic ecosystem used in international literature and in the Global Ecosystem Typology.	South African National Ecosystem Classification System Handbook (Dayaram et al. 2021) IUCN Global Ecosystem Typology (Keith et al. 2020)	- <i>estuarine realm</i> - <i>inland aquatic ecosystem</i> - <i>marine realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i> - <i>terrestrial realm</i>
NEW TERM	90. Global Ecosystem Typology	A comprehensive classification framework for Earth’s ecosystems that integrates their functional and compositional features.	Adopted by the IUCN in 2020, the Global Ecosystem Typology is a framework for standardising ecosystem classification globally. It is a nested hierarchy with six levels extending from realms to sub-global ecosystem types. The upper levels define ecosystems by their ecological functions and the lower levels by assemblages of species. The Global Ecosystem Typology has been adopted as the reference classification for Natural Capital Accounting, the Red List of Ecosystems, and Key Biodiversity Areas. The SA-NECS is well aligned with the Global Ecosystem Typology.		IUCN Global Ecosystem Typology (Keith et al. 2020)	- <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	91. good ecological condition	A broad ecological condition class in which ecosystem composition, structure and function are still intact or largely intact, relative to a reference condition of natural.	<p>One of three broad ecological condition classes, also called “natural or near-natural”. Includes the detailed ecological condition classes “natural” and “near-natural”.</p> <p>Equivalent to DWS Present Ecological State categories A (unmodified, natural) and B (largely natural).</p> <p>Can apply to a site or an ecosystem.</p>	<p>Avoid “high ecological condition”.</p> <p>Depending on the context, it may be preferable to avoid the normative term “good” condition and rather use “natural”.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>fair ecological condition</i> - <i>poor ecological condition</i>
REVISED	92. habitat loss	Loss of suitable habitat for the persistence of a particular species or group of species.	The term “habitat” is defined in relation to species. Habitat represents the ecological conditions that support the persistence of a particular species. Different species have different biotic and abiotic requirements that together constitutes their habitat, but they can overlap, so different species can occupy the same areas. When habitat is lost, it means that the environment's capacity to support the persistence of species is diminished.	<p>Not to be confused with “loss of natural area” more generically. Habitat loss is often listed as a threat to species, but not as a threat to ecosystems.</p> <p>Habitat loss often occurs when natural areas are converted to intensive land uses, but can occur for a range of reasons.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>intensively modified</i> - <i>irreversibly modified</i> - <i>severely modified</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	93. heavily modified	A detailed ecological condition class in which substantial loss of ecosystem composition and structure has occurred and ecosystem functions have been substantially disrupted relative to a reference condition of natural.	<p>Falls within the broad ecological condition class “intensively modified”, which also includes “severely modified” and “critically modified”.</p> <p>Equivalent to:</p> <ul style="list-style-type: none"> ○ poor ecological condition ○ DWS’s Present Ecological State category D (largely modified) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of 70-90% (severely degraded) <p>Can apply to a site or an ecosystem.</p> <p>Examples include heavily eroded terrestrial ecosystem, dense invasives, river with large dam, beach no longer receiving sand, trawled seabed.</p>	<p>Avoid the term “transformed” to describe ecosystems or sites that have been heavily, severely or critically modified. Transformation is a widely held positive socio-economic goal in South Africa, so it creates confusion if the biodiversity sector uses it to describe something negative or undesirable.</p> <p>Avoid “low ecological condition”.</p>		<ul style="list-style-type: none"> - <i>critically modified</i> - <i>ecological condition</i> - <i>intensively modified</i> - <i>poor ecological condition</i> - <i>severely modified</i>
NEW TERM	94. historical extent	The mapped extent (geographic distribution) of an ecosystem type prior to major human modification of the landscape or seascape.	<p>The purpose of mapping the historical extent of an ecosystem type, or as close to that as possible, is as an initial point or stable baseline from which to assess changes in its extent over time. It also serves as the basis for setting biodiversity targets.</p> <p>The IUCN Red List of Ecosystems uses a notional reference date of 1750 for assessments of reductions in ecosystem extent, based on the onset of industrial-scale exploitation of ecosystems. In areas that have been severely or irreversibly modified, the historical extent represents the potential ecosystem type rather than current land cover.</p>	The mapping and use of historical extent of ecosystem types does not imply a policy objective to return ecosystem types to their historical extent, for example through restoration efforts. In most South African ecosystem types, this is not ecologically feasible in any case, even if it were considered desirable.	<p>Technical Guidelines for CBA Maps</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p>	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>contemporary extent</i> - <i>ecological condition</i> - <i>ecosystem type</i> - <i>Red List of Ecosystems</i> - <i>spatial biodiversity assessment</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	95. impact	A change to biodiversity or ecosystem processes as a direct effect of human activity or natural events. Impact does not refer to the cause of change itself, but rather the resulting symptom or response within species, ecosystems or ecological processes.	Impacts can be positive or negative. Negative impacts include, for example, loss of biodiversity, degradation, species mortality and decline in ecosystem functions. Positive impacts include, for example, species population recovery, regaining functional capacity in ecosystems, increased ecosystem services.	<p>The IUCN refers to negative impacts as “stresses” as in the IUCN Unified Classification of Stresses.</p> <p>The term “impact” is more often used in the negative sense related to human-caused pressures on biodiversity, but it is important not to conflate “impact” with negative impacts.</p>		<ul style="list-style-type: none"> - <i>degradation</i> - <i>ecological condition</i> - <i>pressure</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	<p>96. Important Fish Area</p> <p><i>Previously:</i> Fish Sanctuary</p>	<p>A river reach that is essential for protecting threatened or near-threatened freshwater fish that are indigenous to South Africa.</p>	<p>Important Fish Areas are linked to map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.</p> <p>At the time of writing, an update of NFPEPA 2011, and thus FEPA Maps, was underway.</p> <p>Important Fish Areas that are in good ecological condition are identified on FEPA Maps as River FEPAs. Those that are not in good ecological condition are identified as Fish Support Areas.</p> <p>The sub-quaternary catchments associated with Important Fish Areas are marked with a fish symbol on FEPA maps. A red fish indicates that there is at least one population of a CR or EN fish species within that sub-quaternary catchment. A black fish indicates the presence of VU or NT fish populations.</p>	<p>Avoid the acronym "IFA".</p> <p>Important Fish Areas were known as a Fish Sanctuaries in NFPEPA 2011. The term has been changed to align with terms used for other taxonomic groups, such as Important Bird Areas.</p>	<p>Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011)</p> <p>Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)</p>	<ul style="list-style-type: none"> - FEPA Map - Fish Support Area - Freshwater Ecosystem Priority Area (FEPA) - National Freshwater Ecosystem Priority Areas (NFPEPA) - River FEPA - spatial biodiversity plan

