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DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 2747

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**NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004
(ACT NO. 10 OF 2004)****THE REVISED NATIONAL LIST OF ECOSYSTEMS THAT ARE THREATENED AND IN NEED OF
PROTECTION**

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby publish, under section 52(1)(a) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), the Revised National list of Ecosystems that are Threatened or in need of Protection, as set out in the Schedule, for implementation.

The primary implication of the Revised National list of Ecosystems that are Threatened or in need of Protection is that it is linked to Listing Notice 3 published under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). Some of the activities listed in Listing Notice 3 require environmental authorisation when they are carried out in a threatened ecosystem as identified in the list. The List of Ecosystems has also been used throughout South Africa as a decision-making support tool, especially in environmental authorisation application processes and to inform bioregional planning.

The Revised National list of Ecosystems that are Threatened or in need of Protection was developed between 2016 and 2020 incorporating the best available information on terrestrial ecosystem extent and condition, pressures and drivers of change. The Revised aNational list of Ecosystems that are Threatened or in need of Protection is based on assessments that followed the International Union for Conservation of Nature (IUCN) Red List of Ecosystems Framework (version 1.1) and covers all 458 terrestrial ecosystem types described in South Africa (Mucina and Rutherford 2006; with updates described in Dayaram et al., 2019). The revised list identifies 120 threatened terrestrial ecosystem types (55 Critically Endangered, 51 Endangered and 14 Vulnerable types).

Details on the assessment methodology, input data used, and full results can be viewed at the following web portals <http://ecosystemstatus.sanbi.org.za>



BARBARA DALLAS CREECY
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

SCHEDULE**The Revised National List of Threatened Terrestrial Ecosystems – 2022**

ECOSYSTEM NAME		BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
Buffels Thicket	Valley	Albany Thicket	Critically Endangered	B1(i)	Buffels Valley Thicket is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Gouritz Thicket	Valley	Albany Thicket	Critically Endangered	B1(i)	Gouritz Valley Thicket is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Motherwell Karroid Thicket		Albany Thicket	Critically Endangered	B1(i)	Motherwell Karroid Thicket is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Umtiza Thicket	Forest	Albany Thicket	Critically Endangered	B1(i)	Umtiza Forest Thicket is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Namaqualand Seashore Vegetation		Azonal Vegetation	Critically Endangered	B2(i)	Namaqualand Seashore Vegetation is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Namib Seashore Vegetation		Azonal Vegetation	Critically Endangered	A3, B1(i), B2(i)	National land cover data show that Namib Seashore Vegetation has experienced extensive spatial declines of approximately 95% since 1750. Namib Seashore Vegetation is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Alexander Bay Coastal Duneveld		Desert	Critically Endangered	A3, B1(i), B2(i)	National land cover data show that Alexander Bay Coastal Duneveld has experienced extensive spatial

