

WESTERN CAPE

2025

STATE OF CONSERVATION  
REPORT



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This is the second State of Conservation Report to inform the next iteration of the Western Cape State of Biodiversity Report to be released in 2028. Mandated by the Western Cape Biodiversity Act (Act 6 of 2022), this report represents the 2024-2025 annual (period 1 April 2024 – 31 March 2025) update to the conservation status of species and ecosystems within the province of the Western Cape, highlighting outcomes in response to the global biodiversity concerns in the context of its mandate.

### Data & Information:

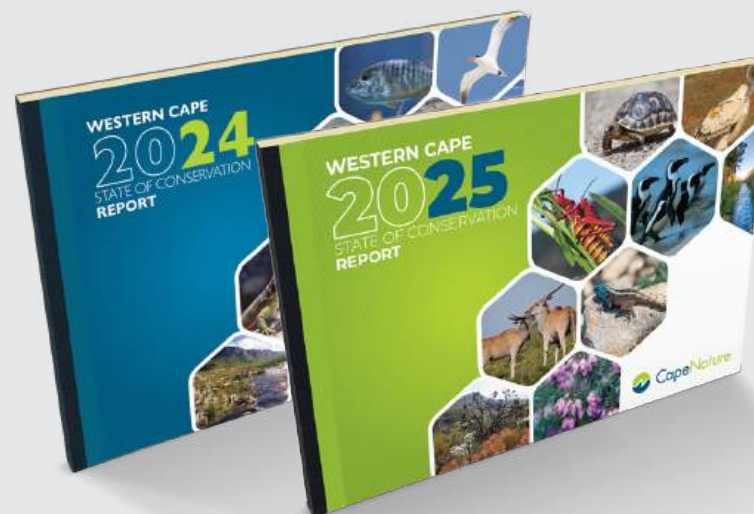
- CapeNature Field Rangers
- Conservation Managers & Officers
- Landscape Conservation Intelligence Teams
- Biodiversity Capabilities

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CapeNature.

### Online WC SoCR 2025 Report

To access the links indicated in the printed book, please scan the QR code provided on the left or visit the website link: <https://www.capenature.co.za/state-of-biodiversity> to view the online version of the book.



- ▶▶ WESTERN CAPE STATE OF BIODIVERSITY 2002
- ▶▶ WESTERN CAPE STATE OF BIODIVERSITY 2007
- ▶▶ WESTERN CAPE STATE OF BIODIVERSITY 2012
- ▶▶ WESTERN CAPE STATE OF BIODIVERSITY 2017
- ▶▶ WESTERN CAPE STATE OF BIODIVERSITY 2023
- ▶▶ WESTERN CAPE STATE OF CONSERVATION 2024



# FOREWORD

This State of Conservation Report provides an overview of the state of biodiversity and conservation, focusing on key outcomes at the end of the 2024/25 reporting period and contributes toward the 5-yearly State of Biodiversity Report to be released after the conclusion of the 2027/28 financial year. Serving as a critical reference point for assessing conservation progress, the Western Cape State of Conservation Report highlights CapeNature's achievements across priority focal areas from species management and habitat protection to responsive policy and planning. These reports demonstrate CapeNature's commitment to aligning its reporting with the South African State of Environment Outlook Report (SoEOR) and towards the Kunming-Montreal Global Biodiversity Framework targets (adopted at COP15 in 2022), an obligation that CapeNature actively embraces through practical, on-the-ground initiatives.

The development and adoption of the 2023 Western Cape Biodiversity Spatial Plan and subsequent tabling of the 2025 Western Cape Protected Areas Expansion Strategy for adoption, marks significant milestones for CapeNature in giving effect the Western Cape Biodiversity Act and the implementation of mechanisms to respond to impacts of the major threats to biodiversity on a local and global scale. These implementation mechanisms strengthen the province's capacity to identify and prioritise areas of biodiversity importance for conservation to meet international targets and build environmental resilience.

As you review the latest findings and achievements within these pages, we invite you to consider how each local success story contributes to the global momentum for biodiversity conservation. We remain confident that through strong partnerships, evidence-based decision-making, and bold financial innovations, we can continue to safeguard our natural heritage and inspire greater stewardship across all sectors of society.

**Dr Ashley Naidoo,**  
**Chief Executive Officer**



WESTERN CAPE  
BIODIVERSITY ACT



WESTERN CAPE  
BIODIVERSITY SPATIAL  
PLAN



KUNMING-MONTREAL  
GLOBAL BIODIVERSITY  
FRAMEWORK



WESTERN CAPE STATE OF  
ENVIRONMENT OUTLOOK  
REPORT



# CAPENATURE LANDSCAPES & LANDSCAPE UNITS



## Legend

### CapeNature

- ☆ Head office
- ☆ Regional office
- Reserve office
- ▲ Satellite office

- CapeNature Protected Areas
- CapeNature Marine Protected Areas
- CapeNature Ramsar Sites
- CapeNature Estuaries

### WEST

- Matzikama
- Peninsula
- Ceder-Berg

### CENTRAL

- Kogelberg
- Witzenberg
- Boland

### SOUTH

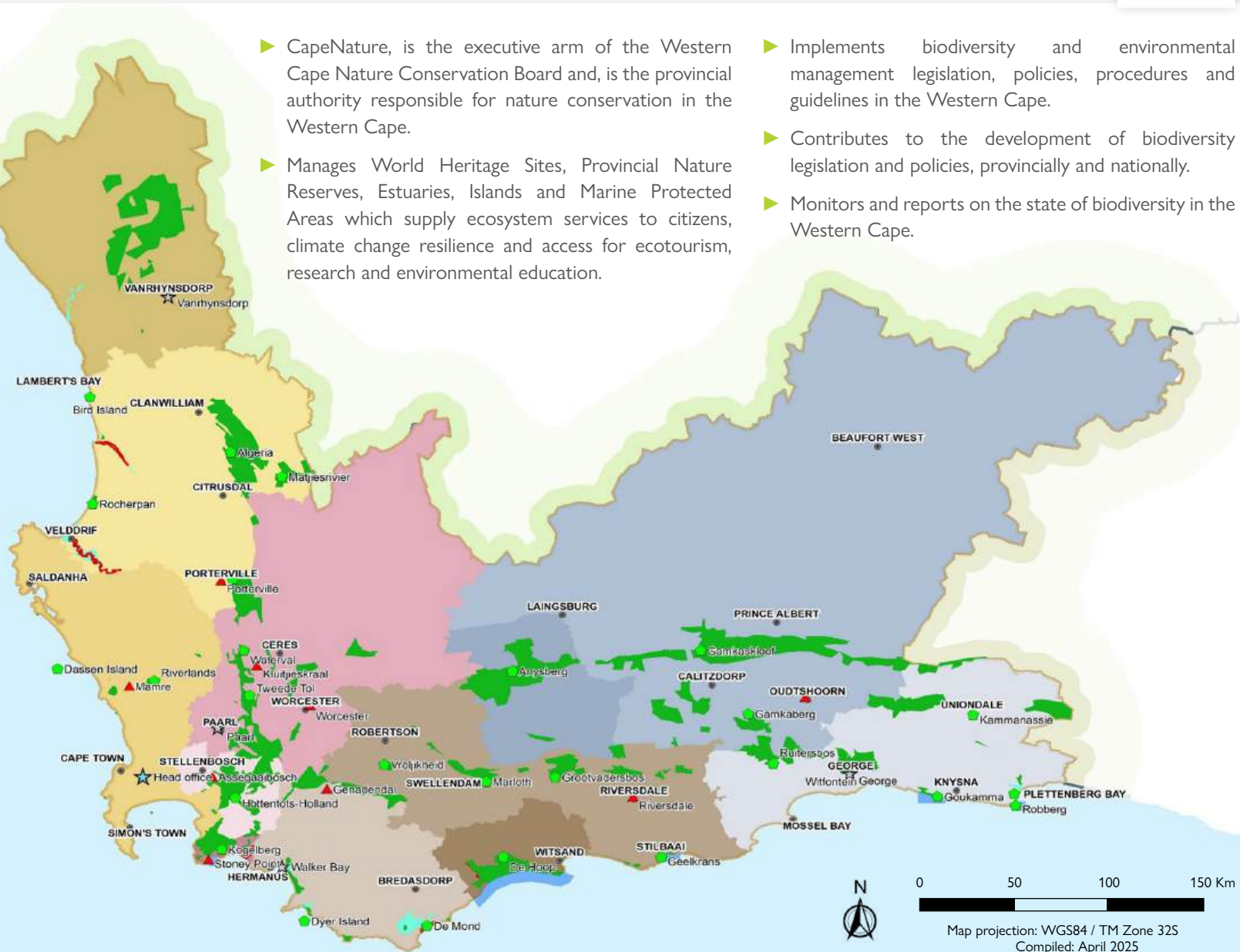
- De Hoop
- Langeberg
- Overberg

### EAST

- Anysberg
- Garden Route
- Karoo

- ▶ CapeNature, is the executive arm of the Western Cape Nature Conservation Board and, is the provincial authority responsible for nature conservation in the Western Cape.
- ▶ Manages World Heritage Sites, Provincial Nature Reserves, Estuaries, Islands and Marine Protected Areas which supply ecosystem services to citizens, climate change resilience and access for ecotourism, research and environmental education.

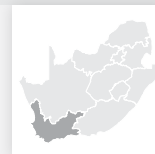
- ▶ Implements biodiversity and environmental management legislation, policies, procedures and guidelines in the Western Cape.
- ▶ Contributes to the development of biodiversity legislation and policies, provincially and nationally.
- ▶ Monitors and reports on the state of biodiversity in the Western Cape.



Map projection: WGS84 / TM Zone 32S  
Compiled: April 2025



# THE BIODIVERSITY OF THE WESTERN CAPE



© Ismail Ebrahim

*Ixia ebrahimii*

A rare species of *Ixia* (also known as “kalossies”) has been discovered in the Wolseley area. During a field trip by volunteers of the Custodians for Rare and Endangered Wildflowers, SANBI botanist Ismail Ebrahim recognised the plant as something special. It was later confirmed to be a new, undescribed species and has been named *Ixia ebrahimii*.

## PLANTS



Plants: **10 778** | **61%** endemic



endemic



not endemic



not defined



Indicates change

Recognised number of indigenous taxa in the Western Cape in selected taxonomic groups, and percentage of taxa that are endemic to the province.



## VERTEBRATES



Freshwater fish: **37** | **73%** endemic



Mammals: **154** | **5%** endemic



Reptiles: **142** | **15%** endemic



Amphibians: **61** | **60%** endemic



Birds: **337** | **0,3%** endemic



Linefish: **105** | Endemism not defined



Araneae: **923** | **27%** endemic



Lepidoptera: **249** | **32%** endemic



Scarabaeinae: **131** | **27%** endemic



Colophon: **21** | **100%** endemic



Odonata: **67** | **14%** endemic



## VERTEBRATES



The newly described *Cacosternum cederbergense* (sp. nov.)

After three years of challenging field work, it has been confirmed: the Western Cape has a new, endemic frog species (Angus et al. 2024). Genetic, morphological and acoustic analyses have shown unequivocally that these frogs, found only in the northern Cederberg, are unique. Remarkably, these tiny (10-23mm) creatures are adapted to survive in this tough, rocky environment, where they use chilly rock pools to breed during winter.



# THE STATUS OF WESTERN CAPE ECOSYSTEMS



## IUCN RED LIST CRITERIA FOR ECOSYSTEMS

Assess risk of collapse of ecosystem

|   |                                           |
|---|-------------------------------------------|
| A | DISTRIBUTION REDUCTION                    |
| B | RESTRICTED DISTRIBUTION & DECLINE         |
| C | DEGRADATION OF ABIOTIC ENVIRONMENT        |
| D | DISRUPTION TO BIOTIC PROCESSES            |
| E | QUANTITATIVE ESTIMATE OF RISK OF COLLAPSE |

QUANTITATIVE THRESHOLDS

Ecosystems are classified according to threat status as reported in the 2018 National Biodiversity Assessment except for terrestrial ecosystems which are updated to reflect the 2022 Red List of Terrestrial Ecosystems (RLE).