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	97. inland aquatic ecosystem	All surface, inland waterbodies whether fresh or saline, including rivers, freshwater lakes and inland wetlands.	Inland aquatic ecosystems make up the freshwater realm, also called the inland aquatic realm.	<p>The term “inland aquatic ecosystem” is preferred to “freshwater ecosystem” because “freshwater” is often understood to exclude saline ecosystems such as brackish pans and brackish streams.</p> <p>“Inland wetlands” are often in practice referred to simply as “wetlands”, and this is appropriate in many contexts. The term “inland” is used to discriminate inland wetlands from the broad Ramsar definition of wetlands which includes rivers, estuaries and shallow marine ecosystems.</p>	<p>Classification system for wetlands and other aquatic ecosystems in South Africa (Ollis et al. 2013)</p> <p>National Biodiversity Assessment 2018: Technical Report (Van Deventer et al. 2019)</p>	<ul style="list-style-type: none"> - <i>aquatic ecosystem</i> - <i>freshwater realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>
NO CHANGE	98. intensive agriculture	Agricultural production that uses large inputs of labour, capital and other inputs relative to the land area being farmed.	Usually associated with substantial impacts on ecological condition. Includes cultivation as well as other intensive farming practices such as piggeries and dairies. Can include game breeding and intensive game farming.	Not to be confused with “agriculture” as a whole, which includes intensive agriculture and extensive agriculture such as rangelands.		<ul style="list-style-type: none"> - <i>agriculture</i> - <i>cultivation</i> - <i>ecological condition</i> - <i>extensive agriculture</i> - <i>intensively modified</i> - <i>rangelands</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	99. intensively modified	A broad ecological condition class in which ecosystem composition, structure and function have been substantially modified relative to a reference condition of natural.	Includes the detailed ecological condition classes “heavily modified”, “severely modified” and “critically modified”. Equivalent to: <ul style="list-style-type: none"> ○ poor ecological condition ○ DWS Present Ecological State categories D (largely modified), E (seriously modified) and F (critically/extremely modified) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of 70-90% (severely degraded) or >90% (very severely degraded) Can apply to a site or an ecosystem.	Avoid “low ecological condition”. Avoid the term “transformed” to describe ecosystems or sites that have been intensively modified. Transformation is a widely held positive socio-economic goal in South Africa, so it creates confusion if the biodiversity sector uses it to describe something negative or undesirable.		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>critically modified</i> - <i>heavily modified</i> - <i>irreversibly modified</i> - <i>severely modified</i>
NEW TERM	100. investment in ecological infrastructure	Devoting time, effort, finances or making decisions that support protecting, maintaining or restoring ecological infrastructure.	Investing in ecological infrastructure improves the flow of services to society, thereby improving human well-being. Investment can be made through a range of approaches relevant to the specific ecological infrastructure, such as clearing invasive alien plants, rehabilitating wetlands or improving rangeland management practices. Because of the role of ecological infrastructure in supporting climate change adaptation (see <i>ecological infrastructure</i>), investment in ecological infrastructure is almost always also a form of ecosystem-based adaptation to the impacts of climate change.		A Framework for Investing in Ecological Infrastructure in South Africa (SANBI 2014)	<ul style="list-style-type: none"> - <i>ecological infrastructure</i> - <i>Ecological Infrastructure Map (EI Map)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	101. irreplaceability	A measure of the degree to which spatial options exist for meeting biodiversity targets. May refer to a site or to a biodiversity feature.	Assessed as part of a systematic biodiversity planning process. An irreplaceability map is usually an intermediate output of a spatial biodiversity plan and an important input into identifying CBAs.			- <i>CBA Irreplaceable</i> - <i>CBA Optimal</i> - <i>systematic biodiversity planning</i>
REPLACED	102. irreversibly modified <i>Older term.</i> Rather use: critically modified	See <i>critically modified</i> .	The NBA 2018 made the change from “irreversibly modified” to “critically modified”, as part of the process of aligning ecological condition terms across realms.			- <i>ecological condition</i> - <i>critically modified</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	103. Key Biodiversity Area (KBA)	<p>Site contributing significantly to the global persistence of biodiversity.</p> <p>KBAs represent the most important sites for biodiversity conservation worldwide, in terrestrial, freshwater and marine ecosystems.</p>	<p>Key Biodiversity Areas are identified nationally, using globally standardised criteria and thresholds established by the IUCN.</p> <p>Identifying and delineating KBAs is primarily a form of spatial biodiversity assessment, although it has some characteristics of spatial biodiversity prioritisation (see next column).</p> <p>There is general similarity in the intention and approach for identifying EBSAs in the marine realm and Key Biodiversity Areas (KBAs), which are generally land-based.</p> <p>In the South African context, the primary purpose of identifying KBAs is for global comparison and reporting. They may also be used as an input layer in spatial biodiversity planning.</p> <p>KBAs are referred to in some of the indicators required for national reporting on progress towards the global Sustainable Development Goals (SDGs) and targets in the Global Biodiversity Framework.</p>	<p>KBAs do not replace or supersede CBAs, and CBA Maps remain the biodiversity sector's primary input into spatial planning and decision making in a range of sectors.</p> <p>The principles and characteristics of systematic biodiversity planning (including quantitative targets, spatial efficiency, complementarity and conflict avoidance) are not applied in identifying This makes them not an especially useful or appropriate informant for land-use planning and environmental authorisation processes. The fact that KBAs cover extensive areas in some parts of South Africa underscores South Africa's megadiverse status and responsibility for conserving globally important biodiversity.</p> <p>In countries that have no other forms of spatial biodiversity prioritisation or planning, KBA maps may constitute a useful prioritisation in themselves.</p>	<p>A Global Standard for the Identification of Key Biodiversity Areas (IUCN 2016a)</p>	<ul style="list-style-type: none"> - <i>Critical Biodiversity Area (CBA)</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i> - <i>spatial biodiversity prioritisation</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	104. land-based protected area	A collective term for all types of protected areas other than Marine Protected Areas.	<p>Land-based protected areas may protect terrestrial, freshwater and in some cases estuarine ecosystems and species.</p> <p>Land-based protected areas include the following types of protected area:</p> <ul style="list-style-type: none"> ○ National Park ○ Nature Reserve ○ Special Nature Reserve ○ Protected Environment ○ Forest Nature Reserve ○ Forest Wilderness Area ○ Mountain Catchment Area ○ World Heritage Site 	Avoid the term “terrestrial protected area” as there are seldom protected areas that protect only terrestrial ecosystems and species.		<ul style="list-style-type: none"> - <i>Marine Protected Area (MPA)</i> - <i>National Park</i> - <i>Nature Reserve</i> - <i>protected area</i> - <i>Protected Environment</i> - <i>Special Nature Reserve</i>
REVISED	105. Least Concern (LC) <i>Previously: Least Threatened (for ecosystems)</i>	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>An ecosystem type is Least Concern when it has experienced little or no loss of natural area or deterioration in condition.</p> <p>A species is Least Concern when it is considered to be at low risk of extinction. Widespread and abundant species are typically classified in this category.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of ecosystem types and species is assessed based on criteria and thresholds set out in IUCN Guidelines based on the best available evidence – see entries on <i>Red List of Ecosystems</i> and <i>Red List of Species</i>.</p> <p>Biodiversity targets for ecosystem types of Least Concern must be met in spatial biodiversity planning, and priority areas for conserving these ecosystem types are included in CBA Maps.</p>	“Least Concern” is the equivalent to the Ecosystem Threat Status category “Least Threatened” that was used in the NSBA 2004 and NBA 2011.	<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>biodiversity threshold</i> - <i>Ecosystem Threat Status</i> - <i>ecosystem type</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
UPDATED	106. list of threatened ecosystems	A list of ecosystems that are threatened and in need of protection, published in terms of the Biodiversity Act. Ecosystems may be listed as Critically Endangered, Endangered or Vulnerable.	<p>The first list of threatened terrestrial ecosystems was published in 2011. An updated list of threatened terrestrial ecosystems was published in 2022. No freshwater, estuarine or marine ecosystems have yet been listed.</p> <p>The identification of ecosystem types for the listing is based on the categories and criteria of the IUCN Red List of Ecosystems and aligns with the National Biodiversity Assessment.</p>	Avoid “threatened ecosystem list”.	<p>National List of Threatened Terrestrial Ecosystems (DEA 2011)</p> <p>National List of Threatened Ecosystems (DFFE 2022)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p>	<ul style="list-style-type: none"> - <i>Biodiversity Act</i> - <i>Ecosystem Threat Status</i> - <i>ecosystem type</i> - <i>listed ecosystem</i> - <i>protected ecosystem</i> - <i>Red List of Ecosystems</i> - <i>threatened ecosystem</i>
UPDATED	107. listed ecosystem	An ecosystem listed as Critically Endangered, Endangered, Vulnerable or Protected in terms of the Biodiversity Act.	<p>The first list of threatened terrestrial ecosystems was published in 2011. An updated list of threatened terrestrial ecosystems was published in 2022.</p> <p>Although the Biodiversity Act allows for listing an ecosystem as “Protected”, no ecosystems have yet been listed as such.</p> <p>Also see <i>list of threatened ecosystems</i>.</p>	Threatened ecosystems have been identified across all realms in the National Biodiversity Assessment. However, not all of these threatened ecosystems have been listed in terms of the Biodiversity Act, hence the usefulness in some circumstances of referring to listed ecosystems specifically rather than threatened ecosystems in general.	<p>National List of Threatened Terrestrial Ecosystems (DEA 2011)</p> <p>National List of Threatened Ecosystems (DFFE 2022)</p>	<ul style="list-style-type: none"> - <i>Biodiversity Act</i> - <i>list of threatened ecosystems</i> - <i>threatened ecosystem</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	108. map of ecosystem types	A map of ecosystem types identified in the South African National Ecosystem Classification System (SA-NECS).	<p>Maps of ecosystem types exist for all realms. Maps of ecosystem types are foundational data layers for spatial biodiversity assessment and planning, and often used in spatial biodiversity prioritisation. They are also essential for ecosystem accounting.</p> <p>Ecosystem types are mapped based on their historical extent (prior to major modification of the landscape) or as close to that as possible. The map of ecosystem types provides a reference extent or stable baseline against which changes in extent can be measured.</p>	Avoid “ecosystem map”. An “ecosystem map” could be a map of one occurrence of an ecosystem type or a group of ecosystems that may or may not correspond to ecosystem types. The concept of an ecosystem type and the spatial delineation of ecosystem types linked to a hierarchical classification system should not be confused with mapping ecosystems in general.	South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)	<ul style="list-style-type: none"> - <i>ecosystem type</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity planning</i>
NEW TERM	109. Marine Protected Area (MPA)	An area of the sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation.	<p>One of nine types of protected area recognised in the Protected Areas Act.</p> <p>Includes inshore MPAs and offshore MPAs. MPAs are often zoned to include no-take zones, where extractive use of marine resources is not permitted, and multiple-use zones, where a greater range of activities is permitted.</p>	Unlike acronyms for other types of protected area, the acronym MPA is well accepted. However, depending on the context, it may be better nevertheless to write Marine Protected Area in full, especially for an audience unlikely to be familiar with the acronym MPA.		<ul style="list-style-type: none"> - <i>marine realm</i> - <i>protected area</i> - <i>Protected Areas Act</i>
NEW TERM	110. marine realm	Includes all connected saline ocean waters characterised by waves, tides and currents.	<p>One of four realms recognised in the SA-NECS, along with the terrestrial, freshwater and estuarine realms.</p> <p>The marine realm extends from the dune base to the seaward extent of the Exclusive Economic Zone.</p>		South African National Ecosystem Classification System Handbook (Dayaram et al. 2021) IUCN Global Ecosystem Typology (Keith et al. 2020)	<ul style="list-style-type: none"> - <i>coast / coastal zone</i> - <i>coastline</i> - <i>dune base</i> - <i>estuarine realm</i> - <i>freshwater realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i> - <i>terrestrial realm</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	111. moderately modified	A broad ecological condition class in which ecosystem function is predominantly unchanged even though composition and structure have been modified relative to a reference condition of natural.	<p>Equivalent to:</p> <ul style="list-style-type: none"> ○ semi-natural ○ fair ecological condition ○ DWS's Present Ecological State category C, which is called "moderately modified" ○ IUCN Red List of Ecosystems, Criteria C thresholds of "severity of degradation" of 50-70% (moderately degraded). <p>Ecosystems in moderately modified condition usually retain sufficient ecological functioning to play an effective role as ecological infrastructure assets.</p> <p>Examples include overgrazed terrestrial ecosystems, sparsely invaded ecosystems, river reach with small farm dam, wetland with reed harvesting, inshore marine ecosystem with low levels of line fishing or rocky shore with hiking trails.</p>			<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>fair ecological condition</i> - <i>semi-natural</i>
REVISED	112. Moderately Protected	An ecosystem type or species that has between 50% and 100% of its biodiversity target included in one or more protected areas.	<p>One of four categories assigned in a protection level assessment, a form of spatial biodiversity assessment.</p> <p>One of three categories of under-protected ecosystem types and species, collectively referred to as "under-protected".</p>	Use the acronym "MP" only in contexts where the meaning will be completely clear, as it is not well established. Avoid using it in legends for graphs or maps.	National Biodiversity Assessment 2018 (SANBI 2019a)	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>Ecosystem Protection Level</i> - <i>ecosystem type</i> - <i>Not Protected</i> - <i>Poorly Protected</i> - <i>protected area</i> - <i>spatial biodiversity assessment</i> - <i>under-protected</i> - <i>Well Protected</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
UPDATED	113. National Biodiversity Assessment (NBA)	A periodic assessment of the state of South Africa's biodiversity, led by SANBI in partnership with a wide range of organisations, as part of SANBI's mandate to monitor and report on the country's biodiversity.	<p>The first national assessment of the state of South Africa's biodiversity was undertaken in 2004 and was called the National Spatial Biodiversity Assessment. It was followed by the National Biodiversity Assessment in 2011 and 2018. At the time of writing the NBA 2025 was underway. The scope of the NBA has expanded in each successive iteration.</p> <p>At the heart of the NBA is a spatial biodiversity assessment that produces four headline indicators: Ecosystem Threat Status (using Red List of Ecosystem criteria since 2018), Ecosystem Protection Level, Species Threat Status (using Red List of Species criteria) and Species Protection Level.</p> <p>In addition to these headline indicators, the NBA synthesises a range of policy relevant biodiversity information, including related to the benefits of biodiversity and ecological infrastructure. Findings from the NBA are mainstreamed into a range of sectors.</p>	Not to be confused with the National Biodiversity Strategy and Action Plan (NBSAP); or the National Biodiversity Framework (NBF). The NBA is a scientific assessment that underpins the NBSAP and the NBF, amongst other applications.	<p>National Biodiversity Assessment 2018 (SANBI 2019a)</p> <p>http://nba.sanbi.org.za/</p> <p>Reports and spatial data available on BGIS.</p>	<ul style="list-style-type: none"> - <i>Ecosystem Protection Level</i> - <i>Ecosystem Threat Status</i> - <i>spatial biodiversity assessment</i> - <i>Species Protection Level</i> - <i>Species Threat Status</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
UPDATED	114. National Biodiversity Framework (NBF)	A framework published in terms of the Biodiversity Act to co-ordinate and align the efforts of the many organisations and individuals involved in conserving and managing South Africa's biodiversity, in support of sustainable development.	<p>The first NBF was published in 2009 (DEAT 2009c). An updated version was published in 2022.</p> <p>The Biodiversity Act requires that the NBF is reviewed every five years; however, in practice the review timeframe has been longer.</p>	<p>Not to be confused with the National Biodiversity Strategy and Action Plan (NBSAP).</p> <p>The NBSAP is a requirement in terms of South Africa's commitments as a signatory to the Convention on Biological Diversity (CBD), while the NBF is a requirement in terms of national legislation. The NBF draws on the NBSAP and vice versa, so that the two are aligned.</p>	<p>National Biodiversity Framework (DEAT 2009c)</p> <p>Revised National Biodiversity Framework (DFFE 2022)</p>	<ul style="list-style-type: none"> - <i>National Biodiversity Assessment (NBA)</i> - <i>National Biodiversity Strategy and Action Plan (NBSAP)</i>
UPDATED	115. National Biodiversity Strategy and Action Plan (NBSAP)	A national strategy for the conservation, management and sustainable use of biodiversity, developed as part of South Africa's commitments as a signatory to the Convention on Biological Diversity (CBD).	South Africa's first NBSAP was published by the Department of Environmental Affairs and Tourism (DEAT) in 2005, and the revised NBSAP was finalised in 2015. A further revision will follow the adoption by the Convention of Biological Diversity (CBD) of the Kunming-Montreal Global Biodiversity Framework in 2022, in order to align national biodiversity goals and targets with the new set of global goals and targets.	<p>Not to be confused with the National Biodiversity Framework (NBF).</p> <p>The NBSAP is a requirement in terms of South Africa's commitments as a signatory to the CBD, while the NBF is a requirement in terms of national legislation. The NBF draws on the NBSAP and vice versa, so that the two are aligned.</p>	<p>National Biodiversity Strategy and Action Plan 2005 (DEAT 2005)</p> <p>National Biodiversity Strategy and Action Plan 2015 (RSA 2015)</p>	<ul style="list-style-type: none"> - <i>National Biodiversity Framework (NBF)</i> - <i>National Biodiversity Assessment (NBA)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	116. National Coastal and Marine Spatial Biodiversity Plan (NCMSBP)	<p>A spatial biodiversity plan for the marine realm, identifying a portfolio of biodiversity priority areas that are important for conserving a representative sample of coastal and marine ecosystem types and species, and for maintaining ecological processes and ecological infrastructure.</p>	<p>The NCMSBP is designed to provide input into a range of policy, planning and implementation processes, such as Marine Spatial Planning (MSP), integrated coastal management, environmental authorisations, restoration initiatives and formal protection of the ocean.</p> <p>It has two main elements:</p> <ul style="list-style-type: none"> ○ A CBA Map, called the National Coastal and Marine CBA Map. ○ A set of sea-use guidelines, which give details about which sea-use activities are compatible with each category of the CBA Map. <p>The CBA Map and sea-use guidelines provide the basis for the biodiversity sector's input into the multi-sectoral MSP process undertaken according to the Marine Spatial Planning Act. The categories in the CBA Map inform the biodiversity-related zones in the Marine Area Plans developed through MSP, and the sea-use guidelines inform the management regulations for those zones.</p>	<p>The planning domain (spatial extent) of the NCMSBP is South Africa's mainland maritime domain (from the dune base to the seaward edge of the Exclusive Economic Zone). It includes only that portion of the ecologically determined coastal zone that falls within the marine realm. Portions of the ecologically determined coastal zone that are considered terrestrial or estuarine are <i>not</i> included in the NCMSBP.</p> <p>Alignment of coastal biodiversity priority areas between the coastal provinces, the estuarine realm and the marine realm is an iterative process, relying on collaboration between the spatial biodiversity planners involved.</p>	<p>National Coastal and Marine Spatial Biodiversity Plan (Harris et al 2022).</p>	<ul style="list-style-type: none"> - <i>CBA Map</i> - <i>coast / coastal zone</i> - <i>marine realm</i> - <i>South Africa's maritime domain</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
UPDATED	117. National Estuary Biodiversity Plan	A spatial biodiversity plan that identified a set of 120 priority estuaries that meet biodiversity targets for a range of estuarine habitat types and estuary-dependent species.	<p>The National Estuary Biodiversity Plan was done as part of the NBA 2011, but is also a standalone plan. It used a systematic biodiversity planning approach. National priority estuaries have been taken up in provincial biodiversity plans by coastal provinces and were taken into account in the National Freshwater Ecosystems Priority Areas (NFEPA) project.</p> <p>At the time of writing, discussion about a potential update of the National Estuary Biodiversity Plan was underway.</p>	Avoid the acronym “NEBP” as it is not well established and unlikely to be recognised.	National Estuary Biodiversity Plan (Turpie et al. 2012)	<ul style="list-style-type: none"> - <i>Estuarine Functional Zone (EFZ)</i> - <i>estuarine realm</i> - <i>priority estuary</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i>
UPDATED	118. National Freshwater Ecosystem Priority Areas (NFEPA)	A spatial biodiversity planning process to identify a set of freshwater ecosystem priorities for meeting biodiversity targets for rivers, wetlands and freshwater fish species of special concern.	<p>NFEPA 2011 was a three-year multi-partner project that took place from 2008 to 2011, with extensive involvement of the freshwater community. It used a systematic biodiversity planning approach. The primary spatial product was a national FEPA Map.</p> <p>At the time of writing, a process to update NFEPA 2011 was underway. The update will likely be known as NFEPA 2.</p>	NFEPA 2011 identified Fish Sanctuaries. These have now been renamed Important Fish Areas, so the term Fish Sanctuaries should no longer be used.	Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011) Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)	<ul style="list-style-type: none"> - <i>FEPA Map</i> - <i>Fish Support Area</i> - <i>Freshwater Ecosystem Priority Area (FEPA)</i> - <i>Important Fish Area</i> - <i>River FEPA</i> - <i>Upstream Management Area</i> - <i>Wetland FEPA</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	119. National Park	An area declared in terms of Section 20 of the Protected Areas Act, or equivalent designation under previous legislation.	<p>One of nine types of protected area recognised in the Protected Areas Act. One of three options in biodiversity stewardship category 1.</p> <p>National Parks protect areas of national or international biodiversity importance or contain a viable, representative sample of South Africa's natural systems, scenic areas or cultural heritage sites. National Parks also provide spiritual, scientific, educational, recreational and tourism opportunities which are environmentally compatible; and contribute to economic development, where feasible.</p> <p>National Parks are managed by SANParks. A National Park may be declared on state, private or communal land. The declaration is binding on the property (title deed restriction) and on the landowner (where a contract with a landowner exists it is usually for 99 years or in perpetuity).</p>	<p>Avoid using just the term "park" or "parks" when referring to National Parks (or protected areas in general).</p> <p>Avoid the acronym "NP" unless unavoidable because of space constraints (e.g. in a column heading).</p>	National Environmental Management: Protected Areas Act (Act 57 of 2003)	<ul style="list-style-type: none"> - <i>Nature Reserve</i> - <i>protected area</i> - <i>Protected Areas Act</i> - <i>Protected Environment</i> - <i>Special Nature Reserve</i>
UPDATED	120. National Protected Area Expansion Strategy (NPAES)	A strategy for expanding South Africa's network of protected areas. Sets ecosystem-specific protected area targets and identifies important geographic areas for protected area expansion.	The first NPAES was published in 2008. It was revised in 2018. A further revision is likely following the adoption by the Convention of Biological Diversity (CBD) of the Kunming-Montreal Global Biodiversity Framework in 2022, which includes a new global target for protected area expansion.	<p>The NPAES 2008 introduced the term <i>focus area for protected area expansion</i> and identified 42 such focus areas for land-based protected area expansion.</p> <p>The NPAES 2018 did not update the 2008 focus areas but rather took a different approach of collating <i>priority areas for protected area expansion</i> identified at the provincial level by provincial conservation authorities and by DFFE for the marine realm.</p>	NPAES 2008 (Government of South Africa, 2010) National Protected Area Expansion Strategy 2018 (DFFE 2018)	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>focus area for protected area expansion</i> - <i>priority area for protected area expansion</i> - <i>protected area</i> - <i>protected area estate</i> - <i>protected area network</i> - <i>protected area target</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	121. National Vegetation Map (NVM)	A map and classification system for vegetation types in South Africa, which represent ecosystem types in the terrestrial realm.	<p>The National Vegetation Map is a foundational input for many applications, including spatial biodiversity assessment, planning and prioritisation, and ecosystem accounting.</p> <p>Vegetation types are mapped based on their historical extent, prior to major human modification of the landscape. The National Vegetation Map is produced by combining existing vegetation maps, floristic data, environmental predictors and expert knowledge. Vegetation types are grouped into Ecosystem Functional Groups and biomes.</p> <p>The NVM form part of the SA-NECS. The National Vegetation Map Committee, convened by SANBI, advises on updates. At the time of writing, National Vegetation Map 2018 was the most recent version.</p>	<p>The National Vegetation Map (NVM) is the name of a product, not to be confused with the VEGMAP Project which is the umbrella project that produces the National Vegetation Map and a National Vegetation Database.</p> <p>The NVM is the South African portion of the Vegetation Map of South Africa, Lesotho and Eswatini.</p>	<p>The Vegetation of South Africa, Lesotho and Swaziland (Mucina & Rutherford 2006)</p> <p>The Vegetation Map of South Africa, Lesotho and Swaziland (SANBI 2018a)</p> <p>Spatial and descriptive data available on BGIS.</p>	<ul style="list-style-type: none"> - <i>biome</i> - <i>ecosystem type</i> - <i>historical extent</i> - <i>National Wetland Map (NWM)</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i> - <i>terrestrial realm</i>
NEW TERM	122. National Wetland Map (NWM)	A map and classification system for wetland ecosystem types in South Africa, which form part of the freshwater realm.	<p>The National Wetland Map forms part of the South African Inventory of Inland Aquatic Ecosystems (SAIIAE). It is a foundational spatial input for many spatial biodiversity assessment, planning and prioritisation processes, and for ecosystem accounting.</p> <p>The NWM forms part of the SA-NECS. The National Wetland Ecosystem Classification Committee, convened by SANBI, advises on updates. At the time of writing, National Wetland Map 5 was the most recent version.</p>	<p>Wetlands are mapped as comprehensively as possible and are classified into wetland ecosystem types. In many cases it is not possible to determine the historical presence or extent of wetlands that have since been intensively modified, so the map is acknowledged not to represent the full historical extent and location of wetlands.</p>	<p>Spatial data available on BGIS.</p>	<ul style="list-style-type: none"> - <i>ecosystem type</i> - <i>freshwater realm</i> - <i>inland aquatic ecosystem</i> - <i>National Vegetation Map (NVM)</i> - <i>South African Inventory of Inland Aquatic Ecosystems (SAIIAE)</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	123. natural	<p>A detailed ecological condition class in which no significant changes in ecosystem composition, structure or function have taken place.</p> <p>Also used quite often as a shortened form of the broad ecological condition class “natural or near-natural”.</p>	<p>Falls within the broad ecological condition class “natural or near-natural”, OR may be a shortened form of “natural or near-natural”.</p> <p>Equivalent to:</p> <ul style="list-style-type: none"> ○ good ecological condition ○ DWS’s Present Ecological State categories A (unmodified, natural) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of <50% ○ KBA Criterion C definition of “outstanding ecological integrity” 	<p>Avoid “high ecological condition”.</p> <p>“Natural” should not be taken to mean “pristine” or uninfluenced by people. It is recognised that all ecosystems are to some extent influenced by human activity.</p> <p>The distinction between “natural” and “near-natural” is often difficult to discern, so most often they are grouped together. This is why “natural” is quite often used as shorthand for “natural or near-natural”. If this is the case, it is useful to spell this out upfront in the document concerned.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>intensively modified</i> - <i>near-natural</i> - <i>semi-natural</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	124. natural or near-natural	A broad ecological condition class in which ecosystem composition, structure and function are still intact or largely intact.	<p>One of three broad ecological condition classes. Includes the detailed ecological condition classes “natural” and “near-natural”.</p> <p>Equivalent to:</p> <ul style="list-style-type: none"> ○ good ecological condition ○ DWS’s Present Ecological State categories A (unmodified, natural) or B (largely natural) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of <50% ○ KBA Criterion C definition of “outstanding ecological integrity” <p>Can apply to a site or an ecosystem.</p>	<p>Avoid “high ecological condition”.</p> <p>“Natural” should not be taken to mean “pristine” or uninfluenced by humans. It is recognised that all ecosystems are to some extent influenced by human activity.</p> <p>The distinction between “natural” and “near-natural” is often difficult to discern, so most often the broad ecological condition class “natural or near-natural” is used rather than using its constituent detailed ecological condition classes individually.</p> <p>Also, “natural” is quite often used as shorthand for “natural or near-natural”, with near-natural implied. If this is the case, it is useful to spell this out upfront in the document concerned.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>intensively modified</i> - <i>semi-natural</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	<p>125. Nature Reserve</p>	<p>An area declared in terms of Section 23 of the Protected Areas Act, or equivalent designation under previous or provincial legislation.</p>	<p>One of nine types of protected area recognised in the Protected Areas Act. One of three options within biodiversity stewardship category 1.</p> <p>Nature Reserves are declared to supplement the system of National Parks, and to protect areas with significant natural features or biodiversity, or scientific, cultural, historical or archaeological interest. Nature Reserves are protected areas in need of long-term protection for the maintenance of biodiversity, provision of ecosystems services, sustainable flow of natural products to meet local community needs and enable continuation of traditional consumptive uses, and provide for nature-based recreation and tourism.</p> <p>A Nature Reserve may be declared on state, private or communal land. The declaration is binding on the property (title deed restriction binding on successor in title) and on the landowner. Where a contract with a landowner exists, it is usually for 99 years or in perpetuity.</p> <p>Nature Reserves are usually managed by provincial conservation authorities or by private or communal landowners. This type of declaration involves more stringent management regulations than in a Protected Environment and restricts unsustainable land use.</p>	<p>Preferably avoid the term “private nature reserve”. Nature Reserves declared on private land as part of biodiversity stewardship programmes are referred to simply as Nature Reserves or as contract Nature Reserves if a qualifier is essential.</p> <p>The term “old ordinance/old order private nature reserves” is sometimes used. This refers to nature reserves on private land that were declared in terms of old provincial legislation prior to the Protected Areas Act of 2003 and that have not been verified or validated.</p> <p>Avoid the acronym “NR” unless unavoidable because of space constraints (e.g. in a column heading).</p>	<p>National Environmental Management: Protected Areas Act (Act 57 of 2003)</p>	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>contract protected area</i> - <i>National Park</i> - <i>Protected Areas Act</i> - <i>Protected Environment</i> - <i>Special Nature Reserve</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	126. near-natural	A detailed ecological condition class in which small changes in ecosystem composition and structure may have taken place, but ecosystem functions are essentially unchanged, relative to a reference condition of natural.	<p>Falls within the broad ecological condition class “natural or near-natural”.</p> <p>Equivalent to:</p> <ul style="list-style-type: none"> ○ good ecological condition ○ DWS’s Present Ecological State category B (largely natural) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of <50% ○ KBA Criterion C definition of “outstanding ecological integrity” <p>Can apply to a site or an ecosystem.</p>	<p>Avoid “high ecological condition”.</p> <p>The distinction between “natural” and “near-natural” is often difficult to discern, so most often these two detailed ecological condition classes are not used individually but are grouped together as “natural or near-natural”.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>intensively modified</i> - <i>natural</i> - <i>semi-natural</i>
REVISED	127. Near Threatened (NT)	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>A species or ecosystem type is Near Threatened when it has been evaluated against the IUCN criteria and does not qualify for Critically Endangered, Endangered or Vulnerable, but is close to qualifying for or is likely to qualify for a threatened category in the near future.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of ecosystem types and species is assessed based on criteria and thresholds set out in IUCN Guidelines based on the best available evidence – see entries on Red List of Ecosystems and Red List of Species.</p>		<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Threat Status</i> - <i>Endangered (EN)</i> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	128. No Natural Remaining (NNR)	An area in severely modified or critically modified ecological condition that is not required to meet biodiversity targets for ecosystem types, species or ecological processes.	One of five broad categories on a CBA Map.		Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>CBA Map</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>Ecological Support Area (ESA)</i> - <i>Other Natural Area (ONA)</i>