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				declines of approximately 92% since 1750. Alexander Bay Coastal Duneveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Namib Lichen Fields	Desert	Critically Endangered	B1(i), B2(i)	Namib Lichen Fields is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Agulhas Limestone Fynbos	Fynbos	Critically Endangered	B1(iii)	Agulhas Limestone Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species
Agulhas Sand Fynbos	Fynbos	Critically Endangered	B1(iii)	Agulhas Sand Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
Algoa Sandstone Fynbos	Fynbos	Critically Endangered	B1(i)	Algoa Sandstone Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Breede Sand Fynbos	Fynbos	Critically Endangered	B1(iii)	Breede Sand Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species and overgrazing.
Cape Flats Sand Fynbos	Fynbos	Critically Endangered	B1(i), B1(iii)	Cape Flats Sand Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species.
Cape Winelands Shale Fynbos	Fynbos	Critically Endangered	B1(i), B1(iii)	Cape Winelands Shale Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				invasive species and altered fire regimes.
Central Rûens Shale Renosterveld	Fynbos	Critically Endangered	A3, A3alt	National land cover and supplementary provincial and metropolitan land cover data show that Central Rûens Shale Renosterveld has experienced extensive spatial declines of approximately 90% since 1750.
Ceres Shale Renosterveld	Fynbos	Critically Endangered	B1(i)	Ceres Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Citrusdal Shale Renosterveld	Fynbos	Critically Endangered	B1(i)	Citrusdal Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Elgin Shale Fynbos	Fynbos	Critically Endangered	B1(i), B1(iii)	Elgin Shale Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species
Garden Route Granite Fynbos	Fynbos	Critically Endangered	B1(i)	Garden Route Granite Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Greyton Shale Fynbos	Fynbos	Critically Endangered	B1(iii)	Greyton Shale Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species and overgrazing
Groot Brak Dune Strandveld	Fynbos	Critically Endangered	B1(i)	Groot Brak Dune Strandveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
Hangklip Sand Fynbos	Fynbos	Critically Endangered	B1(i), B1(iii)	Hangklip Sand Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species.
Knysna Sand Fynbos	Fynbos	Critically Endangered	B1(i)	Knysna Sand Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Kogelberg Sandstone Fynbos	Fynbos	Critically Endangered	B1(iii)	Kogelberg Sandstone Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species
Kouebokkeveld Alluvium Fynbos	Fynbos	Critically Endangered	B1(i)	Kouebokkeveld Alluvium Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Kouebokkeveld Shale Fynbos	Fynbos	Critically Endangered	B1(i)	Kouebokkeveld Shale Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Lambert's Bay Strandveld	Fynbos	Critically Endangered	B1(i)	Lambert's Bay Strandveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Lourensford Alluvium Fynbos	Fynbos	Critically Endangered	A2b, A3alt, B1(i), B1(iii)	Observed rates of habitat loss between 1990 and 2018 indicate that by 2040 the geographic distribution of Lourensford Alluvium Fynbos will have declined by approximately 99%. Supplementary land cover data from provincial and metropolitan authorities show that Lourensford Alluvium Fynbos has experienced extensive spatial declines of approximately 94% since 1750. In addition, this ecosystem is narrowly

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				distributed with high rates of habitat loss in the past 28 years (1990-2018) and evidence of ongoing biotic disruption from invasive species, overgrazing and altered fire regimes.
Mossel Bay Shale Renosterveld	Fynbos	Critically Endangered	B1(i)	Mossel Bay Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Nardouw Sandstone Fynbos	Fynbos	Critically Endangered	B1(i)	Nardouw Sandstone Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Nieuwoudtville Shale Renosterveld	Fynbos	Critically Endangered	B1(i)	Nieuwoudtville Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Peninsula Granite Fynbos	Fynbos	Critically Endangered	B1(i), B1(iii)	Peninsula Granite Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species
Peninsula Sandstone Fynbos	Fynbos	Critically Endangered	B1(iii)	Peninsula Sandstone Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
Peninsula Shale Renosterveld	Fynbos	Critically Endangered	B1(i), B2(i), B1(iii), B2(iii)	Peninsula Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species, overgrazing and altered fire regimes.
Potberg Ferricrete Fynbos	Fynbos	Critically Endangered	B1(iii)	Potberg Ferricrete Fynbos is narrowly distributed with evidence of