### Legend

#### Ecosystems Threat Status (NVM 2024)

#### RLE 2022

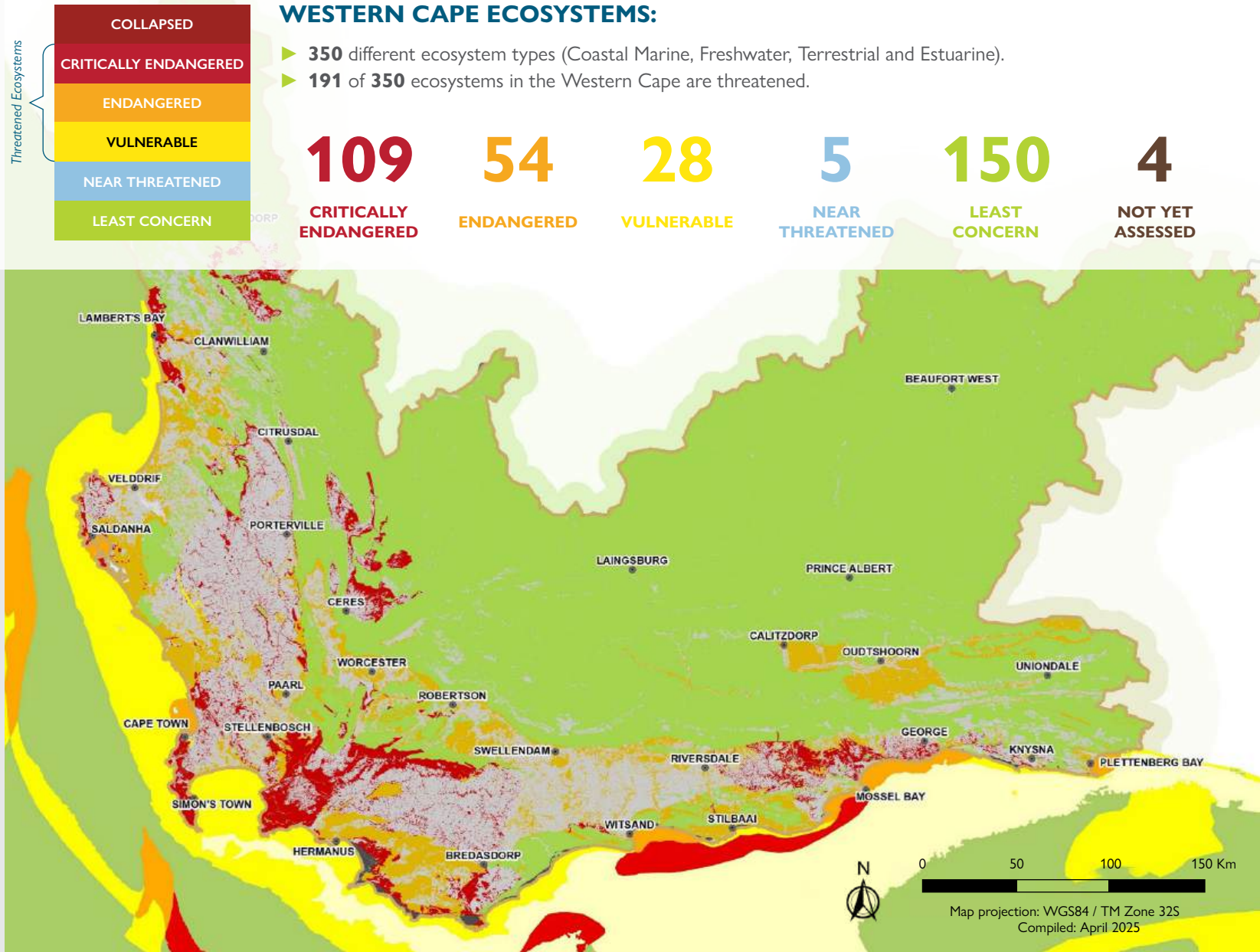
- Critically Endangered
- Endangered
- Vulnerable
- Near Threatened
- Near Threatened (Marine)
- Least Concern
- Not assessed
- 100% Modified

NATIONAL BIODIVERSITY ASSESSMENT 2018

2022 ECOSYSTEM STATUS

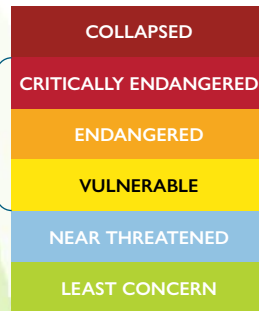
## WESTERN CAPE ECOSYSTEMS:

- 350 different ecosystem types (Coastal Marine, Freshwater, Terrestrial and Estuarine).
- 191 of 350 ecosystems in the Western Cape are threatened.





# THE STATUS OF WESTERN CAPE MARINE ECOSYSTEMS



## WESTERN CAPE MARINE ECOSYSTEMS:

- ▶ 16 of 25 shoreline ecosystems found in the Western Cape, are threatened.
- ▶ 6 Marine Protected Areas (MPAs) on the Western Cape Coast are managed by CapeNature.

0  
CRITICALLY  
ENDANGERED

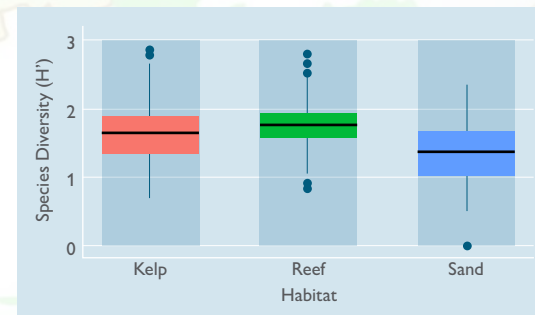
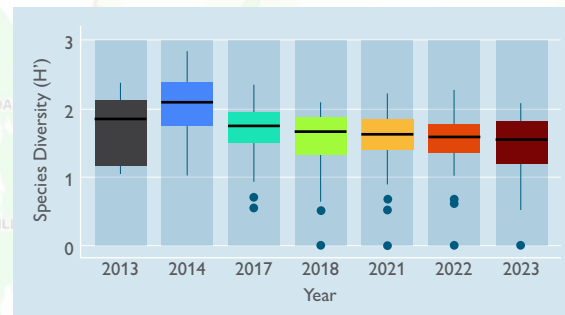
4  
ENDANGERED

12  
VULNERABLE

5  
NEAR  
THREATENED

4  
LEAST CONCERN

| MPA         | Years Surveyed | BRUV Deployments | Species Recorded | Threatened spp (IUCN) |
|-------------|----------------|------------------|------------------|-----------------------|
| Betty's Bay | 2013–2023      | 437              | 67               | 5+ (prelim)           |



CapeNature monitors MPAs in close collaboration with partners e.g., the South African Shark Conservancy carried out Baited Remote Underwater Video Systems (BRUV) surveys in the Betty's Bay MPA in partnership with Worldwide Fund for Nature South Africa.

Species assemblages within the Betty's Bay MPA show a gradual decline over the years but with species diversity appearing to stabilize from 2018/19. The highest diversity was recorded in reef habitats.

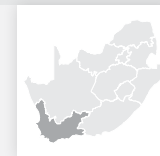
### Legend

- Island Nature Reserves (CapeNature)
- Islands
- Marine Protected Areas (CapeNature)
- Marine Conservation Estate
- Ecosystems Threat Status RLE 2022**
  - Critically Endangered
  - Endangered
  - Vulnerable
  - Near Threatened
  - Near Threatened (Marine)
  - Least Concern
- Terrestrial protected areas
- Marine Protected Areas

Terrestrial protected areas  
Marine Protected Areas



# THE STATUS OF WESTERN CAPE ESTUARINE ECOSYSTEMS



## Legend

- CapeNature Estuary
- Estuaries

## Western Cape Conservation Estate

- Terrestrial protected areas
- Marine Protected Areas

Threatened Ecosystems



## WESTERN CAPE ESTUARINE ECOSYSTEMS:

- 54 of South Africa's 290 estuaries are in the Western Cape.
- 44 of 54 estuaries in the Western Cape are threatened.
- 8 of South Africa's 22 estuary types are represented in the Western Cape.

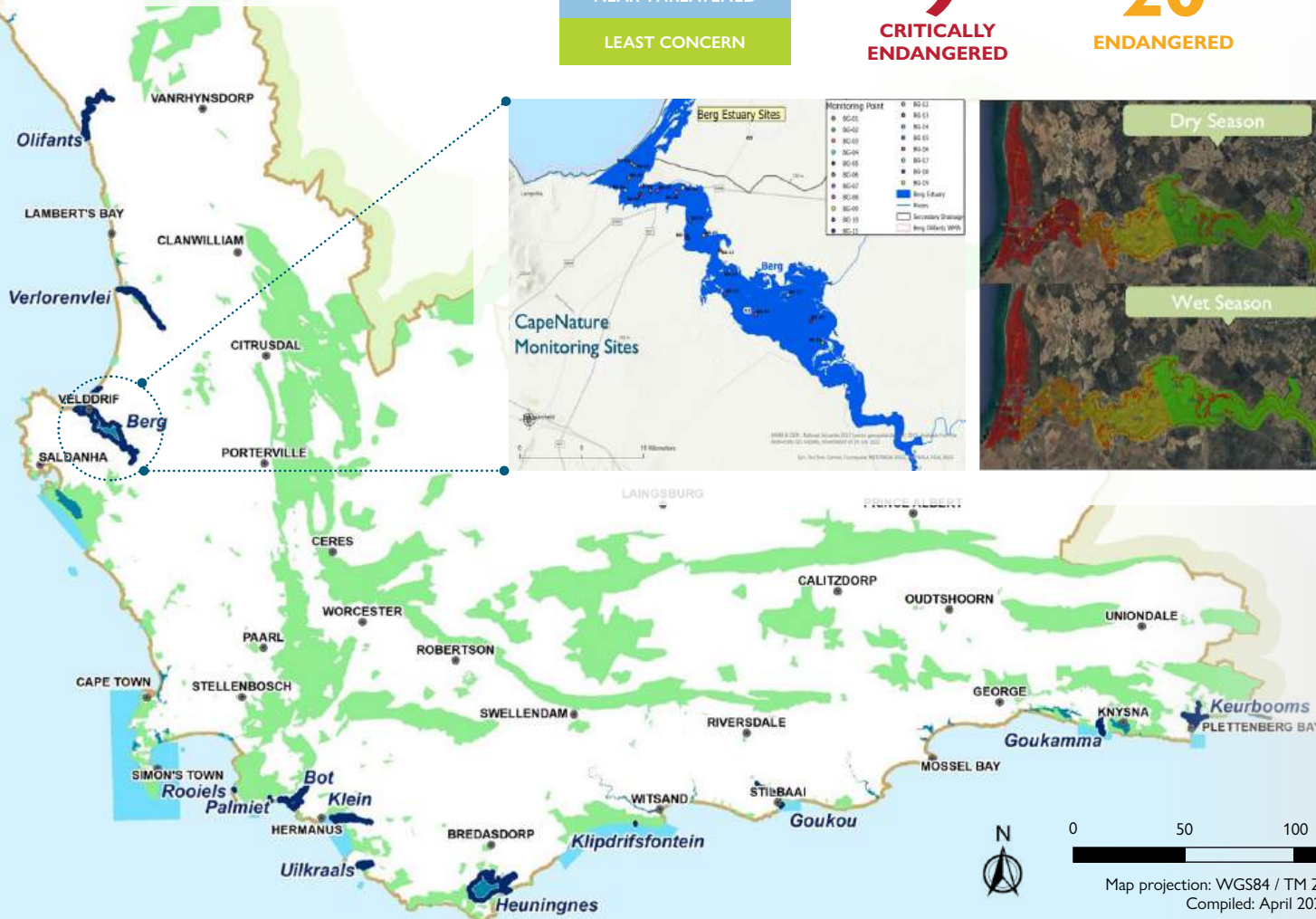
**9**  
CRITICALLY  
ENDANGERED

**20**  
ENDANGERED

**15**  
VULNERABLE

**0**  
NEAR THREATENED

**10**  
LEAST CONCERN



|                 | Temperature (°C) |            | Salinity (PPT) |            |
|-----------------|------------------|------------|----------------|------------|
|                 | Dry Season       | Wet Season | Dry Season     | Wet Season |
| Zone A (Red)    | ≥ 16 < 21        | ≥ 16 < 21  | ≥ 30           | ≥ 30       |
| Zone B (Orange) | ≥ 21 < 23        | ≥ 21 < 23  | < 30 ≥ 20      | < 30 ≥ 12  |
| Zone C (Yellow) | = 23             | ≥ 23 < 24  | < 20 ≥ 3       | < 12 ≥ 3   |
| Zone D (Green)  | = 24             | ≥ 24       | < 3            | < 3        |

Source: CapeNature and Western Cape District Municipality (data)  
Department of Water & Sanitation (analysis)

► MARINE PROTECTED AREAS  
SOUTH AFRICA, SANBI

► CSIR ESTUARINE REPORT

► ESTUARINE TECHNICAL  
REPORT NBA 2018

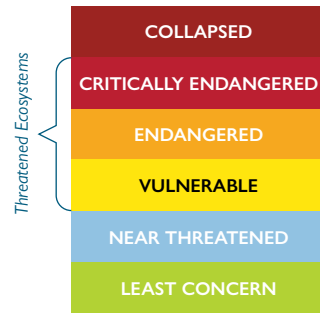
► DEA&DP BIODIVERSITY &  
COASTAL MANAGEMENT



# THE STATUS OF WESTERN CAPE FRESHWATER ECOSYSTEMS



CSIR STRATEGIC WATER SOURCE AREAS



## WESTERN CAPE FRESHWATER ECOSYSTEMS:

- ▶ 101 of 138 freshwater ecosystems in the Western Cape are threatened: 64 river types (>35% not protected), 73 wetland types (>40% not protected).
- ▶ 6 of South Africa's 22 Strategic Water Source Areas are entirely in the Western Cape.