NEW TERM	129. Not Evaluated (NE)	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>An ecosystem type or species is Not Evaluated when it has not been assessed against any of the IUCN criteria.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of ecosystem types and species is assessed based on criteria and thresholds set out in IUCN Guidelines based on the best available evidence – see entries on <i>Red List of Ecosystems</i> and <i>Red List of Species</i>.</p> <p>All ecosystem types in South Africa have been assessed, so there are no ecosystem types that are Not Evaluated.</p> <p>For species, only certain taxonomic groups have been comprehensively evaluated.</p>		<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI. 2019a)</p>	<ul style="list-style-type: none"> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>Ecosystem Threat Status</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	130. Not Protected	An ecosystem type or species that has less than 5% of its biodiversity target included in one or more protected areas.	<p>One of four categories assigned in a protection level assessment, a form of spatial biodiversity assessment.</p> <p>One of three categories of under-protected ecosystem types and species, collectively referred to as “under-protected”.</p> <p>Considering an average biodiversity target of 20%, an ecosystem type with 5% of its biodiversity target included in a protected area has only 1% of its total extent included in a protected area, which is not considered a meaningful level of protection from an ecological perspective.</p>	Use the acronym “NP” only in contexts where the meaning will be completely clear, as it is not well established. Avoid using it in legends for graphs or maps.	National Biodiversity Assessment 2018 (SANBI 2019a)	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>Ecosystem Protection Level</i> - <i>Moderately Protected</i> - <i>Poorly Protected</i> - <i>protected area</i> - <i>spatial biodiversity assessment</i> - <i>Species Protection Level</i> - <i>under-protected</i> - <i>Well Protected</i>
NEW TERM	131. Other Effective area-based Conservation Measure (OECM)	A geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.	<p>Defined by the Convention on Biological Diversity (CBD).</p> <p>A global standard for OECMs has been developed, which sets out criteria that a site should meet in order to qualify as an OECM. South Africa is in the process of engaging with the OECM standard.</p>	<p>The terms “conservation area” and “OECM” are related but should not be conflated. Some conservation areas may qualify as OECMs, but this is not necessarily the case. It is highly likely that a site that meets OECM criteria would fall within the South African definition of conservation area, but there might be OECMs that are not conservation areas.</p> <p>As further work on OECMs is undertaken in South Africa, the definitions of conservation areas and OECMs may become more closely aligned.</p>	Recognising and reporting other effective area-based conservation measures (IUCN 2019)	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>conservation area</i> - <i>protected area</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	132. Other Natural Area (ONA)	An area in natural, near-natural or semi-natural ecological condition that is not required to meet biodiversity targets for ecosystem types, species or ecological processes.	One of five broad categories on a CBA Map.		Technical Guidelines for CBA Maps	<ul style="list-style-type: none"> - <i>CBA Map</i> - <i>Critical Biodiversity Area (CBA)</i> - <i>Ecological Support Area (ESA)</i> - <i>No Natural Remaining (NNR)</i>
REPLACED	133. plantations <i>Older term.</i> Rather use: timber plantations	See <i>timber plantations</i> .		Avoid the term “plantations” when referring to timber plantations (or other specific types of plantations). Rather specify “timber plantations”. Especially for international audiences, “plantations” is a vague term – could be, for example, coffee plantations, sugar plantations, palm oil plantations.		- <i>timber plantations</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	134. poor ecological condition	A broad ecological condition class in which ecosystem composition, structure and function have been substantially modified relative to a reference condition of natural.	<p>One of three broad ecological condition classes. Equivalent to the broad ecological condition class “intensively modified”. Includes the detailed ecological condition classes “heavily modified”, “severely modified” and “critically modified”.</p> <p>Equivalent to:</p> <ul style="list-style-type: none"> ○ intensively modified ○ DWS Present Ecological State categories D (largely modified), E (seriously modified) and F (critically/extremely modified) ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of 70-90% (severely degraded) or >90% (very severely degraded) <p>Can apply to a site or an ecosystem.</p>	<p>Avoid “low ecological condition”.</p> <p>Depending on the context, it may be preferable to avoid the normative term “poor ecological condition” and rather use “intensively modified”, which is more neutral.</p>		<ul style="list-style-type: none"> - <i>ecological condition</i> - <i>fair ecological condition</i> - <i>good ecological condition</i> - <i>intensively modified</i>
REVISED	135. Poorly Protected	An ecosystem type or species which has between 5% and 50% of its biodiversity target included in one or more protected areas.	<p>One of four categories assigned in a protection level assessment, a form of spatial biodiversity assessment.</p> <p>One of three categories of under-protected ecosystem types and species, collectively referred to as “under-protected”.</p>	Use the acronym “PP” only in contexts where the meaning will be completely clear, as it is not well established. Avoid using it in legends for graphs or maps.	National Biodiversity Assessment 2018 (SANBI 2019a)	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>Ecosystem Protection Level</i> - <i>Moderately Protected</i> - <i>Not Protected</i> - <i>protected area</i> - <i>spatial biodiversity assessment</i> - <i>Species Protection Level</i> - <i>under-protected</i> - <i>Well Protected</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	136. pressure	Human activity that has a direct negative impact on biodiversity and ecosystem processes.	<p>Pressures fall within the broad categories of:</p> <ul style="list-style-type: none"> ○ land or sea-use change ○ overexploitation of resources ○ changes in hydrological regime ○ biological invasions ○ pollution ○ climate change <p>Pressures may be indirect or direct. Indirect pressures are the ultimate contributing causes (social, political, natural) of impact on biodiversity or ecosystem services. Direct pressures are the proximate causes (unsustainable use, land use change) of impact on biodiversity or ecosystem services.</p> <p>In a spatial biodiversity assessment, prioritisation and planning context, direct pressures often need to be spatially represented. Mapping ecological condition often depends on the ability to spatially represent the various pressures exerted on biodiversity. In the marine realm in particular, cumulative pressure mapping is used to represent ecological condition.</p>	<p>The term pressure is often used synonymously with driver or threat. The IPBES refers to these as drivers of biodiversity loss. The IUCN refer to these as threats, as in the Unified Classification of Direct Threats.</p> <p>In South Africa, a distinction is made between “threats” and “pressures” and they are not used inter-changeably. The term “pressure” is generally preferred in order to avoid labelling legitimate socio-economic activities as threats. See further discussion under <i>threat</i>.</p>	<p>The global assessment report on biodiversity and ecosystem services (IPBES 2019)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p>	<ul style="list-style-type: none"> - <i>degradation</i> - <i>ecological condition</i> - <i>impact</i> - <i>threat</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	137. priority area for protected area expansion	An area identified through a target-driven spatial biodiversity prioritisation process as a priority for consolidating or expanding the protected area network.	<p>Priority areas for land-based protected area expansion are typically identified by provincial conservation authorities through spatial biodiversity prioritisation based on targets for ecosystem types and a range of other considerations. In the marine realm, DFFE's Oceans and Coasts Branch plays a key role with technical support from SANBI and other organisations.</p> <p>The NPAES 2018 compiled priority areas identified at the provincial level and through pre-existing prioritisation processes for the marine realm into a combined national set of priority areas for protected area expansion.</p>	Not to be confused with “focus areas for protected area expansion” identified in the NPAES 2008. These were large, intact and unfragmented areas of high biodiversity importance, suitable for the creation and expansion of large land-based protected areas. The 42 focus areas for protected area expansion identified in 2008 were not updated in the NPAES 2018 but were rather replaced by a different set of priority areas for protected area expansion.	National Protected Area Expansion Strategy 2018 (DFFE 2018)	<ul style="list-style-type: none"> - <i>Marine Protected Area (MPA)</i> - <i>National Protected Area Expansion Strategy (NPAES)</i> - <i>priority area for protected area expansion</i> - <i>protected area</i> - <i>protected area network</i> - <i>protected area target</i> - <i>protection</i> - <i>spatial biodiversity prioritisation</i>
UPDATED	138. priority estuary	An estuary that is required to meet biodiversity targets for estuarine ecosystem types, estuarine habitats and estuarine-dependent species.	<p>Priority estuaries were identified in the National Estuary Biodiversity Plan 2011, a spatial biodiversity plan for the estuarine realm that used a systematic biodiversity planning approach.</p> <p>120 priority estuaries were identified. Of these, 58 require full protection and 62 require partial protection. Full protection requires including the estuary in a no-take protected area and ensuring its freshwater flow requirements are met. Partial protection can be achieved through a range of measures.</p>	Also called national priority estuaries, because they were identified in a national plan. Some coastal provinces have identified additional estuaries as priorities at the provincial level in their provincial spatial biodiversity plans.	National Estuary Biodiversity Plan (Turpie et al. 2012)	<ul style="list-style-type: none"> - <i>National Estuary Biodiversity Plan</i> - <i>spatial biodiversity plan</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	139. protected area	An area of land or sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation.	<p>Protected areas are declared under the Protected Areas Act and include both state-owned and contract protected areas. The Protected Areas Act recognises nine types of protected area (see <i>Protected Areas Act</i>).</p> <p>Protected areas can be land-based or marine. Land-based protected areas can provide protection for terrestrial, freshwater and in some cases estuarine ecosystems and species.</p> <p>Biodiversity stewardship category 1 is protected areas, with three options in this category: National Park, Nature Reserve or Protected Environment.</p> <p>The South African definition of protected area is narrower than the IUCN definition, which includes areas that are not legally protected and that would be defined in South Africa as conservation areas rather than protected areas.</p>	<p>Not to be confused or conflated with “conservation areas”, which are not recognised in terms of the Protected Areas Act.</p> <p>Avoid “reserves” or “parks” when referring to protected areas.</p> <p>Avoid the acronym “PA” unless it essential to save space (e.g. in a column heading).</p> <p>When writing about protected areas in general, use small letters. When writing about a particular type of protected area, use capitals (e.g. National Park, Marine Protected Area). An exception to this is in the legend for a CBA Map, where “Protected Areas” (one of five broad map categories) is capitalised to align with capitalisation of the other CBA Map categories.</p>	<p>National Environmental Management: Protected Areas Act (Act 57 of 2003)</p> <p>National Protected Area Expansion Strategy 2018 (DFFE 2018)</p>	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>CBA Map</i> - <i>conservation area</i> - <i>contract protected area</i> - <i>land-based protected area</i> - <i>Marine Protected Area (MPA)</i> - <i>protected area estate</i> - <i>protected area network</i> - <i>Protected Areas Act</i> - <i>state-owned protected area</i>
NO CHANGE	140. protected area estate	All protected areas.	<p>Also called the protected area network.</p> <p>Includes all nine types of protected area recognised in the Protected Areas Act.</p>	<p>Not to be confused with “conservation estate”, which includes protected areas and conservation areas.</p> <p>Using the term “estate” can help to convey that protected areas should be considered to be assets.</p>	<p>South African Protected Area Database (DFFE 2022)</p>	<ul style="list-style-type: none"> - <i>conservation area</i> - <i>conservation estate</i> - <i>protected area</i> - <i>protected area network</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	141. protected area network	All protected areas.	Also called protected area estate. Includes all nine types of protected area recognised in the Protected Areas Act.	Not to be confused with “protected area system”. The term “network” conveys that protected area should ideally be configured as a coherent spatial network.	South African Protected Area Database (DFFE 2022)	- <i>conservation area</i> - <i>conservation estate</i> - <i>protected area</i> - <i>protected area estate</i>
NO CHANGE	142. protected area system	The system of protected area legislation, categories and governance.		Not to be confused with “protected area network” or “protected area estate”.	National Protected Area Expansion Strategy 2018 (DFFE 2018)	- <i>Protected Areas Act</i> - <i>protected area</i> - <i>protected area estate</i> - <i>protected area network</i>
REVISED	143. protected area target	A quantitative target for expanding the coverage of the protected area network by a certain date.	Protected area targets for the landscape or seascape as a whole are generally determined through policy commitments. They can be translated into ecosystem-specific protected area targets, typically expressed as a percentage of the historical extent of an ecosystem type. The National Protected Area Expansion Strategy (NPAES) sets protected area targets for each ecosystem type, and these targets are used as a key input to spatial biodiversity prioritisation to identify priority areas for protected area expansion. Protected area targets may be revised when the NPAES is revised.	Avoid “conservation target”. Not to be confused with “biodiversity target”. However, protected area targets and biodiversity targets may converge, to the extent that protected area targets are derived from science. National protected area targets may be linked to protection targets in the Global Biodiversity Framework, but may be adapted to the national ecological and socio-economic context.	National Protected Area Expansion Strategy 2018 (DFFE 2018)	- <i>biodiversity target</i> - <i>historical extent</i> - <i>National Protected Area Expansion Strategy (NPAES)</i> - <i>protected area</i> - <i>spatial biodiversity prioritisation</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	144. Protected Areas Act	The National Environmental Management: Protected Areas Act (Act 57 of 2003), as amended.	<p>The Protected Areas Act recognises nine types of protected areas:</p> <ul style="list-style-type: none"> ○ National Park ○ Nature Reserve ○ Special Nature Reserve ○ Protected Environment ○ Forest Nature Reserve ○ Forest Wilderness Area ○ Mountain Catchment Area ○ World Heritage Site ○ Marine Protected Area <p>Some of these are declared in terms of the Protected Areas Act; others are declared in terms of other legislation.</p> <p>When writing formal documents, the name of the Act can be written in full the first time it is used, followed by “hereafter referred to as the Protected Areas Act” (either as a footnote or in brackets).</p> <p>The Protected Areas Act is part of a set of subordinate legislation to the National Environmental Management Act (NEMA) (Act 107 of 1998) collectively known as specific environmental management Acts (SEMAs). They also include the Biodiversity Act, Air Quality Act, Integrated Coastal Management Act and the Waste Act.</p>	<p>Often referred to as NEMPAA. However, be aware that the acronym “NEMPAA” is not meaningful to most people outside the biodiversity sector, so depending on the audience it is often better to say “the Protected Areas Act”.</p> <p>Protected areas are <i>declared</i>, <u>not</u> proclaimed or gazetted. If a declaration is withdrawn (which is rare), this is referred to as <i>withdrawal of declaration</i>, <u>not</u> deproclamation or degazettement.</p> <p>The eight types of protected areas other than Marine Protected Areas collectively make up “land-based protected areas”.</p>	<p>National Environmental Management: Protected Areas Act (Act 57 of 2003)</p>	<ul style="list-style-type: none"> - <i>Biodiversity Act</i> - <i>Marine Protected Area (MPA)</i> - <i>National Park</i> - <i>Nature Reserve</i> - <i>protected area</i> - <i>Protected Environment</i> - <i>Special Nature Reserve</i> - <i>land-based protected area</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	145. protected ecosystem	Protected ecosystems are defined in the Biodiversity Act as “ecosystems that are of high conservation value or of high national or provincial importance, although they are not listed [as Critically Endangered, Endangered or Vulnerable]” (Section 52(2)(d)).	To date, protected ecosystems have not been listed in terms of the Biodiversity Act. There is no ecological definition of a “protected ecosystem” – this concept exists only in legal terms.	Not to be confused with “well-protected ecosystem”, which is one of the protection level categories in an assessment of Ecosystem Protection Level. Not the opposite of “unprotected ecosystem”, which is another of the categories of protection level in an assessment of Ecosystem Protection Level. Not to be confused with “Protected Environment” which is one of four main categories of protected area defined in the Protected Areas Act.		- <i>Biodiversity Act</i> - <i>list of threatened ecosystems</i> - <i>listed ecosystem</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	146. Protected Environment	An area declared in terms of Section 28 of the Protected Areas Act, or equivalent designation under previous or provincial legislation.	<p>One of nine types of protected area recognised in the Protected Areas Act. One of three options within biodiversity stewardship category 1.</p> <p>Protected Environments are declared as a buffer zone for other types of protected areas; to enable owners of the land to take collective action to conserve natural, cultural, historical, archaeological or scenic value; for provision of environmental goods and services; to protect a specific ecosystem outside of other types of protected areas; or to ensure sustainable use.</p> <p>A Protected Environment may be declared on state, private or communal land. Declaration is less restrictive in terms of restricted land uses than National Parks or Nature Reserves. The declaration is binding on the property (optional title deed restriction) and binding on the landowner.</p>	<p>Not to be confused with “protected ecosystem”, which is one of the four categories of ecosystems that may be listed in terms of the Biodiversity Act.</p> <p>Avoid the acronym “PE” unless it is unavoidable because of space constraints (e.g. in a column heading).</p>	<p>National Environmental Management: Protected Areas Act (Act 57 of 2003)</p>	<ul style="list-style-type: none"> - <i>biodiversity stewardship</i> - <i>National Park</i> - <i>Nature Reserve</i> - <i>Protected Areas Act</i> - <i>Special Nature Reserve</i>
NO CHANGE	147. protection	Refers to formal protection in terms of the Protected Areas Act, and involves the establishment of statutory protected areas that are managed primarily for biodiversity conservation purposes, with sustainable use options where appropriate.	Implies long-term security.	Preferably not to be used interchangeably with “conservation”, which is a broader term than protection.		<ul style="list-style-type: none"> - <i>conservation</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NO CHANGE	148. provincial conservation authority	Refers either to the provincial department with the mandate for environmental affairs or to the provincial conservation agency with delegated responsibility from the provincial department.	A summary term for all provincial organs of state that deal with conservation as their core mandate or as part of their mandate.	Not to be confused with the narrower term “provincial conservation agency”. Provincial conservation authorities include provincial conservation agencies (which are established in terms of provincial legislation) as well as provincial departments with the mandate for environmental affairs in provinces where a conservation agency does not exist.		- <i>conservation agency</i> - <i>conservation authority</i>
NO CHANGE	149. rangelands	A form of extensive agriculture that can include livestock ranching and extensive game ranching.	In many South African ecosystems, rangelands can be compatible with biodiversity conservation objectives if appropriately managed.	The term “agriculture” includes rangelands. Use the term “intensive agriculture” or “cultivation” if the intention is to exclude rangelands.	Grazing and Burning Guidelines (SANBI 2014b)	- <i>agriculture</i> - <i>cultivation</i> - <i>extensive agriculture</i> - <i>intensive agriculture</i>
NEW TERM	150. realm	One of the main components of the biosphere that differ fundamentally in ecosystem organisation and function.	Definition adapted from the IUCN Global Ecosystem Typology (GET) (Keith et al. 2020). Realm is the highest level in the hierarchical classification system in the SA-NECS and GET hierarchy.	South Africa recognises four realms: terrestrial, freshwater, estuarine and marine. The coast is considered to be a cross-realm zone rather than a realm in its own right. The GET recognises five realms: terrestrial, freshwater, marine, subterranean and atmospheric. In the GET, estuaries are considered a transitional freshwater-marine biome rather than a realm.	South African National Ecosystem Classification System Handbook (Dayaram et al. 2021) IUCN Global Ecosystem Typology (Keith et al. 2020)	- <i>coast / coastal zone</i> - <i>estuarine realm</i> - <i>freshwater realm</i> - <i>Global Ecosystem Typology</i> - <i>marine realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i> - <i>terrestrial realm</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	151. Red List of Ecosystems	A consistent global standard for ecosystem risk assessment to monitor the status of ecosystems.	<p>The basis of the IUCN Red List of Ecosystems is a set of five criteria and associated biodiversity thresholds that provide a repeatable, globally consistent method for assigning ecosystems to a risk category. The criteria assess (A) changes in ecosystem distribution; (B) restricted distribution; (C) degradation of the abiotic environment; (D) disruption of biotic processes and (E) quantitative risk analysis.</p> <p>Ecosystems are assigned to one of eight categories:</p> <ul style="list-style-type: none"> ○ Collapsed (CO) ○ Critically Endangered (CR) ○ Endangered (EN) ○ Vulnerable (VU) ○ Near Threatened (NT) ○ Least Concern (LC) ○ Data Deficient (DD) ○ Not Evaluated (NE) 	<p>The NBA 2018 included South Africa's first Red List of Ecosystems assessments based on the IUCN criteria.</p> <p>The earlier NBSA 2004 and NBA 2011 included a national equivalent of the Red List of Ecosystems, prior to the development and finalisation of the global criteria. The national criteria used were quite similar to those of the IUCN Red List of Ecosystems, and ecosystems were assigned to the categories CR, EN, VU or Least Threatened (LT).</p> <p>South Africa has thus had a Red List of Ecosystems effectively since 2004, although a strict time series of threat status will exist only from 2018 onwards.</p> <p>May be abbreviated to RLE but care should be taken to use the acronym only in contexts where it will be readily understood.</p>	<p>An Introduction to the IUCN Red List of Ecosystems (IUCN 2016)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 Synthesis Report (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Collapsed (CO)</i> - <i>Critically Endangered (CR)</i> - <i>Data Deficient (DD)</i> - <i>Ecosystem Threat Status</i> - <i>ecosystem type</i> - <i>Endangered (EN)</i> - <i>Least Concern (LC)</i> - <i>list of threatened ecosystems</i> - <i>Near Threatened (NT)</i> - <i>Not Evaluated (NE)</i> - <i>Red List of Species</i> - <i>spatial biodiversity assessment</i> - <i>threatened ecosystem</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	<p>152. Red List of Species</p> <p><i>Replaces term used in first edition:</i> Red Listed species</p> <p><i>Alternative term:</i> Red List of Threatened Species</p>	<p>A consistent global standard for classifying species' risk of extinction.</p>	<p>Formally called the IUCN Red List of Threatened Species, but often abbreviated to Red List of Species for simplicity. The NBA uses "Red List of Species" and in the South African context this shortened form is completely acceptable.</p> <p>The basis of the IUCN Red List of Species is a set of five criteria and associated biodiversity thresholds that provide a repeatable, globally consistent method for assigning species to a risk category. The criteria assess (A) reduction in population size; (B) reduction in geographic range; (C) small population size; (D) restricted population and (E) quantitative analysis.</p> <p>Species are assigned to one of nine categories:</p> <ul style="list-style-type: none"> ○ Extinct (EX) ○ Extinct in the Wild (EW) ○ Critically Endangered (CR) ○ Endangered (EN) ○ Vulnerable (VU) ○ Near Threatened (NT) ○ Least Concern (LC) ○ Data Deficient (DD) ○ Not Evaluated (NE) 	<p>Species is the primary level within the taxonomic hierarchy at which risk assessments are conducted.</p> <p>However, the system allows for assessments of selected levels below species: subspecies and varieties. South African Red Lists often contain assessments for subspecies and varieties of species. To more precisely indicate that Red List statistics include these subspecies levels, the terms "<i>taxon</i>" or "<i>taxa</i>" are often used in reporting the assessment results. The term "species" is preferred in "Red List of Species" because it is a more relatable term for a non-scientific audience, and for simplicity we use "species" rather than "taxon" throughout the Lexicon. In some scientific contexts it may be preferable to use "taxon".</p> <p>May be abbreviated to RLS (or RLTS) but care should be taken to use the acronym only in contexts where it will be readily understood.</p>	<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Data Deficient (DD)</i> - <i>Endangered (EN)</i> - <i>Extinct (EX)</i> - <i>Extinct in the Wild (EW)</i> - <i>Least Concern (LC)</i> - <i>Near Threatened (NT)</i> - <i>Not Evaluated (NE)</i> - <i>Red List of Ecosystems</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i> - <i>threatened species</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
UPDATED	153. River FEPA	A river reach that is required to meet biodiversity targets for freshwater ecosystems. River FEPAs should remain in natural or near-natural ecological condition.	<p>One of several map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.</p> <p>At the time of writing, an update of NFPEPA 2011, and thus FEPA Maps, was underway.</p>	<p>Avoid “FEPA River”.</p> <p>River FEPAs are sub-quaternary river reaches. The river itself, not the associated sub-quaternary catchment, is the FEPA. One can refer to River FEPAs and their associated sub-quaternary catchments.</p>	<p>Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011)</p> <p>Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)</p>	<p>- FEPA Map</p> <p>- Freshwater Ecosystem Priority Area (FEPA)</p> <p>- National Freshwater Ecosystem Priority Areas (NFPEPA)</p> <p>- Wetland FEPA</p>
REVISED	154. semi-natural	A broad ecological condition class in which ecosystem function is predominantly unchanged even though composition and structure have been modified relative to a reference condition of natural.	<p>Equivalent to:</p> <ul style="list-style-type: none"> ○ fair ecological condition ○ DWS’s Present Ecological State category C (moderately modified) ○ IUCN Red List of Ecosystems, Criteria C thresholds of “severity of degradation” of 50-70% (moderately degraded) <p>Ecosystems in moderately modified condition usually retain sufficient ecological functioning to play an effective role as ecological infrastructure assets.</p> <p>Examples include overgrazed terrestrial ecosystems, sparsely invaded ecosystems, river reach with small farm dam, wetland with reed harvesting, inshore marine ecosystem with low levels of line fishing or rocky shore with hiking trails.</p>			<p>- ecological condition</p> <p>- fair ecological condition</p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	155. severely modified	A detailed ecological condition class in which loss of ecosystem composition, structure and ecological function is extensive.	<p>Falls within the broad ecological condition class “intensively modified” or “poor ecological condition”, which also includes “heavily modified” and “critically modified”.</p> <p>Equivalent to:</p> <ul style="list-style-type: none"> ○ DWS’s Present Ecological State category E (seriously modified), ○ IUCN Red List of Ecosystems Criterion C threshold of “severity of degradation” of 70-90% (severely degraded). <p>Examples include: wheat field, timber plantation, golf course, canalised river, marina.</p> <p>Can apply to a site or an ecosystem.</p>	<p>Avoid “low ecological condition”.</p> <p>Avoid the term “transformed” to describe ecosystems or sites that have been severely modified. Transformation is a widely held positive socio-economic goal in South Africa, so it creates confusion if the biodiversity sector uses it to describe something negative or undesirable.</p>		<ul style="list-style-type: none"> - <i>critically modified</i> - <i>ecological condition</i> - <i>heavily modified</i> - <i>intensively modified</i> - <i>irreversibly modified</i> - <i>poor ecological condition</i>
NEW TERM	156. South Africa’s maritime domain	Comprises the territorial seas (extending from the dune base to 12 nautical miles offshore), and the Exclusive Economic Zone (extending from 12 NM to 200 NM offshore) around the country’s mainland and the sub-Antarctic Prince Edward Islands.	<p>It is possible to separate the <i>mainland</i> maritime domain, which surrounds South Africa’s continental coast, and the <i>Prince Edward Island</i> maritime domain, which surrounds South Africa’s sub-Antarctic islands.</p> <p>South Africa’s mainland maritime domain is the planning domain (spatial extent) for the National Coastal and Marine Spatial Biodiversity Plan (NCMSBP).</p>		<p>National Coastal and Marine Spatial Biodiversity Plan (Harris et al. 2022)</p>	<ul style="list-style-type: none"> - <i>dune base</i> - <i>marine realm</i> - <i>National Coastal and Marine Spatial Biodiversity Plan (NCMSBP)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	157. South African Inventory of Inland Aquatic Ecosystems (SAIIAE)	A collection of datasets that spatially depict the extent of river and wetland ecosystem types, as well as the representation of additional water features and artificial waterbodies.	The SAIIAE includes the National Wetland Map (NWM) and the most comprehensive national river network map at a 1:500 000 scale. It assigns wetlands to wetland ecosystem types based on the Classification System for Wetlands and other Aquatic Ecosystems in South Africa (Ollis et al 2013) and rivers to river ecosystem types based on the classification system for rivers developed in the NBA 2011. It also includes data on pressures on rivers and wetlands to support the assessment of these systems.		South African Inventory of Inland Aquatic Ecosystems (Van Deventer et al. 2018) Classification System for Wetlands and other Aquatic Ecosystems in South Africa (Ollis et al 2013)	<ul style="list-style-type: none"> - <i>aquatic ecosystem</i> - <i>ecosystem type</i> - <i>freshwater realm</i> - <i>inland aquatic ecosystem</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	<p>158. South African National Ecosystem Classification System (SA-NECS)</p>	<p>A hierarchical system for mapping and classifying ecosystem types in South Africa, in the terrestrial, marine, freshwater and estuarine realms.</p>	<p>South Africa has a well-established classification system for ecosystems in all realms. It provides an essential scientific foundation for ecosystem-level assessment, planning, prioritisation, monitoring and management and for ecosystem accounting.</p> <p>The SA-NECS can be viewed as a “system of systems”. Factors used to map and classify ecosystems differ in different realms, but in all cases ecosystems of the same type are expected to share broadly similar ecological characteristics and functioning.</p> <p>SANBI is the custodian of the SA-NECS and convenes the National Ecosystem Classification Committee, with structures and processes in place to ensure spatial and conceptual alignment of terminology between realms.</p> <p>The SA-NECS is underpinned by principles which are stable. The units in the classification system may be refined iteratively as data and knowledge progresses.</p>	<p>The SA-NECS is broadly aligned with the IUCN’s Global Ecosystem Typology (GET) in that it has a similar conceptual approach to defining ecosystem types and similar hierarchical levels. It is possible to cross-walk South Africa’s national ecosystem types to the GET, although there is not a perfect one-to-one relationship for all ecosystem types.</p> <p>The SA-NECS treats estuarine ecosystems as a realm in their own right (which is relatively unusual globally) and treats the coast as a cross-realm zone, consisting of a combination of some terrestrial and marine ecosystem types and all estuarine ecosystem types.</p>	<p>South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)</p>	<ul style="list-style-type: none"> - <i>bioregion</i> - <i>coast / coastal zone</i> - <i>ecoregion</i> - <i>ecosystem type</i> - <i>estuarine realm</i> - <i>freshwater realm</i> - <i>Global Ecosystem Typology</i> - <i>marine realm</i> - <i>National Vegetation Map (NVM)</i> - <i>National Wetland Map (NWM)</i> - <i>South African Inventory of Inland Aquatic Ecosystems (SAIIAE)</i> - <i>terrestrial realm</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	159. South African Protected Area Database (SAPAD)	<p>A spatial data inventory of protected areas in South Africa that is developed and maintained by the Department of Forestry, Fisheries and the Environment (DFFE) and updated quarterly.</p>	<p>SAPAD captures areas under formal legislative protection in terms of the Protected Areas Act and is an important input layer into many spatial biodiversity assessment, prioritisation and planning processes.</p> <p>The legal status of protected areas is audited against official gazettes before inclusion into the database. This auditing is an ongoing task, leading to gradual improvements in the accuracy of the database. Accuracy is generally good from 2000 onwards but less so prior to 2000 for a range of reasons. SAPAD data is collected by land parcels which are aggregated to protected area level. Protected areas are often established incrementally, with one protected area consisting of multiple portions with different declaration dates. SAPAD includes state owned, privately owned and communally-owned protected areas.</p>	<p>SAPAD forms part of DFFE's Protected and Conservation Areas (PACA) database, which includes SAPAD and the South African Conservation Area Database (SACAD).</p>	<p>https://egis.environment.gov.za/protected_and_conservation_areas_database</p>	<ul style="list-style-type: none"> - <i>protected area</i> - <i>protected area estate</i> - <i>protected area network</i> - <i>protected area system</i> - <i>Protected Areas Act</i> - <i>protection</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	160. spatial biodiversity assessment	A spatially explicit assessment of the state of biodiversity or of biodiversity importance, at the ecosystem, species and/or genetic level.	<p>In South Africa, several national-level spatial biodiversity assessments are undertaken. Foremost amongst these is the National Biodiversity Assessment, which produces four headline indicators: Ecosystem Threat Status and Species Threat Status (based on IUCN Red List categories and criteria), and Ecosystem Protection Level and Species Protection Level.</p> <p>Other national-level spatial biodiversity assessments in South Africa include the identification of Key Biodiversity Areas (KBAs) and Ecologically or Biologically Significant Marine Areas (EBSAs). In country contexts where no target-driven spatial biodiversity prioritisation or planning has been undertaken, KBAs and EBSAs can be useful as an initial form of prioritisation, but in South Africa they are considered to be a form of assessment rather than prioritisation.</p> <p>Spatial biodiversity assessments can be undertaken at a range of spatial levels and scales, from a wall-to-wall national assessment to assessment of an individual site (for example, as part of an Environmental Impact Assessment).</p>	<p>Because “biodiversity assessment” could take a range of forms, it is preferable to specify “<i>spatial</i> biodiversity assessment” where applicable.</p> <p>Not to be confused with spatial biodiversity <i>prioritisation</i> or spatial biodiversity <i>planning</i>, which identify explicit geographic <i>priority areas</i>. The purpose of spatial biodiversity assessment is to assess the <i>state</i> or <i>importance</i> of a site, ecosystem or species. This can be a step in identifying priority areas, but should not be conflated with prioritisation or planning, which may depend on a range of other factors in addition to state or importance. Spatial biodiversity assessment usually involves the use of criteria and thresholds, but unlike spatial biodiversity prioritisation it is not target-driven. Spatial biodiversity assessment may feed into spatial biodiversity prioritisation or planning.</p>	<p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Ecologically or Biologically Significant Marine Area (EBSA)</i> - <i>Ecosystem Threat Status</i> - <i>Ecosystem Protection Level</i> - <i>Key Biodiversity Area (KBA)</i> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>spatial biodiversity prioritisation</i>

Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
<p>161. spatial biodiversity plan</p> <p><i>Replaces older term: biodiversity plan</i></p>	<p>A spatial plan that identifies one or more categories of biodiversity priority area, using a systematic biodiversity planning approach.</p>	<p>There are many potential approaches to developing a spatial biodiversity plan. In South Africa, <i>systematic biodiversity planning</i> has become embedded in policy and practice as the approach that is used to develop spatial biodiversity plans.</p> <p>A spatial biodiversity plan is the <i>map product</i> that results from a spatial biodiversity planning process. The main spatial biodiversity plans produced in South Africa are:</p> <ul style="list-style-type: none"> ○ CBA Maps (which exist for all provinces and South Africa’s mainland maritime domain) ○ FEPA Maps <p>These spatial biodiversity plans are intended to be the biodiversity sector’s input into a range of planning and decision-making processes in other sectors, including land-use planning, Marine Spatial Planning, environmental authorisations and water resource management.</p> <p>In South Africa, spatial biodiversity plans are typically undertaken at the national, provincial or sometimes municipal level (e.g. for some metropolitan municipalities). The link to administrative boundaries facilitates implementation of the plans.</p>	<p>Also see <i>spatial biodiversity planning</i>.</p> <p>Use “spatial biodiversity plan” rather than “biodiversity plan”. The term “biodiversity plan” could have other meanings and need not mean a spatial plan.</p> <p>The term “conservation plan” is often used in an international or academic context. Avoid the term “conservation plan” or “biodiversity conservation plan” when writing in a policy, legislative or implementation context. The term “conservation plan” may be interpreted as being only about spatial priorities for protected area expansion, rather than, for example, spatial priorities to inform land-use planning and decision-making. In addition, in the public sector in South Africa, conservation is the mandate only of conservation authorities, while biodiversity is of broader concern for all organs of state (e.g. in terms of the NEMA principles and the CBD). A “conservation plan” can be interpreted to be of relevance only for conservation authorities, while a “spatial biodiversity plan” is more clearly of relevance to a range of sectors. The term “conservation plan” is an acceptable alternative <i>only</i> when writing for the formal literature or in an academic context.</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>CBA Map</i> - <i>FEPA Map</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity prioritisation</i> - <i>systematic biodiversity planning</i>