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				ongoing biotic disruption from invasive species and overgrazing.
Saldanha Granite Strandveld	Fynbos	Critically Endangered	B1(i), B1(iii)	Saldanha Granite Strandveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species and overgrazing.
Saldanha Limestone Strandveld	Fynbos	Critically Endangered	B1(iii)	Saldanha Limestone Strandveld is narrowly distributed with evidence of ongoing biotic disruption from overgrazing.
South Sonderend Sandstone Fynbos	Fynbos	Critically Endangered	B1(iii)	South Sonderend Sandstone Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
Swartland Shale Renosterveld	Fynbos	Critically Endangered	A3, A3alt	National land cover and supplementary provincial and metropolitan land cover data show that Swartland Shale Renosterveld has experienced extensive spatial declines of approximately 90% since 1750.
Swartland Silcrete Renosterveld	Fynbos	Critically Endangered	A3alt, B2(i), B2(iii)	Supplementary land cover data from provincial and metropolitan authorities show that Swartland Silcrete Renosterveld has experienced extensive spatial declines of approximately 93% since 1750. Swartland Silcrete Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018) and evidence of ongoing biotic disruption from invasive species, overgrazing and altered fire regimes
Western Rûens Shale Renosterveld	Fynbos	Critically Endangered	B1(i), B1(iii)	Western Rûens Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				ongoing biotic disruption from invasive species and overgrazing.
Egoli Granite Grassland	Grassland	Critically Endangered	B1(i)	Egoli Granite Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Mabela Sandy Grassland	Grassland	Critically Endangered	B1(i)	Mabela Sandy Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Vredefort Dome Granite Grassland	Grassland	Critically Endangered	B1(i)	Vredefort Dome Granite Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Woodbush Granite Grassland	Grassland	Critically Endangered	B1(i)	Woodbush Granite Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Muzi Palm Veld and Wooded Grassland	Savanna	Critically Endangered	B1(i)	Muzi Palm Veld and Wooded Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Western Maputaland Sandy Bushveld	Savanna	Critically Endangered	B1(i)	Western Maputaland Sandy Bushveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Zululand Coastal Thornveld	Savanna	Critically Endangered	B1(i)	Zululand Coastal Thornveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Klawer Sandy Shrubland	Succulent Karoo	Critically Endangered	B1(i)	Klawer Sandy Shrubland is narrowly distributed with high rates of habitat

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Piketberg Quartz Succulent Shrubland	Succulent Karoo	Critically Endangered	B1(i), B2(i)	Piketberg Quartz Succulent Shrubland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Richtersveld Coastal Duneveld	Succulent Karoo	Critically Endangered	B1(i)	Richtersveld Coastal Duneveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Hartenbos Dune Thicket	Albany Thicket	Endangered	B1(iii)	Hartenbos Dune Thicket is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
Albany Alluvial Vegetation	Azonal Vegetation	Endangered	B1(i)	Albany Alluvial Vegetation is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Cape Lowland Alluvial Vegetation	Azonal Vegetation	Endangered	B1(i)	Cape Lowland Alluvial Vegetation is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Muscadel Riviere	Azonal Vegetation	Endangered	A3alt, B1(i)	Supplementary land cover data from provincial and metropolitan authorities show that Muscadel Riviere has experienced extensive spatial declines of approximately 83% since 1750. Muscadel Riviere is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Albertinia Sand Fynbos	Fynbos	Endangered	B1(iii)	Albertinia Sand Fynbos is narrowly distributed with evidence of ongoing

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				biotic disruption from invasive species.
Atlantis Sand Fynbos	Fynbos	Endangered	B1(iii)	Atlantis Sand Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species and overgrazing.
Boland Granite Fynbos	Fynbos	Endangered	B1(i), B1(iii)	Boland Granite Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018) and evidence of ongoing biotic disruption from invasive species.
Breede Alluvium Fynbos	Fynbos	Endangered	B1(i), B2(i), B1(iii), B2(iii)	Breede Alluvium Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species
Breede Alluvium Renosterveld	Fynbos	Endangered	B1(i)	Breede Alluvium Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Breede Shale Fynbos	Fynbos	Endangered	B1(i), B1(iii)	Breede Shale Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species
Breede Shale Renosterveld	Fynbos	Endangered	B1(iii)	Breede Shale Renosterveld is narrowly distributed with evidence of ongoing biotic disruption from invasive species and overgrazing
Cape Flats Dune Strandveld	Fynbos	Endangered	B1(i), B2(i), B1(iii), B2(iii)	Cape Flats Dune Strandveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species.