**73**  
CRITICALLY  
ENDANGERED

**18**  
ENDANGERED

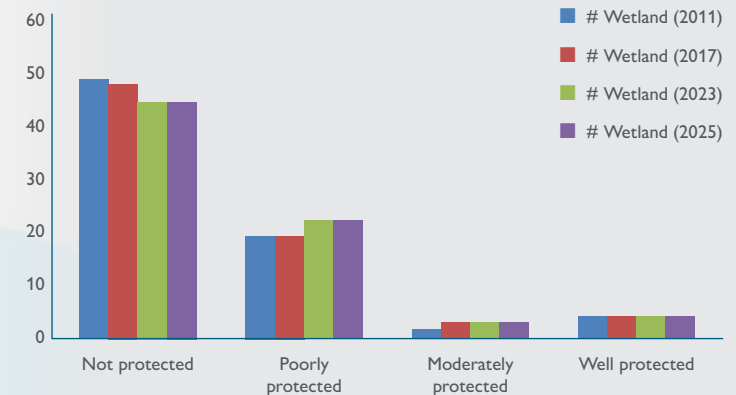
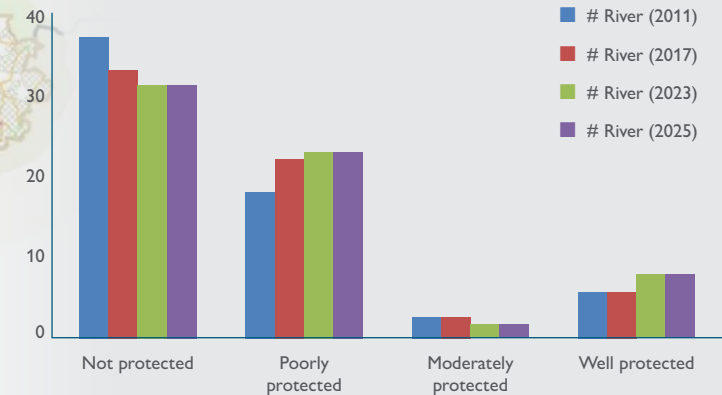
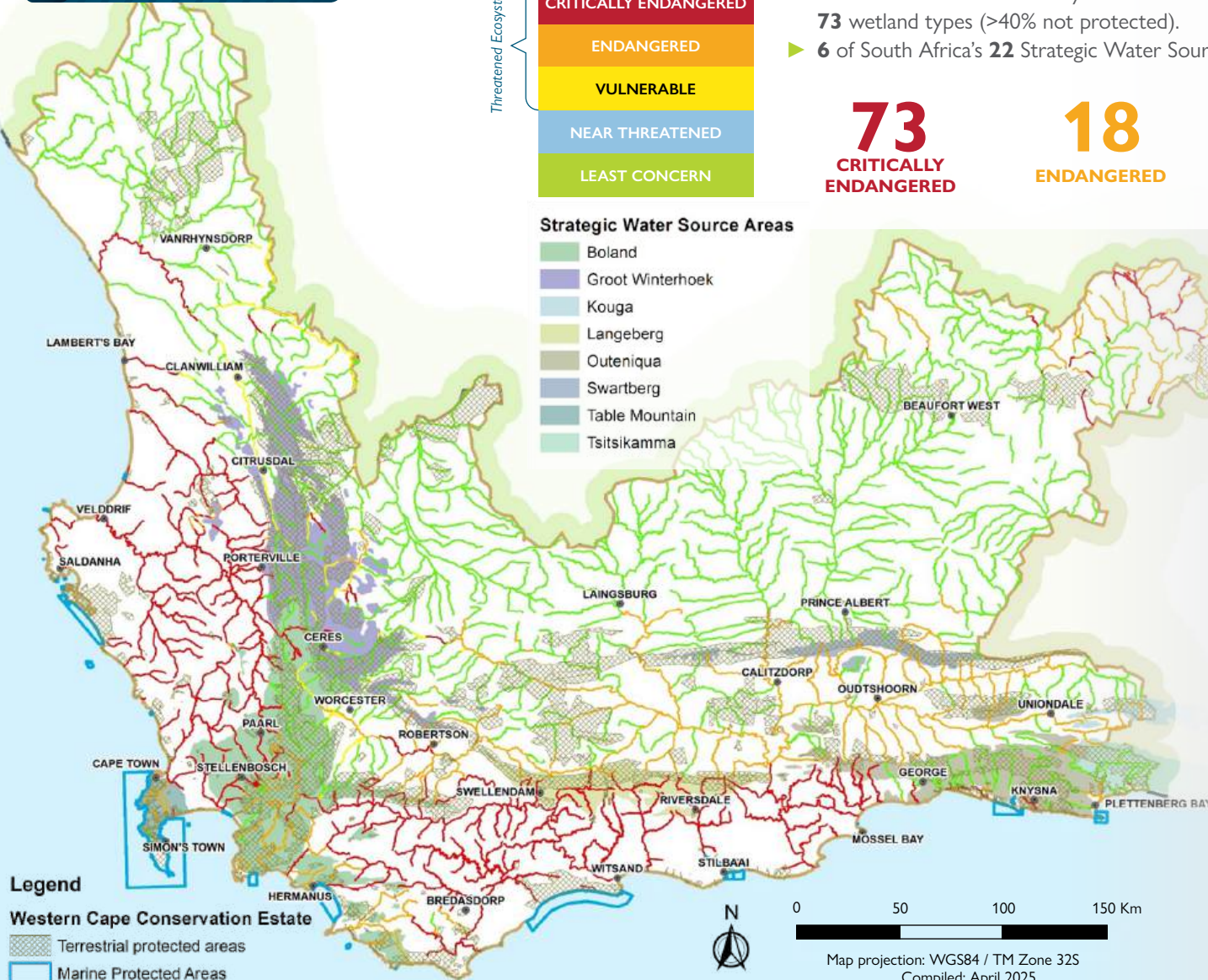
**10**  
VULNERABLE

**0**  
NEAR THREATENED

**37**  
LEAST CONCERN

### Strategic Water Source Areas

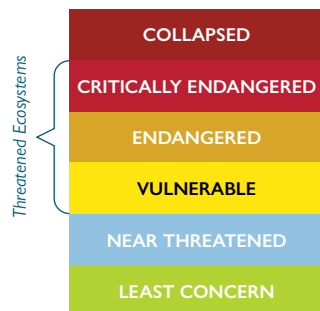
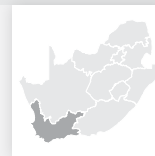
- Boland
- Groot Winterhoek
- Kouga
- Langeberg
- Outeniqua
- Swartberg
- Table Mountain
- Tsitsikamma



Graphs show protection levels of rivers and wetlands between 2011 – 2025.

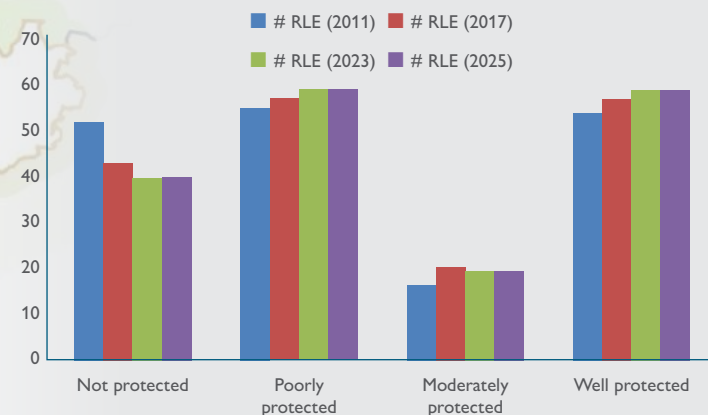
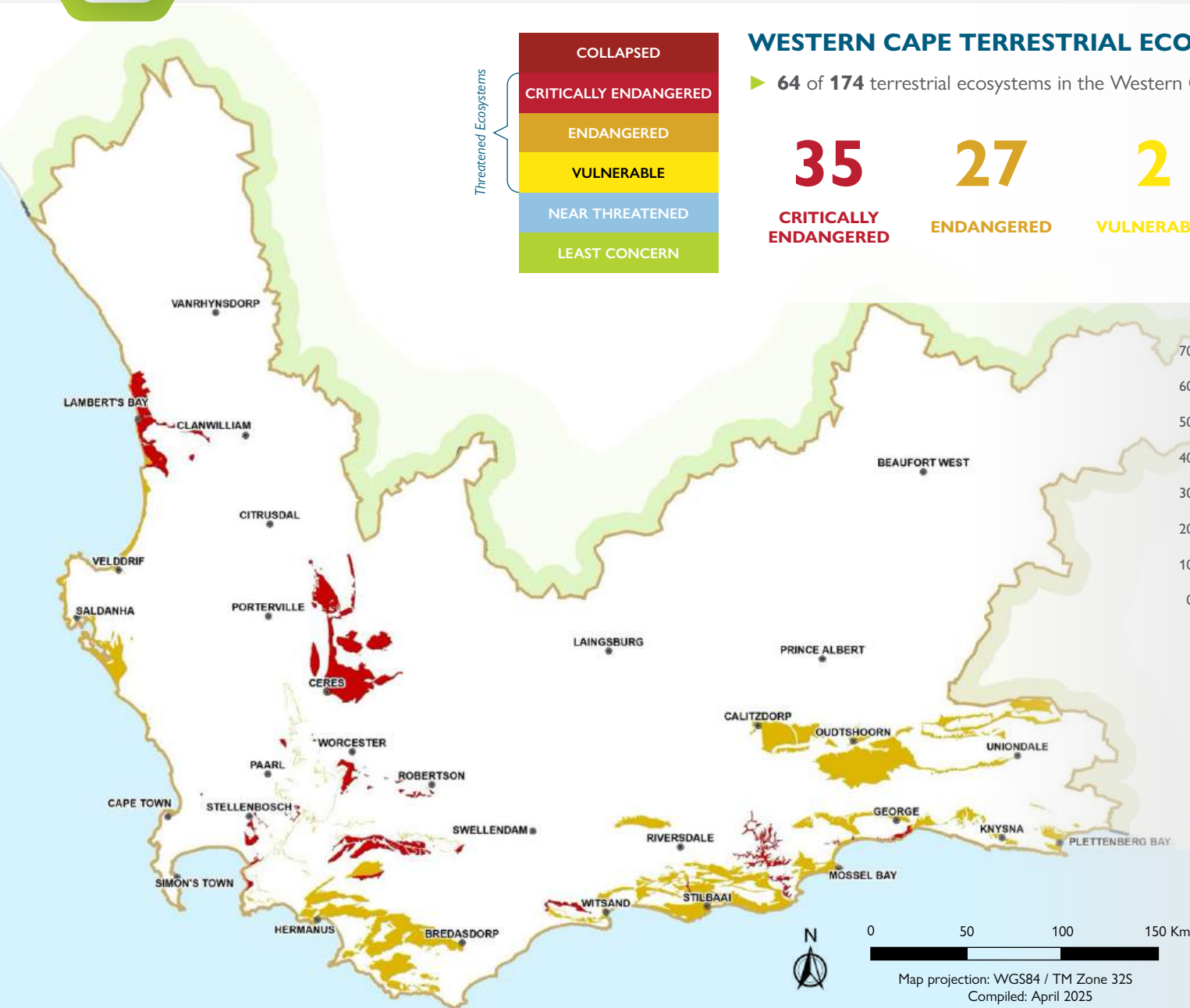


# THE STATUS OF WESTERN CAPE TERRESTRIAL ECOSYSTEMS



## WESTERN CAPE TERRESTRIAL ECOSYSTEMS:

► 64 of 174 terrestrial ecosystems in the Western Cape are threatened

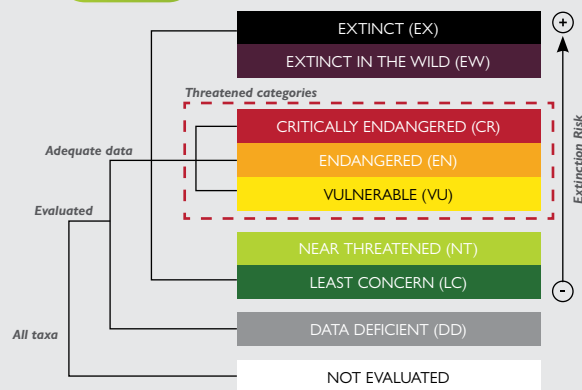
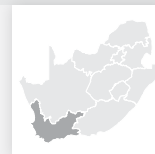


The protection levels of the Red Listed Ecosystems (RLE) as per the 2024 National Vegetation Map (NVM) have been steadily improving overtime.