REVISED

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	<p>162. spatial biodiversity planning</p> <p><i>Replaces older term: biodiversity planning</i></p>	<p>The process of developing a spatial biodiversity plan that identifies one or more categories of biodiversity priority area, using a systematic biodiversity planning approach.</p>	<p>See additional information for spatial biodiversity plan.</p> <p>In the South African context, spatial biodiversity planning is seen as one form of spatial biodiversity prioritisation and uses a systematic biodiversity planning approach, in which biodiversity targets play a central role.</p> <p>The map products of spatial biodiversity planning (i.e. spatial biodiversity plans) in the South African context are CBA Maps and FEPA maps.</p>	<p>Also see <i>spatial biodiversity plan</i>.</p> <p>The term “conservation planning” is an acceptable alternative <i>only</i> when writing for the formal literature or in an academic context.</p> <p>Not to be conflated with <i>spatial biodiversity prioritisation</i>. In the South African context, spatial biodiversity planning is seen as one particular form of prioritisation.</p> <p>Not to be confused with <i>spatial biodiversity assessment</i>, which assesses the <i>state</i> or <i>importance</i> of a site, ecosystem or species. Spatial biodiversity assessment involves the use of criteria and thresholds, but it is not target-driven.</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>biodiversity priority area</i> - <i>CBA Map</i> - <i>FEPA Map</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity prioritisation</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	163. spatial biodiversity prioritisation	The process of identifying spatial priority areas for protecting, conserving, managing and/or restoring biodiversity.	<p>Spatial biodiversity prioritisation can take a range of forms and can use a range of approaches, and can result in a variety of map products depending on the purpose of a particular prioritisation exercise.</p> <p>Spatial biodiversity prioritisation that has been undertaken in South Africa includes:</p> <ul style="list-style-type: none"> ○ Spatial biodiversity planning, using a systematic biodiversity planning approach, and producing CBA Maps and FEPA maps ○ Prioritisation for protected area expansion (underpinning the NPAES and provincial protected area expansion strategies) ○ Identifying ELSAAs ○ Prioritisation of ecological infrastructure assets for management and restoration (this is still in early stages) <p>A common characteristic across all of these forms of spatial prioritisation is that they are <i>target-driven</i>. The targets may be biodiversity targets, protected area targets or other quantitative targets.</p> <p>Spatial biodiversity prioritisation can be undertaken at a range of spatial levels and scales, depending on the purpose of the prioritisation.</p>	<p>Not to be conflated with <i>spatial biodiversity planning</i>. In the South African context, spatial biodiversity planning is seen as one particular form of prioritisation.</p> <p>Not to be confused with <i>spatial biodiversity assessment</i>, which assesses the <i>state</i> or <i>importance</i> of a site, ecosystem or species. This can be a step in identifying priority areas, but should not be conflated with prioritisation which may depend on a range of other factors in addition to state or importance. Spatial biodiversity assessment involves the use of criteria and thresholds, but it is not target-driven.</p>		<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>Essential Life Support Action Area Map (ELSAA Map)</i> - <i>focus area for protected area expansion</i> - <i>protected area target</i> - <i>spatial biodiversity assessment</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>systematic biodiversity planning</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	164. Special Nature Reserve	An area declared in terms of Section 18 of the Protected Areas Act or equivalent designation under previous legislation.	<p>One of nine types of protected area recognised in the Protected Areas Act.</p> <p>Special Nature Reserves are declared to protect highly sensitive, outstanding ecosystems, species, or geological or physical features in the area; and to make the area primarily available for scientific research or environmental monitoring.</p> <p>This type of protected area has been infrequently used.</p>	Avoid the acronym “SNR” unless it is unavoidable because of space constraints (e.g. in a column heading).	National Environmental Management: Protected Areas Act (Act 57 of 2003)	<ul style="list-style-type: none"> - <i>National Park</i> - <i>Nature Reserve</i> - <i>Protected Areas Act</i> - <i>Protected Environment</i>
REVISED	165. species of conservation concern	Species that are assessed as Critically Endangered, Endangered, Vulnerable, Data Deficient or Near Threatened based on IUCN Red List of Species criteria, as well as range-restricted species that are nationally listed as Rare or Extremely Rare (or Critically Rare).	This is a collective term that is broader than “threatened species”.		Species Environmental Assessment Guideline (SANBI 2020)	<ul style="list-style-type: none"> - <i>species of special concern</i> - <i>threatened species</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	166. species of special concern	Species that have particular ecological, economic or cultural significance, including but not limited to threatened species or species of conservation concern.	This term can be useful in a spatial biodiversity planning context, where it may be important to include a broader range of species as biodiversity features than just threatened species or species of special concern. Species of special concern may be important assets for the biodiversity economy.			<ul style="list-style-type: none"> - <i>species of conservation concern</i> - <i>threatened species</i>
NEW TERM	167. Species Protection Level	Indicator of the extent to which species are represented in the current protected area network.	<p>One of two headline national indicators for species, assessed for a variety of species in South Africa. A form of spatial biodiversity assessment.</p> <p>The Species Protection Level indicator measures progress towards protecting a population persistence target for each species. Categories include:</p> <ul style="list-style-type: none"> ○ Well Protected ○ Moderately Protected ○ Poorly Protected ○ Not Protected <p>Not Protected, Poorly Protected and Moderately Protected species are collectively referred to as under-protected species.</p>	<p>Avoid “species protection status”, “protection status”, “conservation status”.</p> <p>“Protection level” is acceptable when the sentence or context makes it clear that this is in relation to species.</p> <p>Species Protection Level is capitalised because it is the formal name of an indicator. Avoid the acronym “SPL” except in contexts where it will be readily understood.</p>	National Biodiversity Assessment 2018 (SANBI 2019a)	<ul style="list-style-type: none"> - <i>Ecosystem Protection Level</i> - <i>Moderately Protected</i> - <i>Not Protected</i> - <i>Poorly Protected</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i> - <i>under-protected</i> - <i>Well Protected</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	168. Species Threat Status	Indicator of the degree to which a species is at risk of extinction.	<p>One of two national headline indicators for species, assessed for a variety of species in South Africa. A form of spatial biodiversity assessment.</p> <p>Assessed based on the categories and criteria of the IUCN Red List of Species. Species are categorised as</p> <ul style="list-style-type: none"> ○ Critically Endangered ○ Endangered ○ Vulnerable ○ Near Threatened ○ Least Concern <p>Critically Endangered, Endangered and Vulnerable species are collectively referred to as threatened species.</p>	<p>The term “conservation status” was used in the past in relation to the IUCN Red List for Species, but its use is now discouraged (globally and in South Africa), as the criteria for assessing risk of extinction are unconcerned with whether or not conservation measures are in place.</p> <p>“Threat status” is acceptable when the sentence or context makes it clear that this is in relation to species.</p> <p>Species Threat Status is capitalised because it is the formal name of an indicator. Avoid the acronym “STS” except in contexts where it will be readily understood.</p>	<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Threat Status</i> - <i>Endangered (EN)</i> - <i>Least Concern (LC)</i> - <i>Near Threatened (NT)</i> - <i>Red List of Species</i> - <i>spatial biodiversity assessment</i> - <i>threatened species</i> - <i>Vulnerable (VU)</i>
NO CHANGE	169. state-owned protected area	A protected area owned and managed by an organ of state (national, provincial or local).		Avoid conflating “statutory protected area” with “state-owned protected area”, as statutory protected areas in South Africa may be privately owned or communally owned.		<ul style="list-style-type: none"> - <i>protected area</i> - <i>contract protected area</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	170. Strategic Water Source Area (SWSA)	<p><i>Short (less formal) definition:</i> SWSAs are the 10% of the land area of South Africa, Lesotho and Eswatini that supply 50% of water to these countries.</p> <p><i>Longer (formal) definition:</i> SWSAs are natural source areas for water that supply disproportionately large volumes of water per unit area and that are considered of strategic significance for water security from a national planning perspective, for either surface water or groundwater or both.</p>	<p>SWSAs are national ecological infrastructure assets, essential for water security. They include SWSAs for surface water (SWSA-sw) and SWSAs for groundwater (SWSA-gw).</p> <p>The spatial identification and delineation of SWSAs for surface water has progressed over the past fifteen years, with increasing precision in each iteration. The most recent delineation of SWSAs at a fine spatial scale delineates 22 SWSAs for surface water across South Africa's mainland (Lotter and Le Maitre 2021).</p> <p>SWSAs for groundwater have also been identified but have been delineated only at a broad spatial scale (Le Maitre et al. 2018).</p> <p>Water source areas can also be mapped at a sub-national scale. Work on this was underway at the time of writing.</p>	<p>Avoid “surface SWSAs” when referring to “SWSAs for surface water”. Avoid “ground SWSAs” when referring to “SWSAs for groundwater”.</p> <p>Avoid the term “High Water Yield Areas”. NFEPA 2011 mapped High Water Yield Areas, which were conceptually similar to SWSAs. However, the term High Water Yield Areas was subsequently replaced by SWSAs.</p> <p>Because SWSAs for groundwater have not yet been delineated at a fine enough spatial scale to be included in most spatial biodiversity assessment, prioritisation and planning processes, it is usually fine, where relevant, to say once upfront in a document that “SWSAs” should be taken to mean SWSAs for surface water.</p>	<p>Strategic Water Source Areas of South Africa, Lesotho and Swaziland for Surface Water and Groundwater (Le Maitre et al. 2018)</p> <p>Fine-scale delineation of Strategic Water Source Areas for surface water) (Lotter & Le Maitre, 2021)</p>	<p>- <i>ecological infrastructure</i></p> <p>- <i>ecosystem services</i></p>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	171. systematic biodiversity planning	An approach to spatial biodiversity planning, or an approach to identifying biodiversity priority areas.	<p>The systematic biodiversity planning approach has become embedded in policy and legislation in South Africa as the required approach for the development of spatial biodiversity plans.</p> <p>Systematic biodiversity planning is based on the principles of <i>representation</i> (the need to conserve a representative sample of all biodiversity) and <i>persistence</i> (the need to conserve ecological and evolutionary processes that allow biodiversity to persist over time).</p> <p>Systematic biodiversity planning involves: mapping biodiversity features (such as ecosystem, species, spatial components of ecological processes); mapping a range of information related to these biodiversity features and their ecological condition; setting quantitative biodiversity targets for biodiversity features; analysing the information using software linked to GIS and developing maps that show spatial biodiversity priorities. The configuration of priority areas is designed to be spatially efficient (i.e. to meet biodiversity targets in the smallest area possible); to avoid spatial conflicts with other land, sea and resource uses where possible; and to provide for connectivity in the landscape or seascape.</p> <p>The "raw" output of systematic biodiversity planning is an irreplaceability analysis, which is then used as the basis for developing a CBA Map or FEPA Map.</p>	<p>Systematic biodiversity planning is also known as systematic conservation planning in the formal literature and in other countries. In a policy, legislative or implementation context in South Africa, "systematic biodiversity planning" is preferred, for the same reasons we prefer to use "spatial biodiversity planning/plans" rather than "conservation planning/plans" – see explanation in entries for <i>spatial biodiversity planning</i> and <i>spatial biodiversity plan</i>.</p> <p>Avoid the term "systematic conservation plan / planning" when writing in a policy, legislative or implementation context. The term "systematic conservation plan / planning" is an acceptable alternative <i>only</i> when writing for the formal literature or in an academic context.</p> <p>Avoid the acronym "SBP" or "SCP".</p>	<p>Technical Guidelines for CBA Maps</p>	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>spatial biodiversity plan</i> - <i>spatial biodiversity planning</i> - <i>spatial biodiversity prioritisation</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	172. terrestrial realm	Includes all dry land, its vegetation cover, proximate atmosphere and substrate (soils, rocks) to the rooting depth of plants, and associated animals and microbes.	<p>Definition from IUCN Global Ecosystem Typology (Keith et al. 2020).</p> <p>One of four realms recognised in the SA-NECS, along with the freshwater, estuarine and marine realms.</p> <p>The terrestrial realm includes all ecosystem types on the land mass up to the dune base.</p>		<p>South African National Ecosystem Classification System Handbook (Dayaram et al. 2021)</p> <p>IUCN Global Ecosystem Typology (Keith et al. 2020)</p>	<ul style="list-style-type: none"> - <i>estuarine realm</i> - <i>freshwater realm</i> - <i>marine realm</i> - <i>National Vegetation Map (NVM)</i> - <i>realm</i> - <i>South African National Ecosystem Classification System (SA-NECS)</i>
NEW TERM	173. threat	A term used to describe some, but not all, pressures on biodiversity.	<p>Internationally, the term threat is generally used synonymously with “pressure” or “driver” to mean anything that causes decline in biodiversity or ecosystem services. However, in South Africa, a distinction is made between “threats” and “pressures” and they are not used interchangeably (see next column for rationale).</p> <p>The term “threat” can be appropriate for those pressures that are less directly linked to a particular socio-economic sector or that are linked to illegal activity. For example, it is usually appropriate to refer to biological invasions, climate change and poaching as threats rather than pressures.</p>	In most instances, the term “pressure” is preferred to “threat”, in order to avoid labelling legitimate socio-economic activities as threats, which can set up an adversarial relationship between the biodiversity sector and other sectors. For example, it is not helpful to refer to urban development or cultivation as a “threat”, as it is likely to cause offence and to reduce the potential to mainstream biodiversity priorities in those sectors through a process of engagement and relationship building.		<ul style="list-style-type: none"> - <i>impact</i> - <i>pressure</i> - <i>degradation</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	174. threatened ecosystem	An ecosystem type that faces a risk of collapse in the near future. It has lost or is losing vital aspects of its structure, function or composition. Threatened ecosystems include those assessed as Critically Endangered, Endangered or Vulnerable.	<p>Threatened ecosystems are identified as part of a Red List of Ecosystem assessment, a form of spatial biodiversity assessment.</p> <p>See entries for <i>Ecosystem Threat Status</i>, <i>National Biodiversity Assessment (NBA)</i> and <i>Red List of Ecosystems</i>.</p> <p>Threatened ecosystems may be listed in terms of the Biodiversity Act. See entries for <i>list of threatened ecosystems</i> and <i>listed ecosystem</i>.</p>	<p>Avoid using the term “endangered ecosystems” to refer to all threatened ecosystems. Endangered ecosystems are one sub-category of threatened ecosystems.</p> <p>Avoid the acronym “TE”.</p>	https://iucnrle.org/	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Threat Status</i> - <i>Endangered (EN)</i> - <i>list of threatened ecosystems</i> - <i>listed ecosystem</i> - <i>Near Threatened (NT)</i> - <i>Red List of Ecosystems</i> - <i>spatial biodiversity assessment</i> - <i>Vulnerable (VU)</i>
REVISED	175. threatened species	A species that faces a risk of extinction in the near future. Threatened species include those assessed as Critically Endangered, Endangered or Vulnerable.	<p>Threatened species are identified as part of a Red List of Species assessment, a form of spatial biodiversity assessment.</p> <p>See entries for <i>Species Threat Status</i>, <i>National Biodiversity Assessment (NBA)</i> and <i>Red List of Species</i>.</p>	<p>Not to be confused with “TOPS-listed species”. Threatened or Protected Species (TOPS) may be listed in terms of the Biodiversity Act. For species on the TOPS list, certain activities are prohibited or require a permit. The TOPS list includes some but not all species that have been assessed as threatened in terms of the IUCN Red List of Species.</p> <p>Avoid using the term “endangered species” to refer to all threatened species. Endangered species are one sub-category of threatened species.</p>	http://redlist.sanbi.org www.iucnredlist.org	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Endangered (EN)</i> - <i>protected area</i> - <i>spatial biodiversity assessment</i> - <i>species of conservation concern</i> - <i>species of special concern</i> - <i>Species Threat Status</i> - <i>Vulnerable (VU)</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
NEW TERM	176. timber plantations	Timber plantations, usually commercial.	Can also be called forestry plantations. In the South African context, timber plantations always consist of exotic species as indigenous tree species are not fast growing enough to be commercially viable.	Avoid the term “plantations” when referring to timber plantations (or other specific types of plantations). Rather specify “timber plantations”. Especially for international audiences, “plantations” is a vague term – could be, for example, coffee plantations, sugar plantations, palm oil plantations. Not to be confused with indigenous forests.		- <i>forest</i> - <i>plantations</i> - <i>ecological condition</i> - <i>development</i>
REVISED	177. under-protected	An ecosystem type or species that has been classified as Moderately Protected, Poorly Protected or Not Protected.	“Under-protected” is a collective term for three categories to which an ecosystem type or species may be assigned in a protection level assessment, which is a form of spatial biodiversity assessment.		National Biodiversity Assessment 2018 (SANBI 2019a)	- <i>Ecosystem Protection Level</i> - <i>Moderately Protected</i> - <i>Not Protected</i> - <i>Poorly Protected</i> - <i>spatial biodiversity assessment</i> - <i>Species Protection Level</i>
NO CHANGE	178. Upstream Management Area	A sub-quaternary catchment in which human activities need to be managed to prevent degradation of downstream River FEPAs and Fish Support Areas.	One of several map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern. At the time of writing, an update of NFPEPA 2011, and thus FEPA Maps, was underway.	Upstream Management Areas do not include management areas for Wetland FEPAs, which need to be determined at a finer scale.	Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011) Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)	- <i>FEPA Map</i> - <i>Fish Support Area</i> - <i>Freshwater Ecosystem Priority Area (FEPA)</i> - <i>National Freshwater Ecosystem Priority Areas (NFPEPA)</i> - <i>River FEPA</i> - <i>Wetland FEPA</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	179. urbanisation	A demographic process in which the proportion of people living in towns and cities increases relative to the proportion living in rural areas.	The movement of people from rural to urban areas results in urbanisation. The level of urbanisation (for example 60%) is the proportion of the population living in urban areas.	Urbanisation is a demographic process, not a land cover class or a land use. The term is often incorrectly used to mean urban development or expansion of the spatial footprint of urban areas. These spatial changes in land cover may accompany urbanisation, but need not necessarily. Urbanisation can also result in a decrease in urban land use or land cover in rural areas in the longer term.		- <i>urban area / urban development</i> - <i>development</i>
NO CHANGE	180. urban area / urban development	A built-up area used for residential and/or commercial and/or industrial activities, associated with cities and towns.	Also called urban expansion, urban sprawl, urban settlement.	Not to be confused with “urbanisation”, which is a demographic process rather than a land cover class or land use.		- <i>urbanisation</i> - <i>development</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
REVISED	181. Vulnerable (VU)	<p>An IUCN Red List category applied to both ecosystems and species.</p> <p>An ecosystem type is Vulnerable when it is considered to be at a high risk of collapse.</p> <p>A species is Vulnerable when it is facing a high risk of extinction.</p>	<p>One of several categories assigned in a threat status assessment, a form of spatial biodiversity assessment.</p> <p>The threat status of ecosystem types and species is assessed based on criteria and thresholds set out in IUCN Guidelines using the best available evidence – see entries on <i>Red List of Ecosystems</i> and <i>Red List of Species</i>.</p> <p>Critically Endangered, Endangered and Vulnerable ecosystem types or species are collectively termed “threatened”.</p>	<p>The Biodiversity Act defines vulnerable ecosystems as “ecosystems that have a high risk of undergoing significant degradation of ecological structure, function or composition as a result of human intervention, although they are not critically endangered ecosystems or endangered ecosystems” (Section 52(2)(c)). This is a legal definition rather than an ecological definition. For biodiversity assessment, prioritisation and planning purposes, the ecological definition should be used.</p>	<p>IUCN Red List Categories and Criteria: Version 3.1. (IUCN 2012)</p> <p>Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria (Bland et al. 2017)</p> <p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>Critically Endangered (CR)</i> - <i>Ecosystem Threat Status</i> - <i>Endangered (EN)</i> - <i>Red List of Ecosystems</i> - <i>Red List of Species</i> - <i>spatial biodiversity assessment</i> - <i>Species Threat Status</i> - <i>threatened ecosystem</i> - <i>threatened species</i>
REVISED	182. Well Protected	<p>An ecosystem type or species that has its full biodiversity target included in one or more protected areas.</p>	<p>One of four categories assigned in a protection level assessment, a form of spatial biodiversity assessment.</p>	<p>Use the acronym “WP” only in contexts where the meaning will be completely clear, as it is not well established. Avoid using it in legends for graphs or maps.</p>	<p>National Biodiversity Assessment 2018 (SANBI 2019a)</p>	<ul style="list-style-type: none"> - <i>biodiversity target</i> - <i>Ecosystem Protection Level</i> - <i>Moderately Protected</i> - <i>Not Protected</i> - <i>Poorly Protected</i> - <i>protected area</i> - <i>spatial biodiversity assessment</i> - <i>Species Protection Level</i> - <i>under-protected</i>