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
Eastern Coastal Shale Band Vegetation	Fynbos	Endangered	B1(i), B2(i)	Eastern Coastal Shale Band Vegetation is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Eastern Rûens Shale Renosterveld	Fynbos	Endangered	A2b, A3, A3alt, B1(i), B1(iii), D3	Observed rates of habitat loss between 1990 and 2018 indicate that by 2040 the geographic distribution of Eastern Rûens Shale Renosterveld will have declined by approximately 58%. National land cover and supplementary provincial and metropolitan land cover data show that Eastern Rûens Shale Renosterveld has experienced extensive spatial declines of approximately 85% since 1750. In addition, this ecosystem is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018) and evidence of ongoing biotic disruption from invasive species and overgrazing. Ecosystem condition data for Eastern Rûens Shale Renosterveld show severe disruption of biotic processes and interactions over more than 70% of its extent since 1750.
Elim Ferricrete Fynbos	Fynbos	Endangered	B1(i), B1(iii)	Elim Ferricrete Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species.
Garden Route Shale Fynbos	Fynbos	Endangered	B1(i)	Garden Route Shale Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Humansdorp Shale Renosterveld	Fynbos	Endangered	B1(i), B2(i)	Humansdorp Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				(1990-2018), placing the ecosystem type at risk of collapse.
Langebaan Dune Strandveld	Fynbos	Endangered	B1(iii)	Langebaan Dune Strandveld is narrowly distributed with evidence of ongoing biotic disruption from invasive species and overgrazing.
Langkloof Shale Renosterveld	Fynbos	Endangered	A3alt, B1(i)	Supplementary land cover data from provincial and metropolitan authorities show that Langkloof Shale Renosterveld has experienced extensive spatial declines of approximately 75% since 1750. Langkloof Shale Renosterveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Leipoldtville Sand Fynbos	Fynbos	Endangered	B1(i)	Leipoldtville Sand Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Overberg Dune Strandveld	Fynbos	Endangered	B1(iii)	Overberg Dune Strandveld is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
Overberg Sandstone Fynbos	Fynbos	Endangered	B1(iii)	Overberg Sandstone Fynbos is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
Rûens Silcrete Renosterveld	Fynbos	Endangered	A2b, A3, A3alt, B1(i), B2(i), B1(iii), B2(iii), D3	Observed rates of habitat loss between 1990 and 2018 indicate that by 2040 the geographic distribution of Rûens Silcrete Renosterveld will have declined by approximately 56%. National land cover and supplementary provincial and metropolitan land cover data show that Rûen Silcrete Renosterveld has experienced extensive spatial declines of approximately 86% since 1750. In addition, this ecosystem is

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species and overgrazing. Ecosystem condition data for Rûens Silcrete Renosterveld show severe disruption of biotic processes and interactions over more than 70% of its extent since 1750.
Saldanha Flats Strandveld	Fynbos	Endangered	B1(i)	Saldanha Flats Strandveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Swartland Alluvium Fynbos	Fynbos	Endangered	A3, A3alt, B1(i), B2(i), B1(iii)	National land cover and supplementary provincial and metropolitan land cover data show that Swartland Alluvium Fynbos has experienced extensive spatial declines of approximately 70% since 1750. Swartland Alluvium Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), and evidence of ongoing biotic disruption from invasive species, overgrazing and altered fire regimes.
Swartland Granite Renosterveld	Fynbos	Endangered	A2b, A3, A3alt, B1(i), B1(iii)	Observed rates of habitat loss between 1990 and 2018 indicate that by 2040 the geographic distribution of Swartland Granite Renosterveld will have declined by approximately 55%. National land cover and supplementary provincial and metropolitan land cover data show that Swartland Granite Renosterveld has experienced extensive spatial declines of approximately 83% since 1750. In addition, this ecosystem is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018) and evidence of