- IMPLEMENTATION NOTE  
REVISED LIST THREATENED  
ECOSYSTEMS
- IUCN RED LIST CRITERIA
- NATIONAL BIODIVERSITY  
ASSESSMENT 2018
- SANBI NATIONAL  
VEGETATION MAP

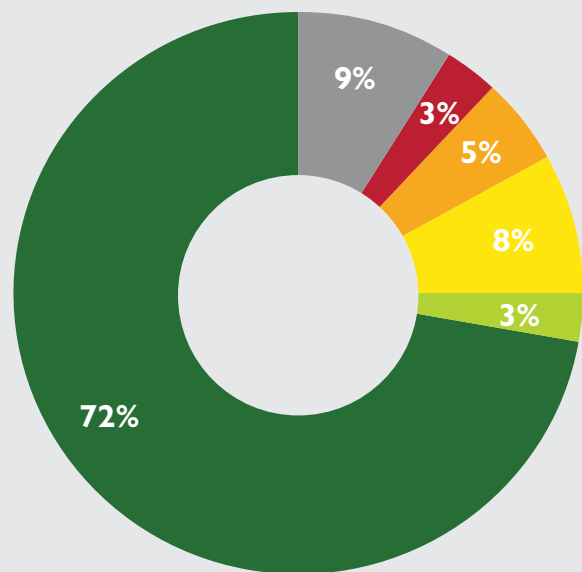


# THE STATUS OF WESTERN CAPE INDIGENOUS SPECIES



**16%** of species in the Western Cape are threatened

IUCN Red List Assessment



No changes recorded since 2024 State of Conservation Report



A species on the edge of extinction – the African Penguin is now considered Critically Endangered.

The African Penguin (*Spheniscus demersus*), a flagship species for seabird conservation, is on the verge of extinction. In 2024, a red flag was formally raised: a thorough analysis of long-term data showed a 78% decline in the breeding population

over the last 30 years, with the global population falling below 10,000 pairs for the first time (Sherley *et al.* 2024). The proposed global red list status of Critically Endangered species has now been adopted by the IUCN, which lists competition with commercial fisheries and climate-mediated shifts in prey populations as major threats (Birdlife International 2024).



Rescued from extinction – *Psoralea cataracta*

Specimens of the Waterfall Fountainbush (*Psoralea cataracta*) were collected in the late 1700's, and the species was considered extinct after extensive unsuccessful searches over the years. Finally, in 2019, the species was rediscovered at a single location on the slopes of

the Winterhoek Mountains near Tulbagh. It is listed as Critically Endangered, being threatened by habitat loss and degradation due to alien invasive species and expanding orchards.



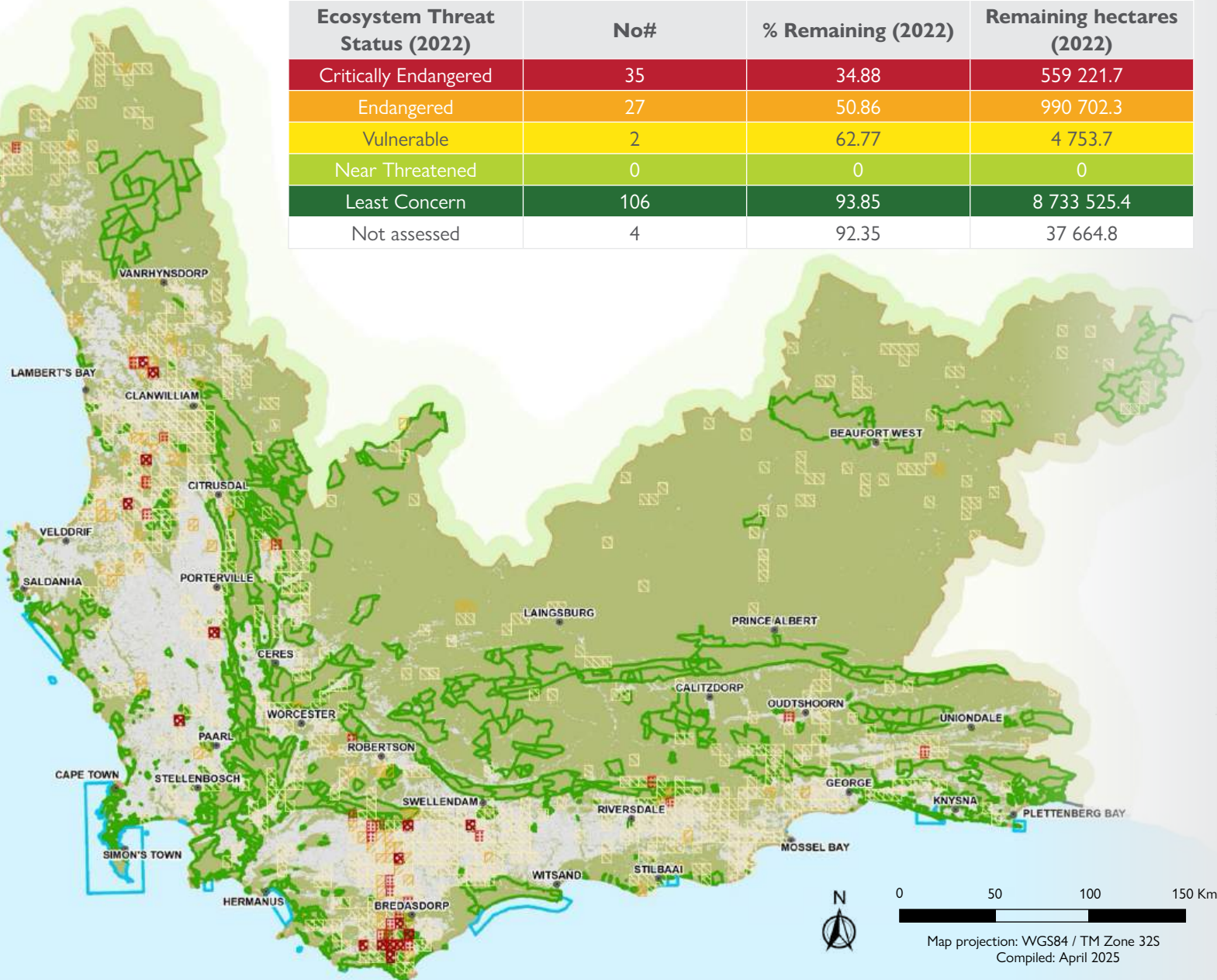


# THE STATUS OF WESTERN CAPE HABITAT LOSS



| Ecosystem Threat Status (2022) | No# | % Remaining (2022) | Remaining hectares (2022) |
|--------------------------------|-----|--------------------|---------------------------|
| Critically Endangered          | 35  | 34.88              | 559 221.7                 |
| Endangered                     | 27  | 50.86              | 990 702.3                 |
| Vulnerable                     | 2   | 62.77              | 4 753.7                   |
| Near Threatened                | 0   | 0                  | 0                         |
| Least Concern                  | 106 | 93.85              | 8 733 525.4               |
| Not assessed                   | 4   | 92.35              | 37 664.8                  |

Habitat loss is expressed as the difference between the National Vegetation Map 2024, less the modified land-use categories extracted from the 2022 Amended Western Cape Land Cover. The classification reflects the revised 2022 Red Listed Ecosystems.



## Legend

### Rate of Habitat Loss Period 2020-2022

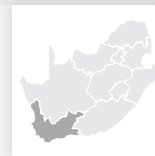
- < 1%
- 1 - 2%
- 2 - 4%
- 4 - 8%

### Western Cape Conservation Estate

- Terrestrial protected areas
- Marine Protected Areas
- Natural remnants (RLE Terrestrial 2022)
- 100% Modified Habitat



# THE STATUS OF WESTERN CAPE CONSERVATION ESTATE



CapeNature manages 16 Nature Reserve complexes, comprising a total of

**828 442 ha**

The CapeNature protected area estate totals **1 095 428 ha** which includes CapeNature managed Protected Areas and formal Stewardship sites supported by CapeNature.

## Western Cape Conservation Estate Area (hectares)

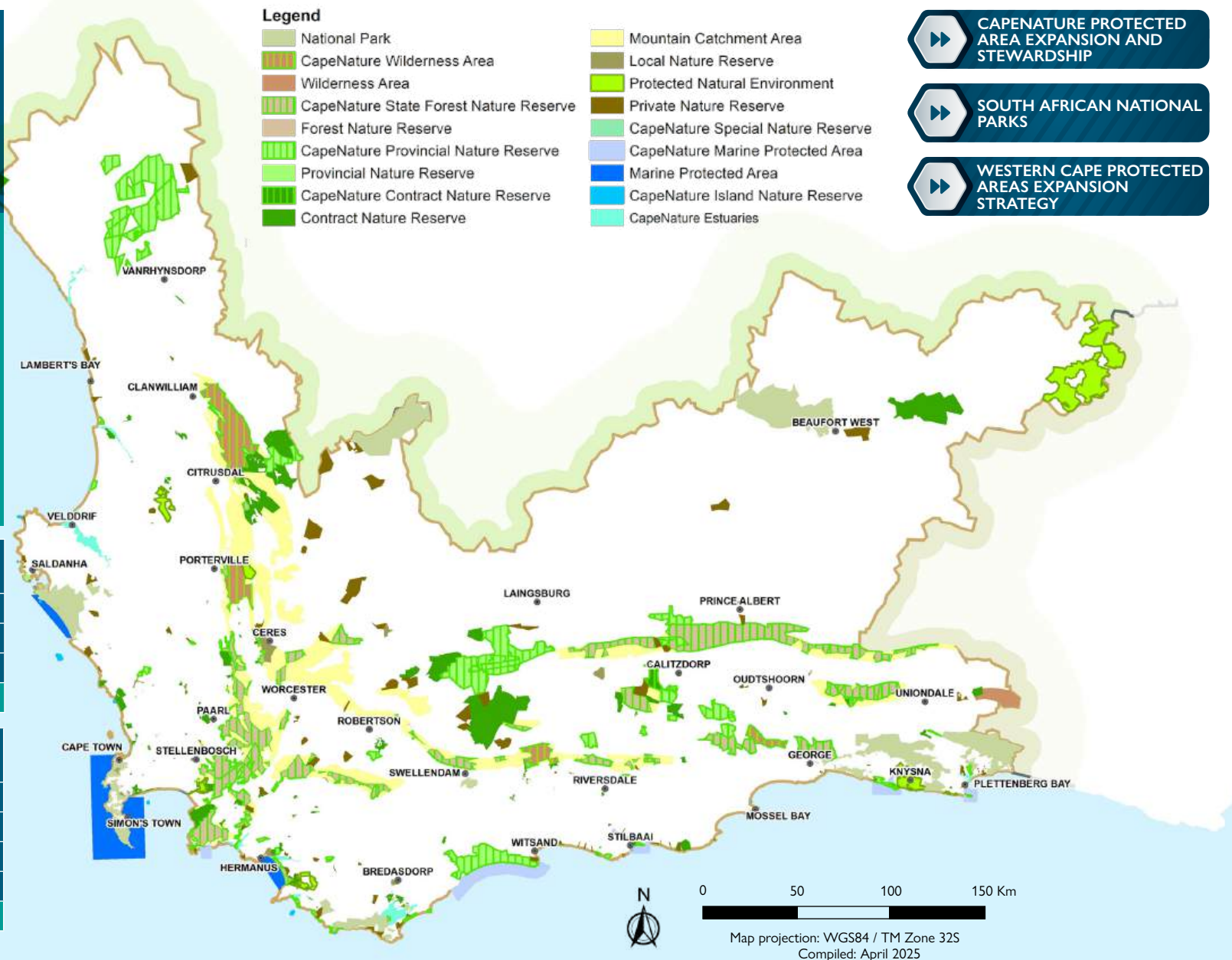
|                                                  |           |
|--------------------------------------------------|-----------|
| CapeNature – State Vested Protected Areas Estate | 659 233   |
| CapeNature-managed Protected Areas Estate        | 828 442   |
| CapeNature Protected Areas Estate                | 1 095 428 |
| Western Cape Protected Areas Estate              | 2 331 018 |