	Term	Definition	Additional information	Common points of confusion / what to avoid	Supporting documents	Related terms
UPDATED	183. Wetland Cluster	A group of wetlands embedded in a relatively natural landscape, allowing for important ecological processes such as migration of frogs and other wetland-dependent species between wetlands.	<p>One of several map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.</p> <p>At the time of writing, an update of NFEPA 2011, and thus FEPA Maps, was underway.</p>		<p>Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011)</p> <p>Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)</p>	<ul style="list-style-type: none"> - FEPA Map - Freshwater Ecosystem Priority Area (FEPA) - National Freshwater Ecosystem Priority Areas (NFEPA) - Wetland FEPA
UPDATED	184. Wetland FEPA	A wetland that is required to meet biodiversity targets for freshwater ecosystems.	<p>One of several map categories on a FEPA Map, a spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.</p> <p>At the time of writing, an update of NFEPA 2011, and thus FEPA Maps, was underway.</p>	<p>Avoid "FEPA Wetland".</p> <p>At the time NFEPA 2011 was undertaken, the national map of wetlands had varying degrees of completeness and accuracy in different parts of the country. As a result there is substantial uncertainty associated with Wetland FEPAs, which require ground-truthing. Subsequent refinements and improvements in the National Wetland Map will result in greater certainty in the identification of Wetland FEPAs in NFEPA 2.</p>	<p>Atlas of Freshwater Ecosystem Priority Areas in South Africa (Nel et al. 2011)</p> <p>Implementation Manual for Freshwater Ecosystem Priority Areas (Driver et al. 2011)</p>	<ul style="list-style-type: none"> - Freshwater Ecosystem Priority Area (FEPA) - National Freshwater Ecosystem Priority Areas (NFEPA) - National Wetland Map (NWM) - River FEPA - Wetland Cluster

3 Clusters of related terms

This section summarises groups of related terms that appear in the table above. No new terms have been added to the clusters.

3.1 Spatial biodiversity assessment, prioritisation and planning

Spatial biodiversity assessment, prioritisation and planning are interrelated and complementary, as shown in Figure 1 below. They provide a way of building on foundational biodiversity data with analysis and interpretation to provide useful biodiversity information. In some cases they can be approached sequentially, but this is not always necessary. Spatial biodiversity assessment, prioritisation and planning can be conducted at a range of spatial levels and scales, depending on the purpose.

Terms	Definition
<i>spatial biodiversity assessment</i>	A spatially explicit assessment of the state of biodiversity or of biodiversity importance, at the ecosystem, species and/or genetic level. A spatially explicit assessment of the state of biodiversity or of biodiversity importance, at the ecosystem, species and/or genetic level. Spatial biodiversity assessments can be undertaken at a range of spatial levels and scales, from a wall-to-wall national assessment to assessment of an individual site (for example, as part of an Environmental Impact Assessment).
<i>spatial biodiversity prioritisation</i>	The process of identifying spatial priority areas for protecting, conserving, managing and/or restoring biodiversity. The process of identifying spatial priority areas for protecting, conserving, managing and/or restoring biodiversity. Spatial biodiversity prioritisation can be undertaken at a range of spatial levels and scales, depending on the purpose of the prioritisation.
<i>spatial biodiversity planning</i>	The process of developing a spatial biodiversity plan that identifies one or more categories of biodiversity priority area, using a systematic biodiversity planning approach.
<i>spatial biodiversity plan</i>	A spatial plan that identifies one or more categories of biodiversity priority area, using a systematic biodiversity planning approach. In South Africa, spatial biodiversity plans are typically undertaken at the national, provincial or sometimes municipal level (e.g. for some metropolitan municipalities). The link to administrative boundaries facilitates implementation of the plans.
<i>systematic biodiversity planning</i>	An approach to spatial biodiversity planning, or an approach to identifying biodiversity priority areas.
<i>CBA Map</i>	A spatial plan for conserving biodiversity and maintaining an ecologically well-functioning landscape or seascape.
<i>Key Biodiversity Area (KBA)</i>	Site contributing significantly to the global persistence of biodiversity. KBAs represent the most important sites for biodiversity conservation worldwide, in terrestrial, freshwater and marine ecosystems.
<i>Ecologically or Biologically Significant Marine Area (EBSA)</i>	A marine area of high biodiversity importance, identified based on a global standard.
<i>Essential Life Support Action Area Map (ELSAA Map)</i>	A spatial representation of integrated and optimised nature-based actions required to achieve South Africa's policy commitments at the nexus of biodiversity conservation, climate resilience and human well-being.
<i>FEPA Map</i>	A spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.
<i>focus area for protected area expansion</i>	Large, intact and unfragmented area of high biodiversity importance, suitable for the creation and expansion of large land-based protected areas, identified in the NPAES 2008.
<i>priority area for protected area expansion</i>	An area identified through a target-driven spatial biodiversity prioritisation process as a priority for consolidating or expanding the protected area network.

Red List of Ecosystems	A consistent global standard for ecosystem risk assessment to monitor the status of ecosystems.
Red List of Species	A consistent global standard for classifying species' risk of extinction. Also known as the Red List of Threatened Species.
Ecosystem Protection Level	Indicator of the extent to which ecosystem types are represented in the current protected area network.
Species Protection Level	Indicator of the extent to which species are represented in the current protected area network.

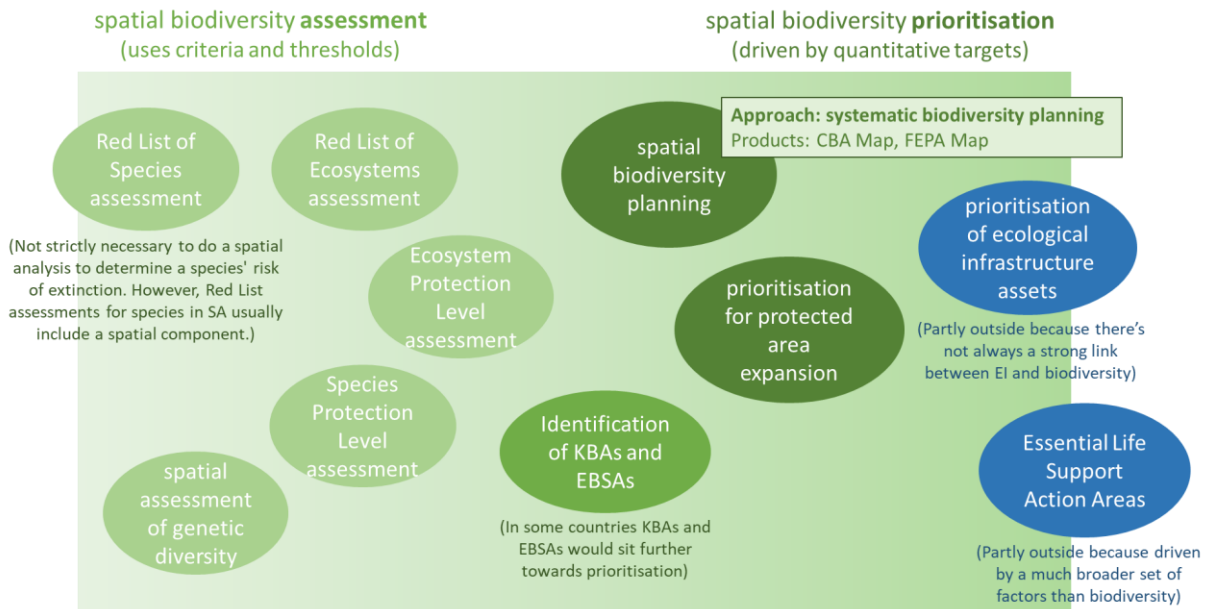


Figure 1. The relationship between spatial biodiversity assessment, prioritisation and planning, showing examples of each.