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				ongoing biotic disruption from invasive species and overgrazing.
Swellendam Silcrete Fynbos	Fynbos	Endangered	B1(i)	Swellendam Silcrete Fynbos is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Western Coastal Shale Band Vegetation	Fynbos	Endangered	B1(iii)	Western Coastal Shale Band Vegetation is narrowly distributed with evidence of ongoing biotic disruption from invasive species.
East Griqualand Grassland	Grassland	Endangered	B1(i)	East Griqualand Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Eastern Highveld Grassland	Grassland	Endangered	A3	National land cover data show that Eastern Highveld Grassland has experienced extensive spatial declines of approximately 70% since 1750.
Income Sandy Grassland	Grassland	Endangered	B1(i)	Income Sandy Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
KaNgwane Montane Grassland	Grassland	Endangered	B1(i)	KaNgwane Montane Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Midlands Mistbelt Grassland	Grassland	Endangered	A3	National land cover data show that Midlands Mistbelt Grassland has experienced extensive spatial declines of approximately 71% since 1750.
Mooi River Highland Grassland	Grassland	Endangered	B1(i)	Mooi River Highland Grassland is narrowly distributed with high rates of habitat loss in the past 28 years

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				(1990-2018), placing the ecosystem type at risk of collapse.
Mthatha Moist Grassland	Grassland	Endangered	B1(i)	Mthatha Moist Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Northern Escarpment Dolomite Grassland	Grassland	Endangered	B1(i)	Northern Escarpment Dolomite Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Northern Zululand Mistbelt Grassland	Grassland	Endangered	B1(i)	Northern Zululand Mistbelt Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Paulpietersburg Moist Grassland	Grassland	Endangered	B1(i)	Paulpietersburg Moist Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Southern KwaZulu-Natal Moist Grassland	Grassland	Endangered	B1(i)	Southern KwaZulu-Natal Moist Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Tsakane Clay Grassland	Grassland	Endangered	B1(i)	Tsakane Clay Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Vaal-Vet Sandy Grassland	Grassland	Endangered	A3	National land cover data show that Vaal-Vet Sandy Grassland has experienced extensive spatial declines of approximately 72% since 1750.

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
Western Highveld Sandy Grassland	Grassland	Endangered	A3, B1(i)	National land cover data show that Western Highveld Sandy Grassland has experienced extensive spatial declines of approximately 82% since 1750. Western Highveld Sandy Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
KwaZulu-Natal Coastal Belt Grassland	Indian Ocean Coastal Belt	Endangered	A3, A3alt, B1(i)	National land cover and supplementary provincial and metropolitan land cover data show that KwaZulu-Natal Coastal Belt Grassland has experienced extensive spatial declines of approximately 89% since 1750. KwaZulu-Natal Coastal Belt Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
KwaZulu-Natal Coastal Belt Thornveld	Indian Ocean Coastal Belt	Endangered	B1(i)	KwaZulu-Natal Coastal Belt Thornveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Maputaland Coastal Belt	Indian Ocean Coastal Belt	Endangered	B1(i)	Maputaland Coastal Belt is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Maputaland Wooded Grassland	Indian Ocean Coastal Belt	Endangered	B1(i)	Maputaland Wooded Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Transkei Coastal Belt	Indian Ocean Coastal Belt	Endangered	B1(i)	Transkei Coastal Belt is narrowly distributed with high rates of habitat loss in the past 28 years (1990-

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				2018), placing the ecosystem type at risk of collapse.
KwaZulu-Natal Sandstone Sourveld	Savanna	Endangered	A2b, A3, A3alt, B1(i)	Observed rates of habitat loss between 1990 and 2018 indicate that by 2040 the geographic distribution of KwaZulu-Natal Sandstone Sourveld will have declined by approximately 54%. National land cover and supplementary provincial and metropolitan land cover data show that this ecosystem has experienced extensive spatial declines of approximately 86% % since 1750. In addition, KwaZulu-Natal Sandstone Sourveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Lebombo Summit Sourveld	Savanna	Endangered	B1(i), B2(i)	Lebombo Summit Sourveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Legogote Sour Bushveld	Savanna	Endangered	B1(i)	Legogote Sour Bushveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Marikana Thornveld	Savanna	Endangered	B1(i)	Marikana Thornveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Sekhukhune Plains Bushveld	Savanna	Endangered	B1(i)	Sekhukhune Plains Bushveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Tzaneen Sour Bushveld	Savanna	Endangered	B1(i)	Tzaneen Sour Bushveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-