## PRIVATE NATURE RESERVES VERIFIED IN 2024-2025

|                                    | Hectares       |
|------------------------------------|----------------|
| Taayskloof Private Nature Reserve  | 4201.25        |
| Grotto Bay Private Nature Reserve  | 356.17         |
| Brackenburn Private Nature Reserve | 168.02         |
| <b>Total hectares declared:</b>    | <b>4725.43</b> |

## STEWARDSHIP NATURE RESERVE AGREEMENTS SIGNED IN 2024-2025

|                                       | Hectares       |
|---------------------------------------|----------------|
| Wilderness Nature Reserve             | 643.64         |
| Tweerivieren Nature Reserve Extension | 5164.24        |
| Oranjevlei Nature Reserve             | 189.95         |
| Sewejaarskop Nature Reserve           | 2394.14        |
| <b>Total hectares signed:</b>         | <b>8391.98</b> |

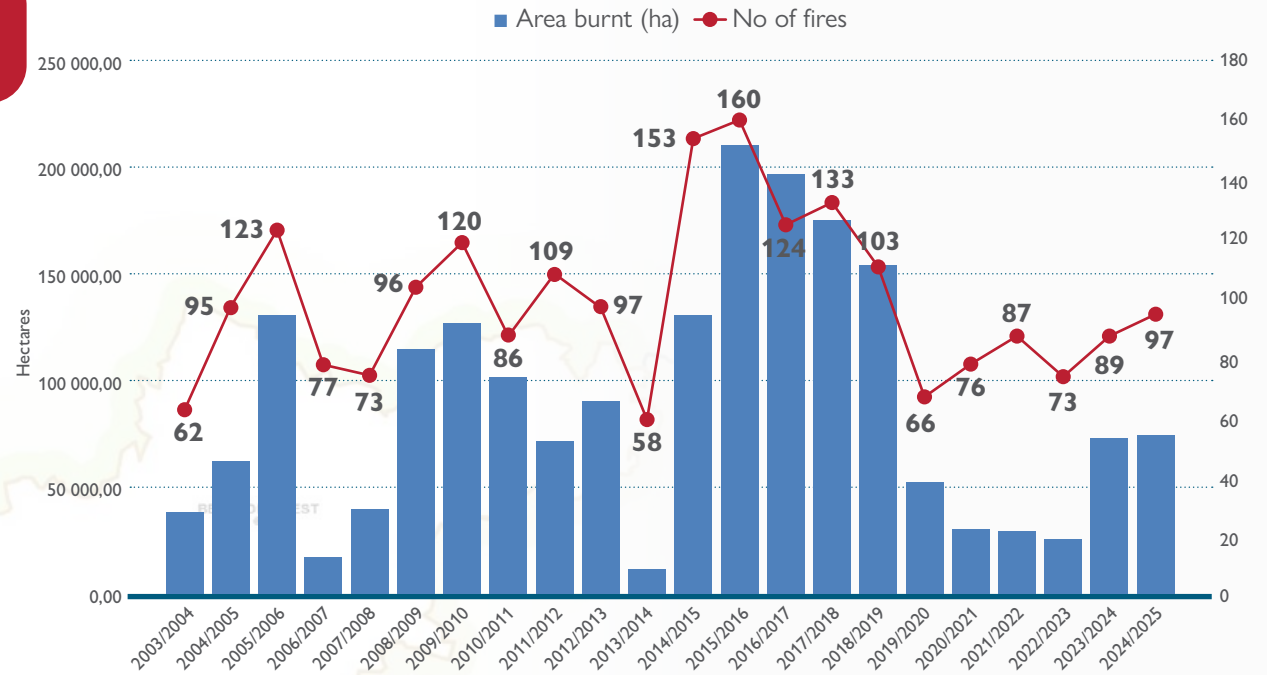
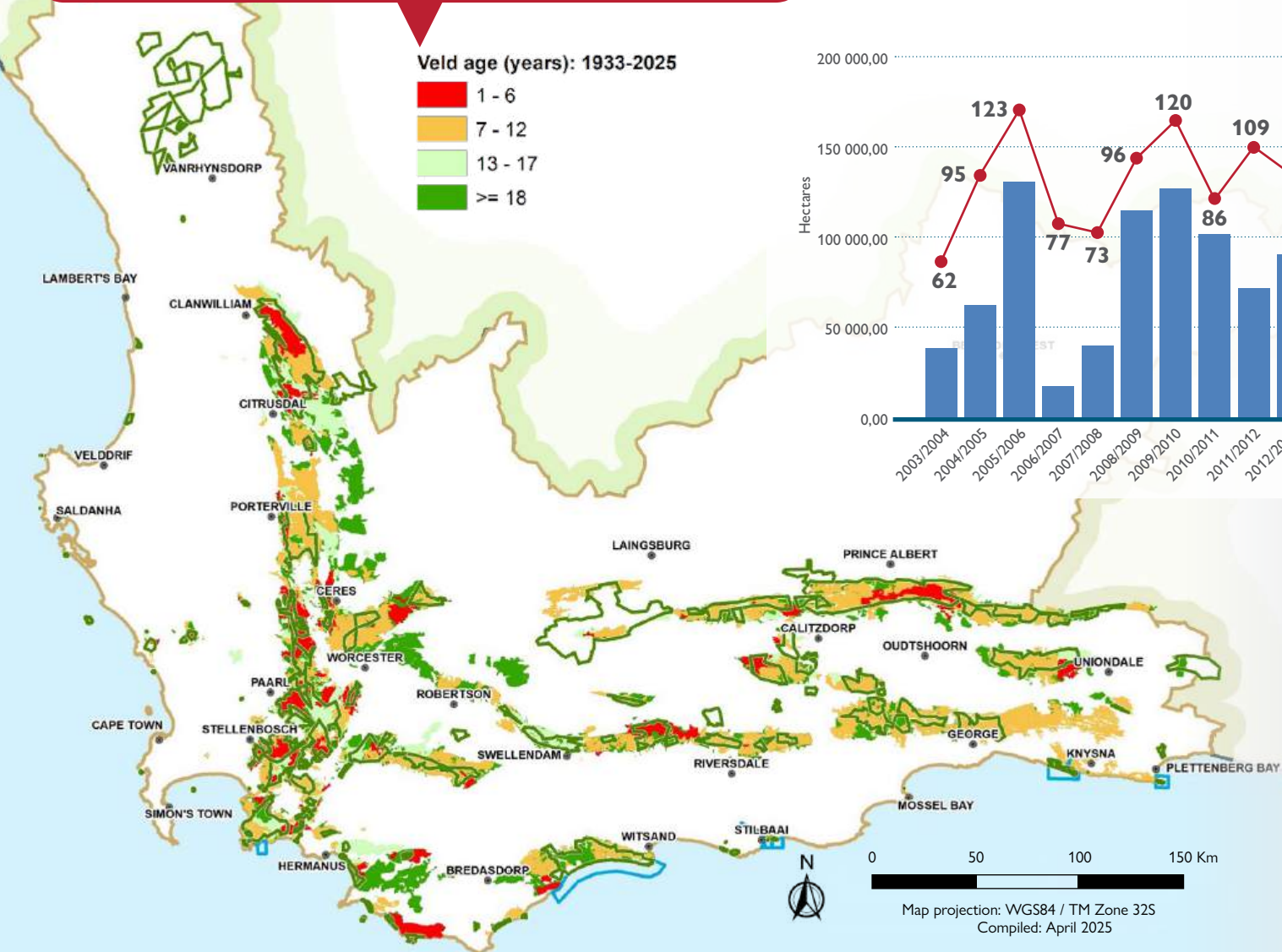




# THE STATUS OF FIRE



Veld Age monitoring provides a management indicator for assessing the impact of fires on biodiversity. Ideal ranges of veld ages vary across the province but, as a generalisation, areas with young veld are targeted for protection from fire.



CapeNature responded to **97** fires in the 2024/25 financial year, representing **75 173.9** hectares compared to **89** fires and **73 671.6** hectares burned in 2023/24. Most ignitions are anthropogenic and the greater number of fires and larger fires in both 2023/24 and 2024/25 resulted in increased costs. CapeNature and its partners managed to restrict many fires (**47%**) to under **10** hectares in size.

## Legend

- CapeNature Protected Areas
- CapeNature Marine Protected Areas



# THE STATUS OF WESTERN CAPE BIOLOGICAL INVASIONS: PLANTS



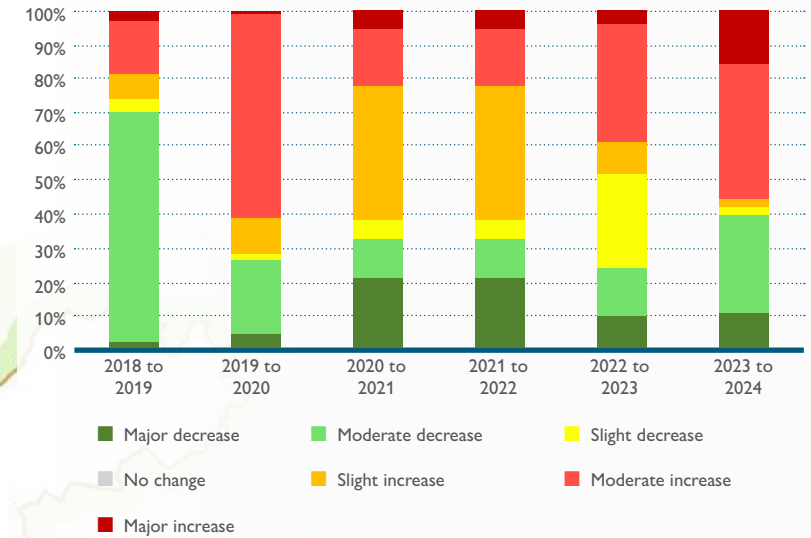
CapeNature prioritises clearing alien invasive plants according to species, densities, topography and Strategic Water Source Areas, working closely with Greater Cape Town Water Fund to target key City of Cape Town water catchments to improve water supply.

Invasive Alien Plant (IAP) densities per management compartment in CapeNature Protected Areas.

## CapeNature Invasive Alien Plant Density 2024



## INVASIVE ALIEN SPECIES DENSITY CHANGE



Invasive Alien Plant density changes in CapeNature managed Protected Areas over time (2023 to 2024) per change category.