3.2 Ecosystem classification and mapping

The South African National Ecosystem Classification System (SA-NECS) is a hierarchical system for mapping and classifying ecosystem types in South Africa, integrated across the terrestrial, marine, freshwater and estuarine realms. The SA-NECS is governed by the National Ecosystem Classification Committee, with structures and processes in place to ensure spatial alignment and conceptual alignment of terminology between realms.

Terms	Definition
<i>aquatic ecosystem</i>	Any aquatic ecosystem, including inland aquatic, estuarine and marine ecosystems.
<i>biogeographical region</i>	A broad region subjected to similar ecological processes with similar species assemblages.
<i>biome</i>	A large biogeographical area based on prevailing climatic factors and dominant forms of plant life.
<i>bioregion</i>	A classification level between biome and ecosystem type in the classification hierarchy for the terrestrial realm, defined ecologically based on dominant landscape-scale attributes or biological data.
<i>coast / coastal zone</i>	A cross-realm zone that extends from the land into the sea, the specific boundaries of which depend on the context in which it is being used and typically differ in legal, planning and assessment contexts.
<i>coastline</i>	The land-sea interface. Coastline is a general term and does not refer to a specific line. There is no definitive spatial representation of the coastline that can be used in all contexts.
<i>dune base</i>	The decadal scale high-water mark. The preferred representation of the coastline in spatial biodiversity assessment, prioritisation and planning.
<i>ecologically determined coastal zone</i>	All ecosystem types influenced by both the land and sea, spanning semi-coastal and coastal vegetation, through estuaries and shores, to the seaward edge of the inner shelf, bays and river-influenced marine ecosystem types. An ecological definition of the coast, based on the characteristics of ecosystem types.
<i>ecologically determined seashore</i>	The zone that comprises the backshore (made up of seashore vegetation types) and shores, within which sand is mobile.
<i>ecoregion</i>	A relatively large area of land or water, containing characteristic, geographically distinct assemblages of natural communities and species.
<i>ecosystem</i>	A dynamic complex of animal, plant and micro-organism communities and their non-living environment interacting as a functional unit.
<i>ecosystem type</i>	A complex of organisms and their associated physical environment that are united by similar ecological processes, and that exhibit substantial differences in biotic structure and composition to that of other ecosystem types.
<i>Estuarine Functional Zone (EFZ)</i>	The open water area of an estuary together with the associated floodplain, incorporating estuarine habitat (such as sand and mudflats, salt marshes, rock and plant communities) and key physical and biological processes that are essential for estuarine ecological functioning.
<i>estuarine realm</i>	Includes all permanent coastal water bodies that are partially enclosed by land and that are either continuously or periodically open to the sea on decadal time scales, which extends inland as far as the upper limit of tidal action, salinity penetration or back-flooding under closed mouth conditions.
<i>forest</i>	In the context of spatial biodiversity assessment, prioritisation and planning, forest refers to indigenous forests mapped as the Forest biome in the National Vegetation Map or in more detail by the Department of Forestry, Fisheries and the Environment. The Forest biome makes up less than 1% of South Africa's land area.
<i>freshwater realm</i>	Includes all permanent and temporary waterbodies that are not directly connected to the oceans and are characterised by water regimes defined by frequency, duration, flow velocity, depth and extent of inundation. Also called the inland aquatic realm.

<i>inland aquatic ecosystem</i>	All surface, inland waterbodies whether fresh or saline, including rivers, freshwater lakes and inland wetlands. Inland water ecosystems make up the freshwater realm.
<i>map of ecosystem types</i>	A map of ecosystem types identified in the South African National Ecosystem Classification System (SA-NECS)
<i>marine realm</i>	Includes all connected saline ocean waters characterised by waves, tides and currents.
<i>National Vegetation Map (NVM)</i>	A map and classification system for vegetation types in South Africa, which represent ecosystem types in the terrestrial realm.
<i>National Wetland Map (NWM)</i>	A map and classification system for wetland ecosystem types in South Africa, which form part of the freshwater realm.
<i>realm</i>	One of the main components of the biosphere that differ fundamentally in ecosystem organisation and function.
<i>South African National Ecosystem Classification System (SA-NECS)</i>	A hierarchical system for mapping and classifying ecosystem types in South Africa, in the terrestrial, marine, freshwater and estuarine realms.
<i>South African Inventory of Inland Aquatic Ecosystems (SAIIAE)</i>	A collection of datasets that spatially depict the extent of river and wetland ecosystem types, as well as the representation of additional water features and artificial waterbodies.
<i>terrestrial realm</i>	Includes all dry land, its vegetation cover, proximate atmosphere and substrate (soils, rocks) to the rooting depth of plants, and associated animals and microbes.

3.3 Ecological condition

Ecological condition refers to the degree to which the composition, structure and function of an area or biodiversity feature has been modified from a reference condition of natural. In South Africa, the historical extent is used as the reference condition, but this does not imply that the desired or recommended condition for all ecosystems is natural, nor that the reference condition is a static ideal that is unchanging. It is simply a reference point from which to judge the degree of modification, or conversely, the degree of ecological integrity.

Terms related to ecological condition are currently under discussion within the global community, including in relation to implementing the System for Environmental-Economic Accounting: Ecosystem Accounting (United Nations 2021), the standards for Key Biodiversity Areas (IUCN 2016), the IUCN Red List of Ecosystems (Bland et al. 2017) and in reference to ecosystem restoration. Hence, these definitions are currently fluid and subject to changes. There may also still be differences in how ecological condition is defined both within and between realms.

Broad classes	Detailed classes
<p><i>natural or near-natural</i> A broad ecological condition class in which ecosystem composition, structure and function are still intact or largely intact.</p>	<p><i>natural</i> A detailed ecological condition class in which no significant changes in ecosystem composition, structure or function have taken place. Also used quite often as a shortened form of the broad ecological condition class “natural or near-natural”.</p>
	<p><i>near-natural</i> A detailed ecological condition class in which small changes in ecosystem composition and structure may have taken place, but ecosystem functions are essentially unchanged, relative to a reference condition of natural.</p>
<p><i>semi-natural</i> A broad ecological condition class in which ecosystem function is predominantly unchanged even though composition and structure have been modified relative to a reference condition of natural.</p>	<p><i>moderately modified</i> A broad ecological condition class in which ecosystem function is predominantly unchanged even though composition and structure have been modified relative to a reference condition of natural.</p>
<p><i>intensively modified</i> A broad ecological condition class in which ecosystem composition, structure and function have been substantially modified relative to a reference condition of natural.</p>	<p><i>heavily modified</i> A detailed ecological condition class in which substantial loss of ecosystem composition and structure has occurred and ecosystem functions have been substantially disrupted relative to a reference condition of natural.</p>
	<p><i>severely modified</i> A detailed ecological condition class in which loss of ecosystem composition, structure and ecological function is extensive.</p>
	<p><i>critically modified</i> A detailed ecological condition class in which the ecosystem has been modified completely, with an almost complete loss of composition and structure relative to a reference condition of natural. All or most ecosystem function has been destroyed and the changes are irreversible.</p>

As part of the National Biodiversity Assessment, work has been ongoing to better understand how different ecological condition classes are used in different realms (Skowno et al. 2019, Harris et al. 2022). Although they do not always correspond directly, there is an emerging consensus on how the terms might align. Table 1 summarises alignment and differences between ecological condition terms and classes used in different contexts – adapted from the NBA 2018 (Skowno et al. 2019). The detailed classes “heavily modified” and “severely modified” have proved especially challenging in terms of alignment across realms and nesting within the broad classes.

Table 1. Ecological condition classes used in spatial biodiversity assessment, prioritisation and planning, showing alignment and differences in different contexts

Broad ecological condition classes	Natural or near-natural		Semi-natural		Intensively modified		
	Lexicon	Natural	Near-natural	Moderately modified		Heavily modified	Severely modified
NBA 2018	Natural	Near-natural	Moderately modified	Heavily modified	Severely modified		Critically modified
Freshwater & estuarine realms (DWS)	A Unmodified	B Largely natural	C Moderately modified		D Largely modified	E Seriously modified	F Critically modified
Marine realm	Natural or near-natural		Moderately modified	Severely modified		Very severely modified	
Red List of Ecosystems (Criterion C)	Natural or near-natural (<50% degraded)		Moderately degraded (50-70% degraded)		Severely degraded (70-90% degraded)		Very severely degraded (>90% degraded)



3.4 Targets and thresholds

Quantitative targets and thresholds play an important role in spatial biodiversity assessment, prioritisation and planning.

Term	Definition
<i>biodiversity target</i>	<p>A quantitative target for an ecosystem type, species or ecological process that sets the minimum amount needed to ensure the representation and persistence of biodiversity, used in spatial biodiversity planning.</p> <p><i>For ecosystems:</i> The minimum proportion of each ecosystem type that needs to be kept in natural or near-natural ecological condition in the long term to maintain viable representative samples of all ecosystem types and the majority of species associated with them. Expressed as a percentage of the historical extent of an ecosystem type (measured as area, length or volume).</p> <p><i>For species:</i> The minimum number of individuals in a population required to ensure the viability and persistence of that population, or the minimum number of populations of a species required to ensure the viability and persistence of that species, within a particular landscape. context or defined in a provincial, national, continental or global conservation programme or strategy.</p>
<i>biodiversity threshold</i>	<p>A quantitative threshold used in spatial biodiversity assessment, such as the assessment of threat status of ecosystem types and species based on the IUCN Red List of Ecosystems or Red List of Species. Each Criterion has a series of thresholds linked to the different threat categories.</p>
<i>protected area target</i>	<p>A quantitative target for expanding the coverage of the protected area network by a certain date.</p>

3.5 Threat status of ecosystems and species

Red List of Ecosystems and Red List of Species assessments are undertaken periodically and consolidated in the National Biodiversity Assessment to provide two national headline biodiversity indicators: Ecosystem Threat Status and Species Threat Status. The assessments are undertaken according to the international system of categories and criteria set out by the IUCN Red List of Ecosystems (Bland et al. 2017) or IUCN Red List of Species (IUCN 2012).

Threat status terms	Definition
Red List of Ecosystems	A consistent global standard for ecosystem risk assessment to monitor the status of ecosystems.
Red List of Species	A consistent global standard for classifying species' risk of extinction. Formally called the IUCN Red List of Threatened Species.
biodiversity threshold	A quantitative threshold used in spatial biodiversity assessment, such as the assessment of threat status of ecosystem types and species based on the IUCN Red List of Ecosystems or Red List of Species. Each Criterion has a series of thresholds linked to the different threat categories.
Collapsed (CO)	An IUCN Red List category applied to ecosystems. An ecosystem type is Collapsed when it is virtually certain that its defining biotic or abiotic features are lost, and the characteristic native biota are no longer sustained.
Extinct (EX)	An IUCN Red List category applied to species. A species is Extinct when there is no reasonable doubt that the last individual has died.
Extinct in the Wild (EW)	An IUCN Red List category applied to species. A species is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range.
Critically Endangered (CR)	An IUCN Red List category applied to both ecosystems and species. An ecosystem type is Critically Endangered when it is considered to be at an extremely high risk of collapse. A species is Critically Endangered when it is considered to be at extremely high risk of extinction.
Endangered (EN)	An IUCN Red List category applied to both ecosystems and species. An ecosystem type is Endangered when it is considered to be at a very high risk of collapse. A species is Endangered when it is considered to be at very high risk of extinction.
Vulnerable (VU)	An IUCN Red List category applied to both ecosystems and species. An ecosystem type is Vulnerable when it is considered to be at a high risk of collapse. A species is Vulnerable when it is facing a high risk of extinction.
Least Concern (LC)	An IUCN Red List category applied to both ecosystems and species. An ecosystem type is Least Concern when it has experienced little or no loss of natural habitat or deterioration in condition. A species is Least Concern when it is considered to be at low risk of extinction. Widespread and abundant species are typically classified in this category.
Near Threatened (NT)	An IUCN Red List category applied to both ecosystems and species. A species or ecosystem type is Near Threatened when it has been evaluated against the IUCN criteria and does not qualify for Critically Endangered, Endangered or Vulnerable, but is close to qualifying for or is likely to qualify for a threatened category in the near future.
Data Deficient (DD)	An IUCN Red List category applied to both ecosystems and species. An ecosystem type or species is Data Deficient when there is inadequate information to make a direct or indirect assessment of its risk of extinction (species) or collapse (ecosystems).
Not Evaluated (NE)	An IUCN Red List category applied to both ecosystems and species. An ecosystem type or species is Not Evaluated when it has not been assessed against any of the IUCN criteria.
threatened ecosystem	An ecosystem type that faces a risk of collapse in the near future. It has lost or is losing vital aspects of its structure, function or composition. Threatened ecosystems include those assessed as Critically Endangered, Endangered or Vulnerable.

threatened species

A species that faces a risk of extinction in the near future. Threatened species include those assessed as Critically Endangered, Endangered or Vulnerable.

3.6 Protection level of ecosystems and species

Protection level is assessed for ecosystem types and species as part of the National Biodiversity Assessment to provide two national headline biodiversity indicators: Ecosystem Protection Level and Species Protection Level. These indicators provide information about how well represented different ecosystem types or species are in the protected area network. The categories are: Well Protected, Moderately Protected, Poorly Protected or Not Protected, based on how much of the biodiversity target for each ecosystem type or species is included in one or more protected areas. Not Protected, Poorly Protected and Moderately Protected ecosystem types are collectively referred to as under-protected ecosystems.

Protection level terms	Definition
<i>Ecosystem Protection Level</i>	Indicator of the extent to which ecosystem types are represented in the current protected area network.
<i>Species Protection Level</i>	Indicator of the extent to which species are represented in the current protected area network.
<i>Well Protected</i>	An ecosystem type or species that has its full biodiversity target included in one or more protected areas.
<i>Moderately Protected</i>	An ecosystem type or species that has between 50% and 100% of its biodiversity target included in one or more protected areas.
<i>Poorly Protected</i>	An ecosystem type or species which has between 5% and 50% of its biodiversity target included in one or more protected areas.
<i>Not Protected</i>	An ecosystem type or species that has less than 5% of its biodiversity target included in one or more protected areas.
<i>under-protected</i>	An ecosystem type or species that has been classified as Moderately Protected, Poorly Protected or Not Protected.

3.7 Biodiversity priority areas

Biodiversity priority areas are areas or sites in the landscape or seascape that are important for conserving a viable representative sample of ecosystem types and species or for maintaining ecological processes and functioning or both. Biodiversity priority areas are identified through spatial biodiversity planning, which uses a systematic biodiversity planning approach and should be based on the best available data and science. They are represented in a spatial biodiversity plan. There are several different types of biodiversity priority areas, which are not mutually exclusive and, in some cases, overlap, often because a particular area or site is important for more than one reason. They should be seen as complementary, with overlaps reinforcing the importance of an area.

Biodiversity priority area	Definition
Critical Biodiversity Area (CBA)	An area that must be maintained in, or restored to, natural or near-natural ecological condition in order to conserve a viable representative sample of all ecosystem types and species and maintain ecologically functional landscapes or seascapes.
Ecological Support Area (ESA)	An area that must be maintained in at least semi-natural ecological condition, or where further deterioration in ecological condition must be avoided, to support the conservation of ecosystems and species and maintain ecologically functional landscapes or seascapes.
Freshwater Ecosystem Priority Area (FEPA)	A river reach or wetland that is required to meet biodiversity targets for freshwater ecosystem types. A Freshwater Ecosystem Priority Area can be either a River FEPA or a Wetland FEPA.
free-flowing river and flagship free-flowing river	A long stretch of river that has not been dammed, flowing undisturbed from its source to the confluence with another large river or to the sea. There are 63 remaining free-flowing rivers in South Africa. Of these, 19 have been identified as flagship free-flowing rivers , representing the different freshwater ecoregions of the country.
priority estuary	An estuary that is required to meet biodiversity targets for estuarine ecosystem types, estuarine habitats and estuarine-dependent species
protected area	An area of land or sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation.

3.8 CBA Maps

The term CBA Map is shorthand for a map of Critical Biodiversity Areas and Ecological Support Areas, based on a systematic biodiversity plan. CBA Maps form the basis for biodiversity sector plans or bioregional plans. CBA Maps have been developed for all provinces in South Africa as well as South Africa's mainland maritime domain. There are five broad categories on a CBA Map, summarised in the table below. Spatial data for most CBA Maps is available on BGIS.