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				2018), placing the ecosystem type at risk of collapse.
Western Maputaland Clay Bushveld	Savanna	Endangered	B1(i)	Western Maputaland Clay Bushveld is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Eastern Karoo	Little Succulent Karoo	Endangered	D1	Ecosystem condition data for Eastern Little Karoo show severe disruption of biotic processes and interactions over more than 50% of its extent in the last 50 years.
Sundays Thicket	Arid Albany Thicket	Vulnerable	D3	Ecosystem condition data for Sundays Arid Thicket show severe disruption of biotic processes and interactions over more than 70% of its extent since 1750.
Lowveld Riverine Forest	Forests	Vulnerable	B2(i)	Lowveld Riverine Forest is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Peninsula Shale Fynbos	Fynbos	Vulnerable	A3	National land cover data show that Peninsula Shale Fynbos has experienced extensive spatial declines of approximately 56% since 1750.
Swartland Alluvium Renosterveld	Fynbos	Vulnerable	A3alt	Supplementary land cover data from provincial and metropolitan authorities show that Swartland Alluvium Renosterveld has experienced extensive spatial declines of approximately 55% since 1750.
Dry Hinterland Grassland	Coast Grassland	Vulnerable	A3, B1(i)	National land cover data show that Dry Coast Hinterland Grassland has experienced extensive spatial declines of approximately 55% since 1750. Dry Coast Hinterland Grassland is narrowly distributed with high rates of habitat loss in the

ECOSYSTEM NAME		BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
					past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Eastern State Grassland	Free Clay	Grassland	Vulnerable	A3, B1(i)	National land cover data show that Eastern Free State Clay Grassland has experienced extensive spatial declines of approximately 60% since 1750. Eastern Free State Clay Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Moist Hinterland Grassland	Coast	Grassland	Vulnerable	A3, A3alt, B1(i)	National land cover and supplementary provincial and metropolitan land cover data show that Moist Coast Hinterland Grassland has experienced extensive spatial declines of approximately 64% since 1750. Moist Coast Hinterland Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Northern KwaZulu-Natal Moist Grassland		Grassland	Vulnerable	B1(i)	Northern KwaZulu-Natal Moist Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Rand Highveld Grassland		Grassland	Vulnerable	A3, B1(i)	National land cover data show that Rand Highveld Grassland has experienced extensive spatial declines of approximately 57% since 1750. Rand Highveld Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Soweto Highveld Grassland		Grassland	Vulnerable	A3, B1(i)	National land cover data show that Soweto Highveld Grassland has experienced extensive spatial

ECOSYSTEM NAME	BIOME	THREAT STATUS 2021	LISTING CRITERIA	ASSESSMENT SUMMARY
				declines of approximately 61% since 1750. Soweto Highveld Grassland is narrowly distributed with high rates of habitat loss in the past 28 years (1990-2018), placing the ecosystem type at risk of collapse.
Pondoland-Ugu Sandstone Coastal Sourveld	Indian Ocean Coastal Belt	Vulnerable	A3	National land cover data show that Pondoland-Ugu Sandstone Coastal Sourveld has experienced extensive spatial declines of approximately 50% since 1750.
Ngongoni Veld	Savanna	Vulnerable	A3, A3alt	National land cover and supplementary provincial and metropolitan land cover data show that Ngongoni Veld has experienced extensive spatial declines of approximately 58% since 1750.
Schweizer-Reneke Bushveld	Savanna	Vulnerable	A3	National land cover data show that Schweizer-Reneke Bushveld has experienced extensive spatial declines of approximately 51% since 1750.
Springbokvlakte Thornveld	Savanna	Vulnerable	A3	National land cover data show that Springbokvlakte Thornveld has experienced extensive spatial declines of approximately 55% since 1750.

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