## Legend

- CapeNature Protected Areas
- CapeNature Marine Protected Areas



0 50 100 150 Km

Map projection: WGS84 / TM Zone 32S  
Compiled: April 2025

- CAPE TOWN WATER FUND
- ECOLOGICAL INFRASTRUCTURE AND INVESTMENT FRAMEWORK
- PROVINCIAL BIODIVERSITY STRATEGY AND ACTION PLAN



# CLIMATE CHANGE RESPONSE



## Legend

Climate Adaptation Corridors

## Protected areas - new in 2025

CapeNature managed reserves

Stewardship Sites

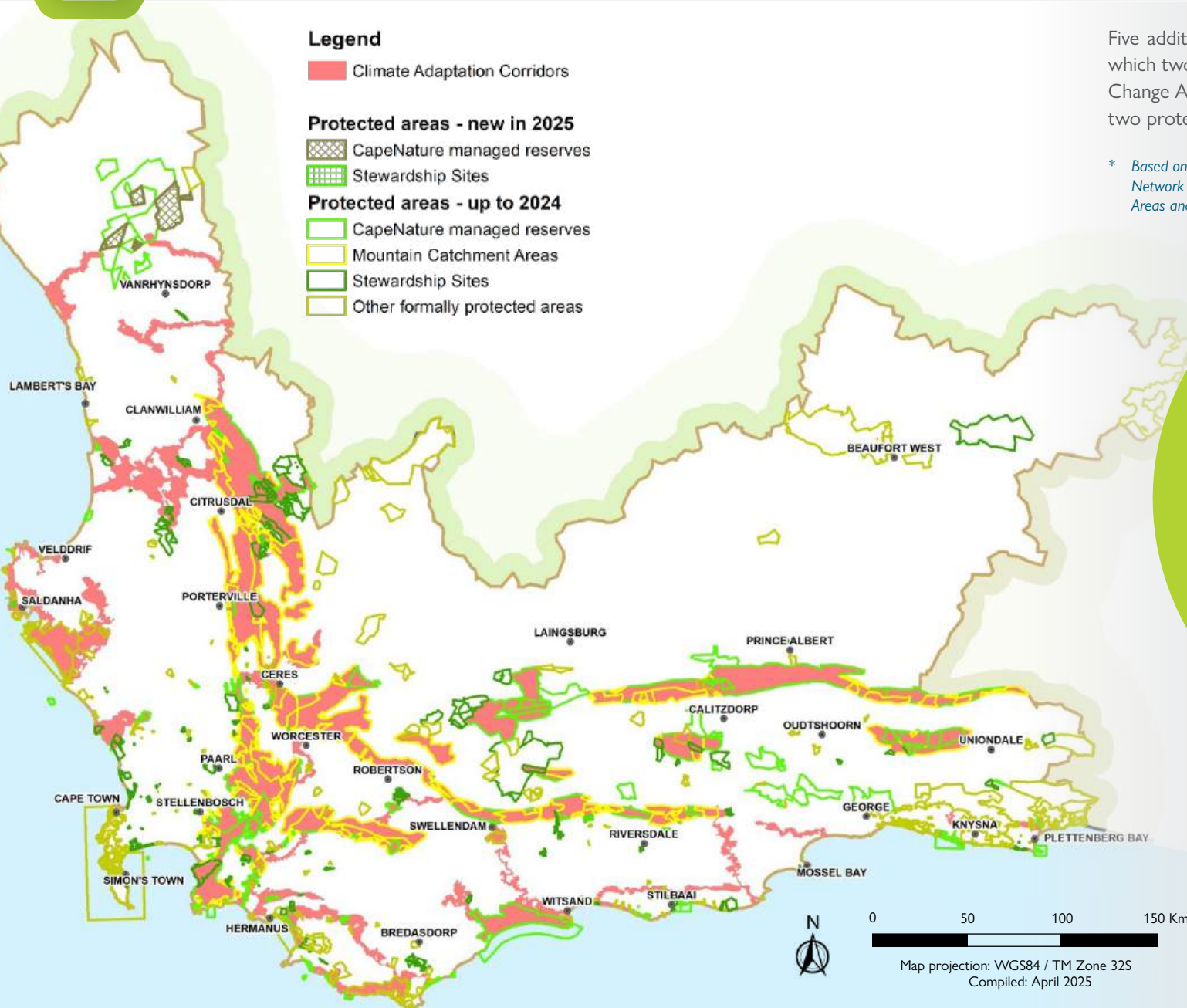
## Protected areas - up to 2024

CapeNature managed reserves

Mountain Catchment Areas

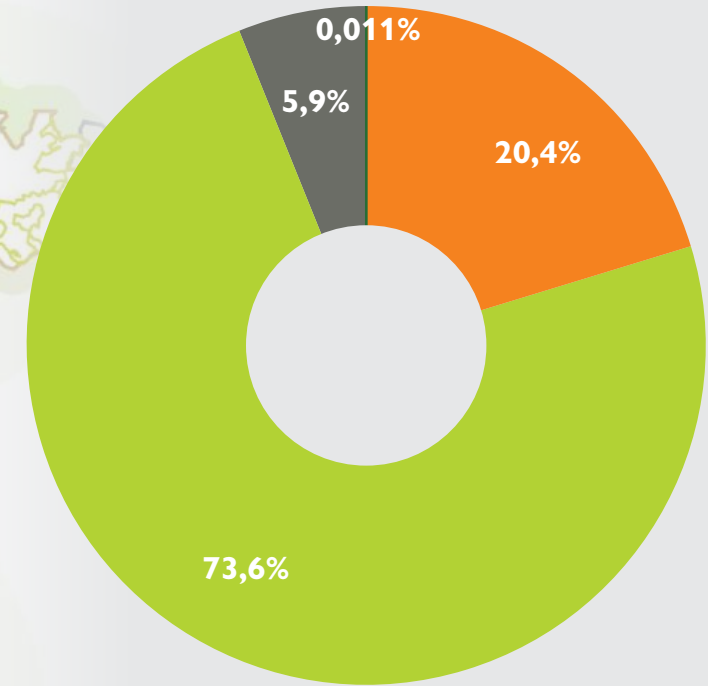
Stewardship Sites

Other formally protected areas



Five additional protected areas were added in the year in review of which two areas contributed to the protection of the original Climate Change Adaptation Corridor Network\* extent (1 733 274 ha). These two protected areas contributed 191.1ha.

\* Based on the Table Mountain Fund's delineated Climate Change Adaptation Corridor, this Network encompasses corridors outside protected areas, as well as including Protected Areas and Mountain Catchment Areas.



Protected Areas change (2025)

Climate Corridors outside PA

Protected area (2025)

Area of loss (2008 - 2022)

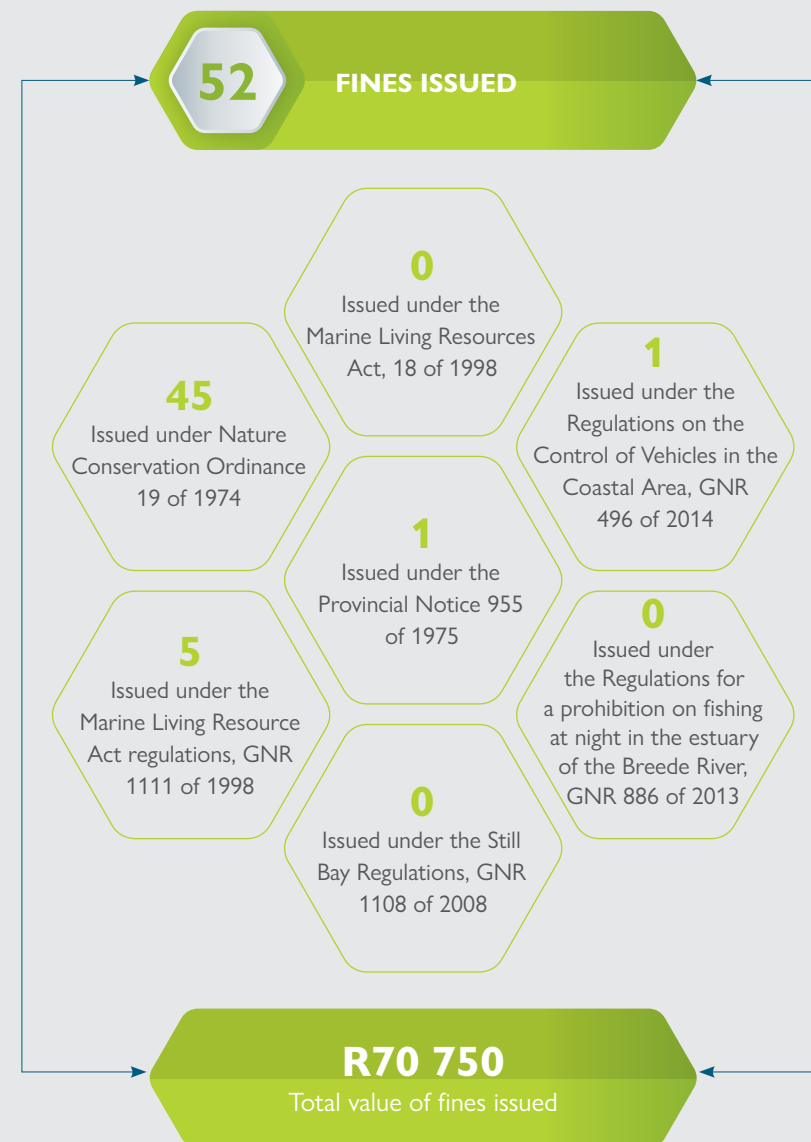
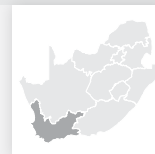


0 50 100 150 Km

Map projection: WGS84 / TM Zone 32S  
Compiled: April 2025

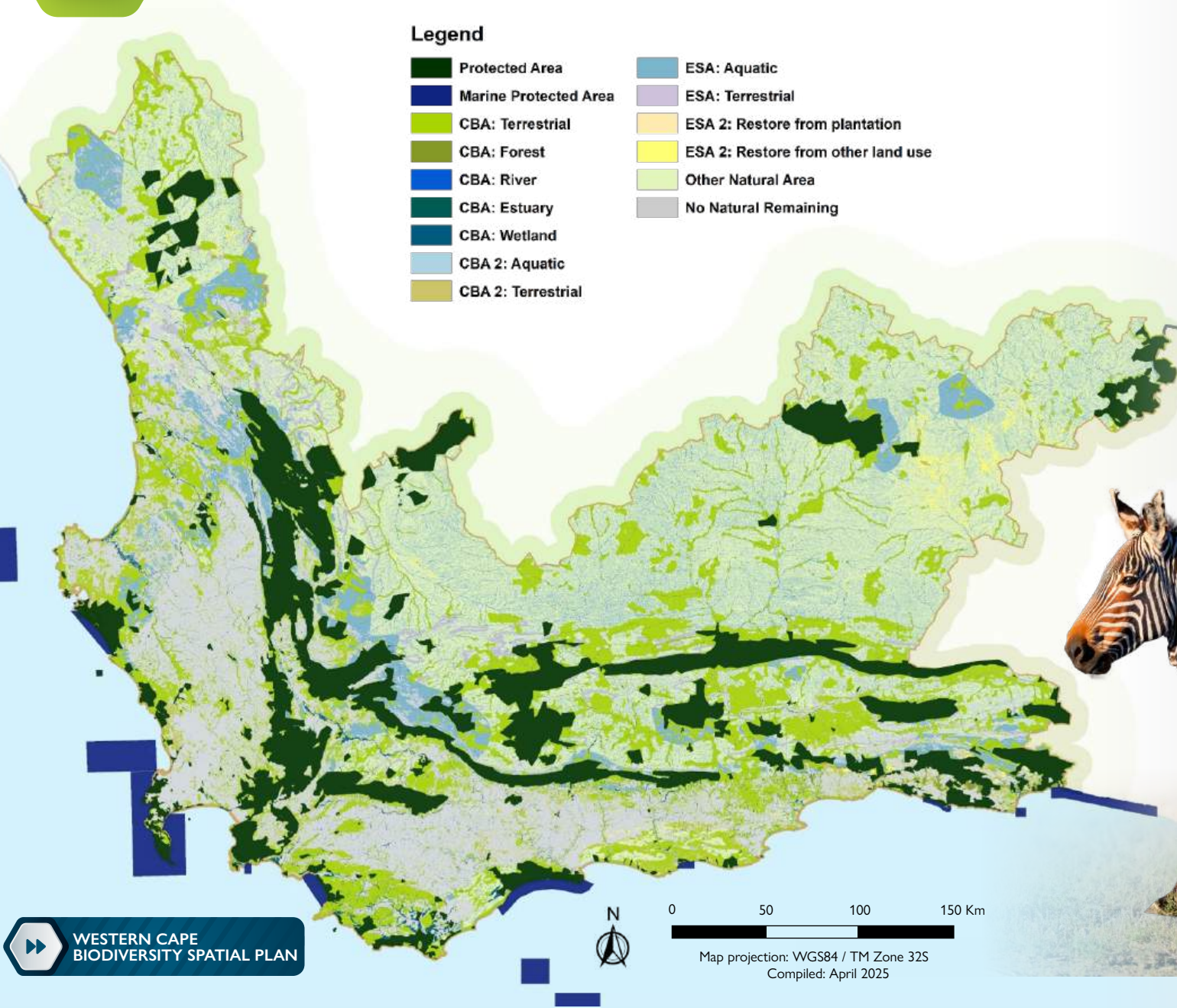


# BIODIVERSITY CRIME RESPONSE





# BIODIVERSITY SPATIAL PLAN GAZETTED FOR ADOPTION



## Legend

- Protected Area
- Marine Protected Area
- CBA: Terrestrial
- CBA: Forest
- CBA: River
- CBA: Estuary
- CBA: Wetland
- CBA 2: Aquatic
- CBA 2: Terrestrial
- ESA: Aquatic
- ESA: Terrestrial
- ESA 2: Restore from plantation
- ESA 2: Restore from other land use
- Other Natural Area
- No Natural Remaining

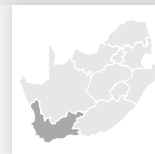
The 2023 Western Cape Biodiversity Spatial Plan was adopted on 13 December 2024 (Gazette Extraordinary 9017).

| WCBSP Category                   | % of Western Cape |
|----------------------------------|-------------------|
| Protected Areas                  | 16.4%             |
| Critical Biodiversity Area (CBA) | 22.0%             |
| Ecological Support Area (ESA)    | 13.4%             |
| Other Natural Areas              | 29.0%             |
| No Natural Remaining             | 19.1%             |





# PROTECTED AREAS EXPANSION STRATEGY & PRIORITISATION



The Western Cape Protected Areas Expansion Strategy sets out the strategic approach for expanding the protected area estate in the Province of the Western Cape. Illustrated below is the technical prioritisation process that underpins the Western Cape Protected Areas Expansion Strategy. The maps presented do not depict the strategy itself but rather the data-driven assessment used to guide where future conservation efforts should be focused.