CBA Map category	Definition
protected area	An area of land or sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation.
Critical Biodiversity Area (CBA)	An area that must be maintained in, or restored to, natural or near-natural ecological condition in order to conserve a viable representative sample of all ecosystem types and species and maintain ecologically functional landscapes or seascapes.
<i>CBA Irreplaceable or CBA 1</i>	A CBA that is irreplaceable or near-irreplaceable for meeting biodiversity targets.
<i>CBA Optimal or CBA 2</i>	A CBA that has been selected as the best option for meeting biodiversity targets based on complementarity, spatial efficiency, connectivity and/or avoidance of conflict with other uses.
<i>CBA Natural</i>	A CBA that is in good ecological condition (natural or near-natural).
<i>CBA Restore</i>	A CBA that is no longer in good ecological condition and should preferably be restored to a condition consistent with retaining its associated biodiversity features.
Ecological Support Area (ESA)	An area that must be maintained in at least semi-natural ecological condition, or where further deterioration in ecological condition must be avoided, to support the conservation of ecosystems and species and maintain ecologically functional landscapes or seascapes.
<i>ESA 1</i>	An ESA that is in natural or semi-natural ecological condition.
<i>ESA 2</i>	An ESA that is in an intensively modified ecological condition.
Other Natural Area (ONA)	An area in natural, near-natural or semi-natural ecological condition that is not required to meet biodiversity targets for ecosystem types, species or ecological processes.
No Natural Remaining (NNR)	An area in severely modified or critically modified ecological condition that is not required to meet biodiversity targets for ecosystem types, species or ecological processes.
amalgamated national CBA and ESA layer	A spatial layer of CBAs and ESAs compiled from the most up-to-date publicly available CBA Maps across the country.

3.9 FEPA Maps

The term FEPA Map is shorthand for a map of Freshwater Ecosystem Priority Areas, Fish Support Areas and Upstream Management Areas, based on a systematic biodiversity plan for freshwater ecosystems. FEPA Maps were published in the Atlas of FEPAs (Nel et al. 2011) accompanied by an Implementation Manual for FEPAs (Driver et al. 2011). Spatial data for FEPAs Maps is available on BGIS.

FEPA terms	Definition
<i>catchment</i>	The land area from which water runs off into a specified wetland or aquatic ecosystem; a drainage basin.
<i>FEPA Map</i>	A spatial biodiversity plan for freshwater ecosystems and fish species of conservation concern.
<i>Important Fish Area</i>	A river reach that is essential for protecting threatened or near-threatened freshwater fish that are indigenous to South Africa. Previously called Fish Sanctuaries.
<i>Fish Support Area*</i>	A river reach that is essential for protecting threatened or near-threatened freshwater fish that are indigenous to South Africa, but that is not in good ecological condition (i.e. an Important Fish Area that is not in good ecological condition) OR a river reach that is important for migration of threatened or near-threatened fish species.
<i>free-flowing river and flagship free-flowing river</i>	A long stretch of river that has not been dammed, flowing undisturbed from its source to the confluence with another large river or to the sea. There are 63 remaining free-flowing rivers in South Africa. Of these, 19 have been identified as flagship free-flowing rivers, representing the different freshwater ecoregions of the country.
<i>Freshwater Ecosystem Priority Area (FEPA)*</i>	A river reach or wetland that is required to meet biodiversity targets for freshwater ecosystem types. A Freshwater Ecosystem Priority Area can be either a River FEPA or a Wetland FEPA.
<i>National Freshwater Ecosystem Priority Areas (NFEPA)</i>	A spatial biodiversity planning process to identify a set of freshwater ecosystem priorities for meeting biodiversity targets for rivers, wetlands and freshwater fish species of special concern.
<i>River FEPA</i>	A river reach that is required to meet biodiversity targets for freshwater ecosystems. River FEPAs should remain in natural or near-natural ecological condition.
<i>Upstream Management Area</i>	A sub-quaternary catchment in which human activities need to be managed to prevent degradation of downstream River FEPAs and Fish Support Areas.
<i>Wetland FEPA</i>	A wetland that is required to meet biodiversity targets for freshwater ecosystems.

* Some FEPAs and some Fish Support Areas are also Important Fish Areas – they are marked with a fish symbol on the FEPA maps in the Atlas of FEPAs. A separate map of Important Fish Areas is available.

3.10 Protected areas and conservation areas

Protected areas and conservation areas play an important role in the management and conservation of biodiversity. Several related terms are important to distinguish, summarised in the table below. Also see *Biodiversity stewardship* cluster.

Term	Definition
conservation	Protection, management and/or restoration for explicit biodiversity conservation objectives.
conservation area	An area of land or sea not formally protected in terms of the Protected Areas Act but managed for biodiversity conservation.
conservation estate	An inclusive term referring to all protected areas and all conservation areas.
protection	Refers to formal protection in terms of the Protected Areas Act, and involves the establishment of statutory protected areas that are managed primarily for biodiversity conservation purposes, with sustainable use options where appropriate. Implies long-term security.
protected area	An area of land or sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation.
protected area estate	All protected areas.
protected area network	All protected areas.
protected area system	The system of protected area legislation, categories and governance.
land-based protected area	A collective term for all types of protected areas other than Marine Protected Areas.
contract protected area	A protected area declared through a contractual arrangement between a conservation authority and private or communal landowner(s), who retain ownership of the land. Contract protected areas may form part of biodiversity stewardship programmes, but need not necessarily.
state-owned protected area	A protected area owned and managed by an organ of state (national, provincial or local).
protected area target	A quantitative target for expanding the coverage of the protected area network by a certain date.
National Protected Area Expansion Strategy (NPAES)	A strategy for expanding South Africa's network of protected areas. Sets ecosystem-specific protected area targets and identifies important geographic areas for protected area expansion.
focus area for protected area expansion	Large, intact and unfragmented area of high biodiversity importance, suitable for the creation and expansion of large land-based protected areas, identified in the NPAES 2008.
priority area for protected area expansion	An area identified through a target-driven spatial biodiversity prioritisation process as a priority for consolidating or expanding the protected area network.
Protected Areas Act	The National Environmental Management: Protected Areas Act (Act 57 of 2003), as amended.
Marine Protected Area (MPA)	An area of the sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation.
National Park	An area declared in terms of Section 20 of the Protected Areas Act, or equivalent designation under previous legislation.
Nature Reserve	An area declared in terms of Section 23 of the Protected Areas Act, or equivalent designation under previous or provincial legislation.
Protected Environment	An area declared in terms of Section 28 of the Protected Areas Act, or equivalent designation under previous or provincial legislation.
Special Nature Reserve	An area declared in terms of Section 18 of the Protected Areas Act or equivalent designation under previous legislation.

<p><i>Other Effective area-based Conservation Measure (OECM)</i></p>	<p>A geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.</p> <p>There is a link, but currently not a one-to-one relationship, between conservation areas and OECMs. Some conservation areas may qualify as OECMs, and there may be sites that qualify as OECMs that are not conservation areas. As further work on OECMs is undertaken in South Africa, the definitions of conservation areas and OECMs may become more closely aligned.</p>
<p><i>South African Protected Area Database (SAPAD)</i></p>	<p>A spatial data inventory of protected areas in South Africa that is developed and maintained by the Department of Forestry, Fisheries and the Environment (DFFE) and updated quarterly.</p>

3.11 Biodiversity stewardship

Biodiversity stewardship is an approach to securing land in biodiversity priority areas through entering into agreements with private or communal landowners, led by conservation authorities. There are various options for the agreements entered into between a landowner (or landowners) and a conservation authority as part of a biodiversity stewardship programme. The different biodiversity stewardship options confer different benefits on landowners and require different levels of restriction on land use. They fall into three broad categories:

- Category 1: Protected areas
- Category 2: Conservation areas
- Category 3: Biodiversity partnership areas

The legal mechanism for category 1 is the Protected Areas Act and for category 2 is the Biodiversity Act, contract law or property law. Category 3 is not legally binding.

Category	Term	Definition
	<i>biodiversity stewardship category</i>	One of three categories of agreements entered into between a landowner (or landowners) and a conservation authority (or in some cases an NGO) as part of a biodiversity stewardship programme.
	<i>biodiversity stewardship agreement</i>	An agreement entered into between a landowner (or landowners) and a conservation authority (or in some cases an NGO) as part of a biodiversity stewardship programme.
Category 1: protected area	<i>National Park</i>	An area declared in terms of Section 20 of the Protected Areas Act, or equivalent designation under previous legislation.
	<i>Nature Reserve</i>	An area declared in terms of Section 23 of the Protected Areas Act, or equivalent designation under previous or provincial legislation.
	<i>Protected Environment</i>	An area declared in terms of Section 28 of the Protected Areas Act, or equivalent designation under previous or provincial legislation.
Category 2: conservation area	<i>Biodiversity Management Agreement (BMA)</i>	An agreement entered into in terms of the Biodiversity Act between the Minister or MEC and the implementer of a Biodiversity Management Plan or an aspect thereof.
	<i>Biodiversity Agreement</i>	An agreement concluded as part of a biodiversity stewardship programme, based on contract law and not recognised in terms of either the Protected Areas Act or the Biodiversity Act.
Category 3: biodiversity partnership area	A non-contractual agreement entered into as part of a biodiversity stewardship programme. The third of three categories of biodiversity stewardship agreements. Includes all area-based conservation mechanisms that are not recognised in terms of contract law, property law, the Biodiversity Act or the Protected Areas Act and that do not require an agreement.	

Nature Reserves and Protected Environments declared through biodiversity stewardship are considered part of the protected area estate. Biodiversity Management Agreements, Biodiversity Agreements and Biodiversity Partnership Areas are conservation areas, and are considered part of the conservation estate but not the protected area estate. Also see *Protected areas and conservation areas* cluster.

3.12 Ecological infrastructure

Ecological infrastructure refers to naturally functioning ecosystems that provide valuable services to people and the economy. Ecological infrastructure is the nature-based equivalent of built infrastructure, and is just as important for providing services and underpinning economic development. The benefits of ecological infrastructure fall into broad categories (not mutually exclusive) such as water security, food security, disaster risk reduction, and the biodiversity economy. In most cases these benefits also contribute to climate change adaptation.

Dedicated maps of ecological infrastructure assets are relatively new compared with CBA Maps. At the time of writing, work was underway on approaches to delineating ecological infrastructure assets and compiling them into a map product. Additional terms may be added to this cluster as progress on mapping ecological infrastructure continues.

Ecosystem classification terms	Definition
<i>ecological infrastructure asset</i>	A feature in the landscape or seascape that directly supplies one or more services or benefits to people and the economy.
<i>Ecological Infrastructure Map (EI Map)</i>	A map of ecological infrastructure assets.
<i>investment in ecological infrastructure</i>	Devoting time, effort, finances or making decisions that support protecting, maintaining or restoring ecological infrastructure.
<i>Strategic Water Source Area (SWSA)</i>	SWSAs are the 10% of the land area of South Africa, Lesotho and Eswatini that supply 50% of water to these countries.

3.13 Benefits of biodiversity

There are a range of terms relating to various aspects of how biodiversity and ecological infrastructure are of benefit to people.

Benefits of biodiversity terms	Definition
<i>benefits of biodiversity and ecological infrastructure</i>	All the benefits that humanity obtains from biodiversity and natural or semi-natural ecosystems.
<i>biodiversity asset</i>	Species, ecosystem or other biodiversity-related resource that directly contributes to socio-economic development.
<i>ecological infrastructure</i>	Naturally functioning ecosystems that provide valuable services to people and the economy.
<i>ecosystem services</i>	The contributions of ecosystems to human well-being.

4 Terms to avoid

The following terms should always be avoided:

Best-design site, when referring to CBA Optimal (although the term “best design” can be used in an explanatory description of the CBA Optimal category).

Biodiversity conservation target, when referring to biodiversity targets or protected area targets.

Biodiversity value, when referring to the importance of biodiversity in general or of a particular site or area (such as a CBA or KBA). Rather use “importance” or refer to the multiple values (plural) of biodiversity. “Value” (singular) can be taken to mean monetary value.

BPAs as an acronym for biodiversity priority areas – biodiversity priority areas should be written in full every time, with small letters.

C-Plan, unless referring specifically to the C-Plan software or to the Gauteng C-Plan. If referring to Gauteng C-Plan do not shorten to “C-Plan” – C-Plan is a software program.

Conservation planning, when referring to biodiversity planning, EXCEPT in the academic literature.

Conservation status, when referring to Ecosystem Threat Status, Ecosystem Protection Level, Species Threat Status, Species Protection Level, or the legal status of a protected area.

Conservation target, when referring to either biodiversity targets or protected area targets.

Degraded, when referring to ecological condition from a biodiversity perspective. Rather talk about degrees of modification relative to a reference condition of natural. Can use the term ‘degraded’ if in context of ecological function.

Ecosystem map, when referring to a map of ecosystem types. An ecosystem map could be a map of one specific ecosystem.

Ecosystem status, when referring to Ecosystem Threat Status.

Ecosystem target, when referring to biodiversity targets for ecosystem types.

Ecosystem threat class or classification, when referring to Ecosystem Threat Status.

Ecosystem threshold, when referring to a biodiversity threshold.

Formal protected area, when referring to a protected area. Protected areas are by definition formal.

Habitat loss, when referring to loss of natural area in a generic sense, not in relation to the habitat of a particular species or group of species.

Health, when referring to ecological condition from a biodiversity perspective. A dam, for example, could be perfectly healthy from a water provision perspective but critically modified from a biodiversity perspective. Rather talk about degrees of modification from a reference condition of natural.

High biodiversity areas, when referring to biodiversity priority areas.

High condition, when referring to good ecological condition.

Least Threatened, when referring to the threat status category Least Concern (Least Threatened was used in the NSBA 2004 and NBA 2011 but is no longer used).

Low condition, when referring to poor ecological condition.

Medium condition, when referring to fair ecological condition.

Natural habitat, when referring to natural vegetation.

NEMBA, when referring to the Biodiversity Act for an audience outside the biodiversity sector.

NEMPAA, when referring to the Protected Areas Act for an audience outside the biodiversity sector.

Parks, when referring to protected areas.

Pattern and process, when referring to biodiversity pattern and ecological processes.

Plantations, when referring to timber plantations (or other specific types of plantations). Rather specify “timber plantations”. Especially for international audiences “plantations” is a vague term – could be, for example, coffee plantations, sugar plantations, palm oil plantations.

Priority biodiversity areas, when referring to biodiversity priority areas.

Process, when referring to ecological processes.

Red Data or Red Data Book or Red Data List, when referring to the Red List of Species.

Reserves, when referring to protected areas.

Sensitive or sensitivity, when referring to biodiversity importance. Sensitivity is a measure of vulnerability to impact, and sensitivity and importance are not necessarily correlated. An area or site can be of high biodiversity importance and at the same time robust or resilient to impacts, or conversely an area or site can be highly sensitive to impacts but of low biodiversity importance.

Statutory conservation area, when referring to a protected area (protected areas are by definition statutory).

Stewardship, stewardship agreements or stewardship categories, when referring to biodiversity stewardship, biodiversity stewardship agreements or biodiversity stewardship categories.

Study, when referring to a spatial biodiversity assessment, prioritisation or planning process, unless it was done simply as an academic exercise.

Target (as a noun), when referring to biodiversity targets or protected area targets. Because the word target can be used in different senses, it is almost always important to specify which type of target one is referring to, unless the context is completely unambiguous.

Target (as a verb), when it could create confusion with setting biodiversity targets or protected area targets, e.g. avoid “areas that should be targeted for conservation action” – rather use e.g. “prioritised for protected area expansion” or “maintained in good ecological condition” or other more specific terms.

Terrestrial protected area, when referring to a land-based protected area that may protect terrestrial, estuarine and freshwater ecosystems and species.

Threats, when referring to legitimate socio-economic activities such as urban development, mining or agriculture. Rather refer to pressures. Climate change or biological invasions can be termed threats, as can illegal activities such as poaching.

Transformation/transformed, when referring to loss of natural vegetation or decline in ecological condition. Transformation is a widely held positive socio-economic goal in South Africa, so it creates confusion if the biodiversity sector uses it to describe something negative or undesirable.

Unprotected, when referring to the protection level category Not Protected.

Urbanisation, when referring to urban areas or urban development. Urbanisation a demographic process in which the proportion of people living in towns and cities increases relative to the proportion living in rural areas. It is not a land use or land cover class.

5 Other naming conventions

Biome names: written with capital letters e.g. Fynbos biome, Grassland biome, Albany Thicket biome.

Common names for species: written with small letters except where a proper noun is used e.g. hippopotamus, rose, cycad, African elephant, Denham's bustard.

Bioregional plans: preceded with the name of the relevant municipality e.g. Waterberg District Bioregional Plan, West Rand District Bioregional Plan, Nelson Mandela Bay Bioregional Plan, Ekurhuleni Bioregional Plan.

A general convention for **capitalisation:**

- When referring to bioregional plans in general – small letter. When referring to a particular bioregional plan – capitals (e.g. West Rand District Bioregional Plan)
- When referring to biodiversity priority areas in general – small letters. When referring to a particular type of biodiversity priority area – capitals (e.g. Critical Biodiversity Area, Freshwater Ecosystem Priority Area)
- When referring to protected areas in general – small letters. When referring to a particular type of protected area – capitals (e.g. National Park, Marine Protected Area)

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