## FEATURES USED TO CALCULATE THE BIODIVERSITY PRIORITY INDEX

WCBSP 2023 – Terrestrial and aquatic CBAs and ESAs

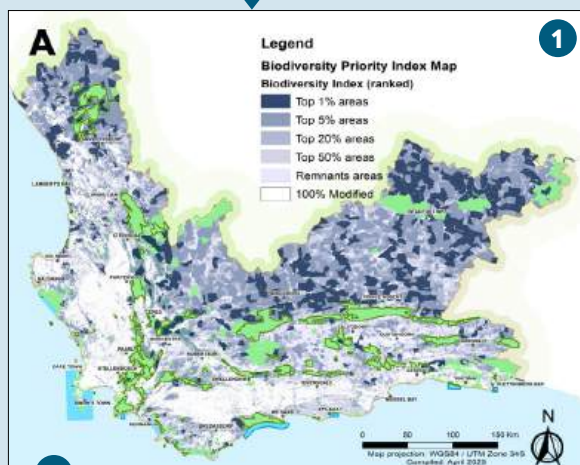
Threatened ecosystems – critically endangered, endangered, and vulnerable

Priority species per protection level

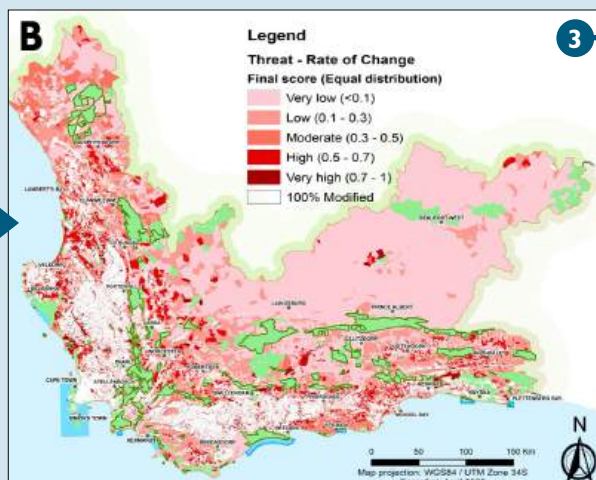
Protection levels – moderately protected, poorly protected, and not protected

Functional remnants based on optimal patch sizes

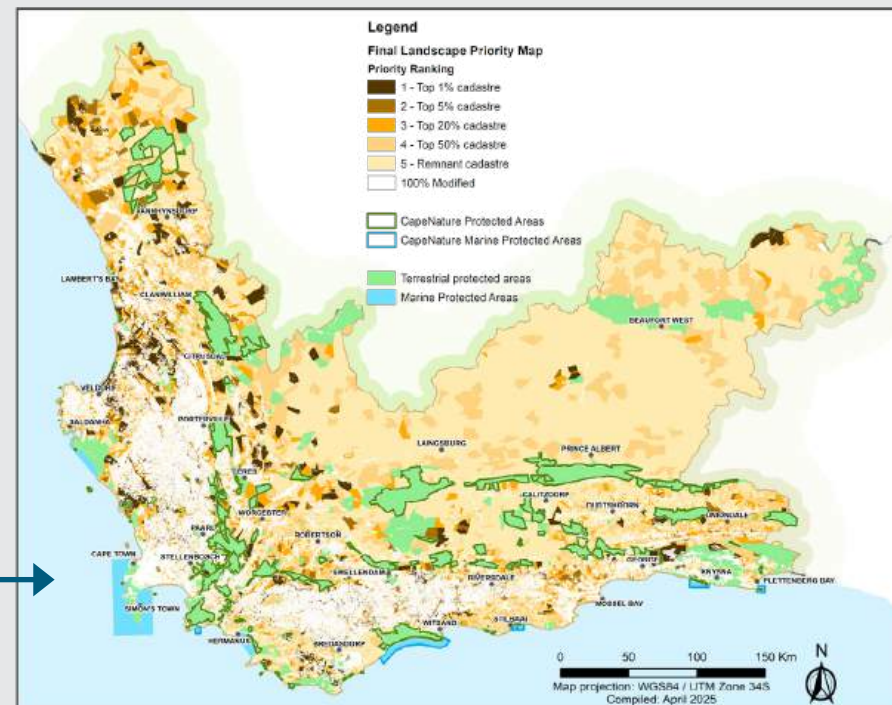
Ecosystem services – coastal corridor, rivers (buffered), wetlands, amongst others.



**B:** The land-use Change Map identifies areas where natural habitats are being rapidly lost due to land-use change (2014–2022), such as agriculture and urban expansion. Higher scores reflect greater pressure on biodiversity.



**A:** The Biodiversity Priority Index Map highlights areas with the highest biodiversity importance based on multiple ecological criteria (see features listed above). Darker areas indicate higher overall biodiversity importance.



**Landscape Priority Map**

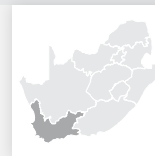
The Landscape Priority Map integrates the biodiversity importance and land-use pressure to produce a prioritised view of the landscape (Western Cape). Areas ranked “1” represent the highest conservation urgency - those with high biodiversity value under immediate threat. This map helps target expansion efforts where they can have the greatest impact.

WESTERN CAPE PROTECTED AREAS EXPANSION STRATEGY

WESTERN CAPE BIODIVERSITY SPATIAL PLAN



# CAPENATURE'S BIODIVERSITY PROTOCOLS



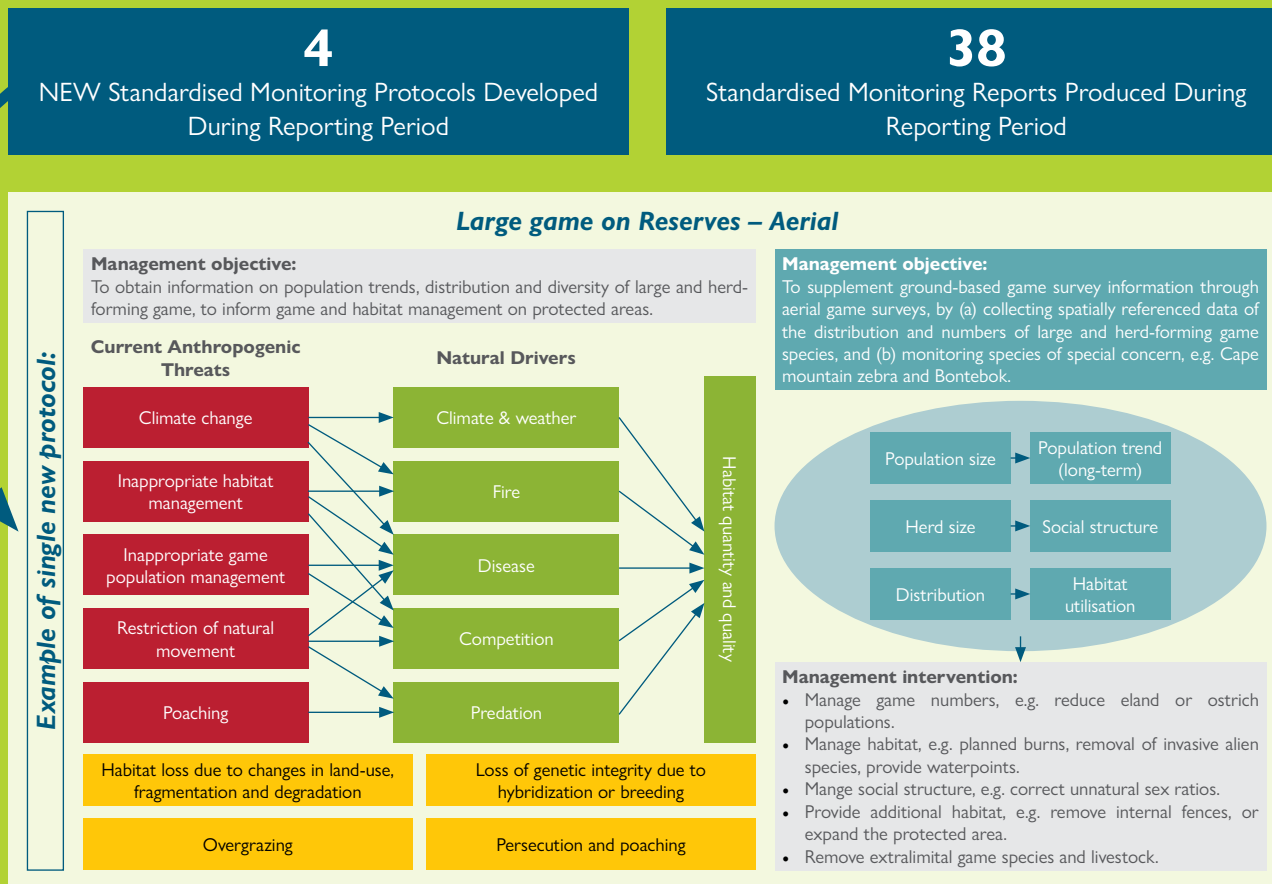
To ensure the reliability, accuracy and reproducibility of data and monitoring efforts, CapeNature ensures organisation-wide adoption of standardised surveillance and monitoring protocols, developed by both internal and external experts. CapeNature also ensures the alignment of protocols to international standards.

## ECOLOGICAL MONITORING PROTOCOLS



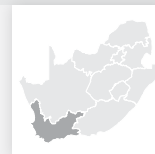
Disclaimer: Protocols are under constant redevelopment/revision. The latest versions can be obtained from the Biodiversity Capabilities/Landscape Conservation Intelligence teams.

## ANNUAL SURVEILLANCE AND MONITORING





# CAPENATURE'S STANDARDS & STRATEGIES

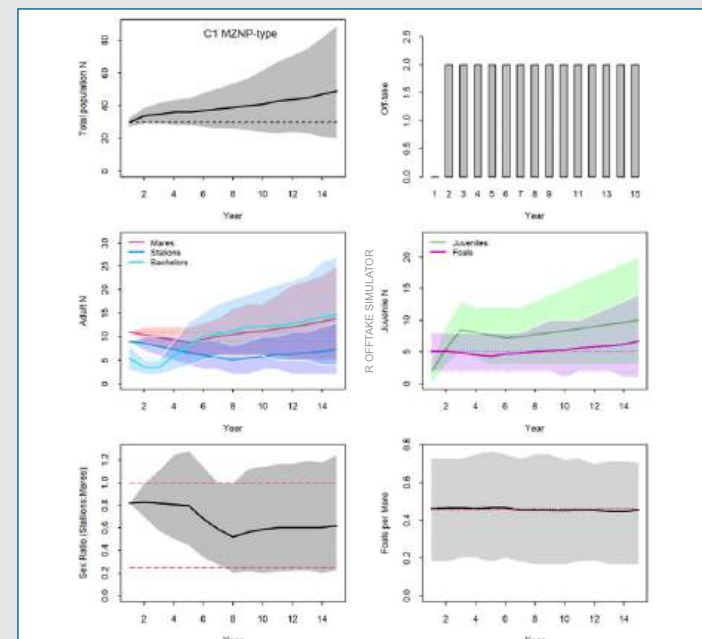


## INTERNAL STANDARDS

- ▶ Species Prioritisation Framework
- ▶ Field & Monitoring Protocols
- ▶ Standard Operational Procedures/Guidelines (SOPs/SOGs)
- ▶ Habitat Restoration & Fire Management Guidelines
- ▶ Data Management Policies
- ▶ Occupational Health and Safety Standards
- ▶ Audit Standards
- ▶ Marine and Boating Standards

## NATIONAL & GLOBAL ALIGNMENT

- ▶ SANBI & DFFE Frameworks
- ▶ National Biodiversity Assessment (NBA)
- ▶ IUCN Red List & Ecosystem Guidelines
- ▶ Global Biodiversity Framework
- ▶ CITES



The CapeNature R offtake simulator tool assists in modelling population viability under differing offtake conditions. \*R scripts available via the Biodiversity Capabilities Team



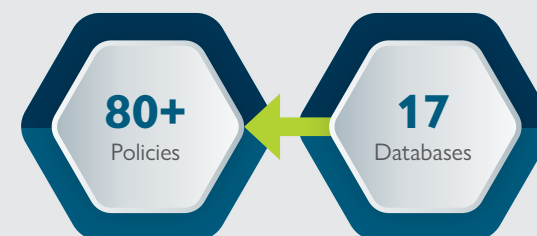
▶▶ IUCN REDLIST

▶▶ CITES



## NEW POLICIES/STRATEGIES DEVELOPED BY CAPENATURE DURING 2024/25

- ▶ 2023 Western Cape Biodiversity Spatial Plan (gazetted for adoption on December 2024).
- ▶ Policy: The Keeping of Pets, Livestock, Poultry and Equids on CapeNature Protected Areas.
- ▶ Policy: Translocation and Utilisation of Raptors in Sport Hunting, Abatement, Exhibition or Rehabilitation Activities.

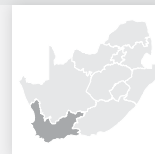


▶▶ THE KUNMENG-MONTREAL GLOBAL BIODIVERSITY FRAMERWORK

▶▶ CONSERVATION STANDARDS



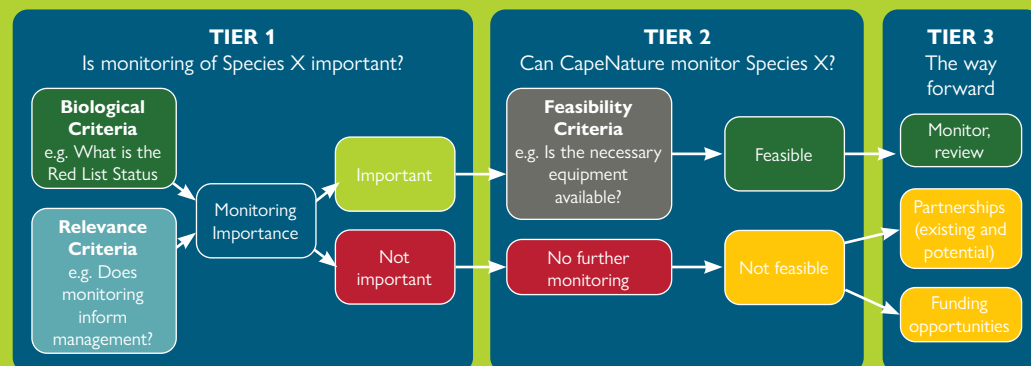
# SURVEILLANCE AND MONITORING PRIORITY SPECIES



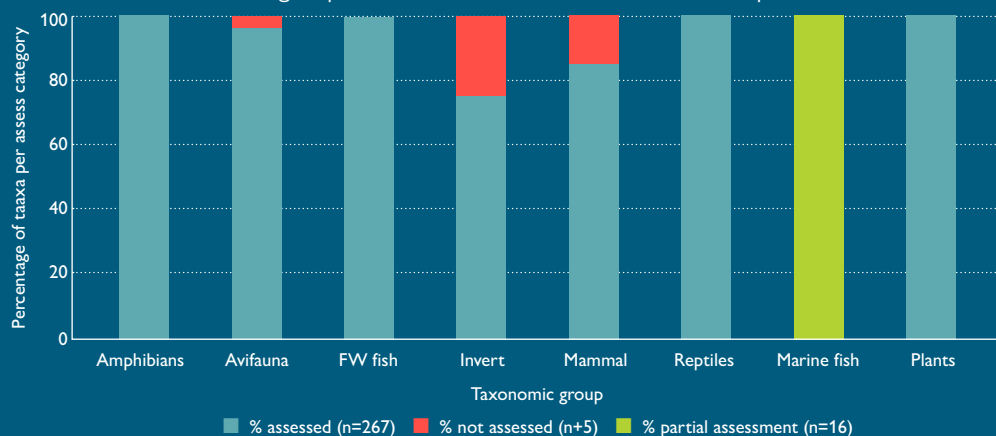
## Species Prioritisation Tool (SPT) for Surveillance & Monitoring

**Purpose:** To optimize CapeNature's surveillance and monitoring (S&M) activities and highlight opportunities for partnerships.

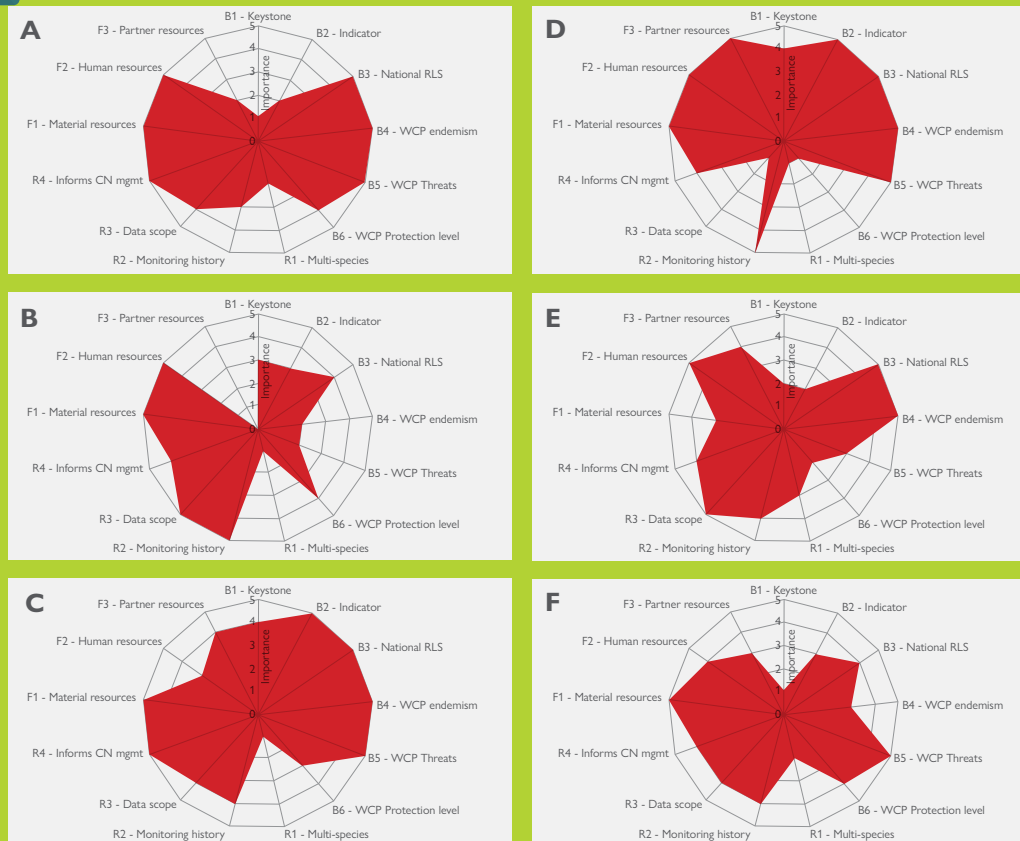
**Approach:** A 3-tier decision-tree (see below) using biological, relevance and feasibility criteria to determine monitoring needs and actions. To date, 267 species have been assessed or partially assessed and are awaiting peer review. Results are thus preliminary and might change.



Percentage of CapeNature priority species evaluated using the prioritisation tool, per taxonomic group. Results will be used to re-assess S&M priorities.



## Prioritisation Tool for Surveillance & Monitoring: Preliminary Results



Radar charts showing Tier 1 results for top three fauna and flora species out of the 267 species assessed using the Prioritisation Tool.

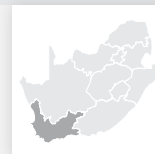
Fauna: A= Brenton Blue Butterfly, B= Cape Vulture, C= African penguin.

Flora: D= Clanwilliam Cedar, E= Hilmar's Tanquana, F= Blue-tongue orchid.

Prioritised species are derived from Protected Area Management Plans, the Western Cape Biodiversity Spatial Plan, and described in the State of Biodiversity Report.



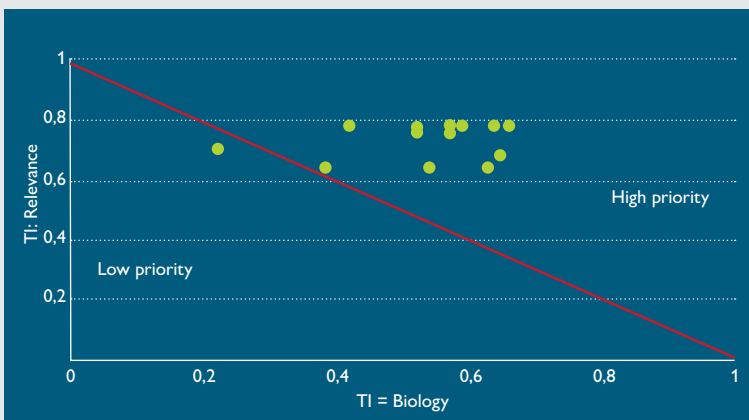
# SURVEILLANCE AND MONITORING PRIORITY SPECIES



## Prioritisation Tool for Surveillance & Monitoring (S&M): Example: Aizoaceae



## Prioritisation Tool for Surveillance & Monitoring (S&M): Example: Amphibians and Reptiles



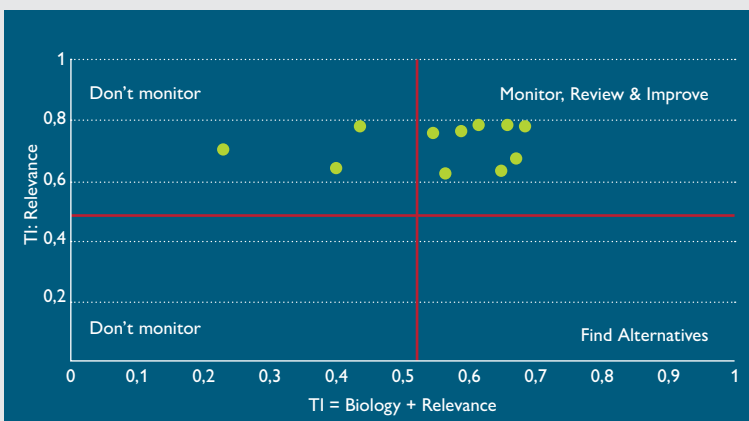
The results of 15 Aizoaceae taxa evaluated using the Prioritisation Tool. Out of the 15 species assessed, 12 are rated as a high priority for S&M while 1 is rated as low a priority.



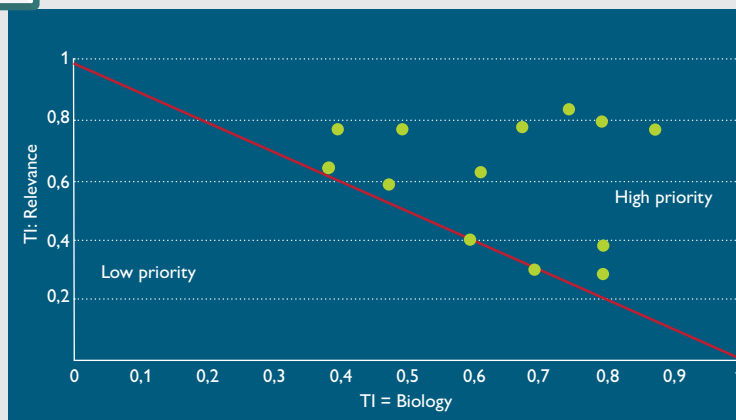
**A:** *Antimima granitica* is listed as Least Concern and the tool confirms that it is a lower priority for surveillance & monitoring for CapeNature. Image from iNaturalist, <https://www.inaturalist.org/observations/145243846>.



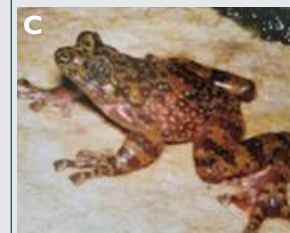
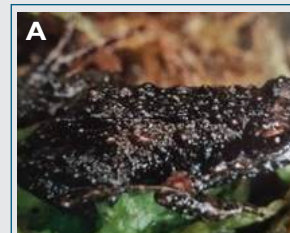
**B:** The Critically Endangered *Tanquana hilmarii* succulent scores highest within the Aizoaceae Family for surveillance and monitoring. This is due its endemism, highly restricted range, and susceptibility to poaching. Currently only one subpopulation remains thus a high priority for S&M. Image from iNaturalist, <https://www.inaturalist.org/observations/10847964>.



When considering feasibility of S&M of the same 15 taxa, the Prioritisation indicates which species are important to monitor internally and where to seek alternatives.



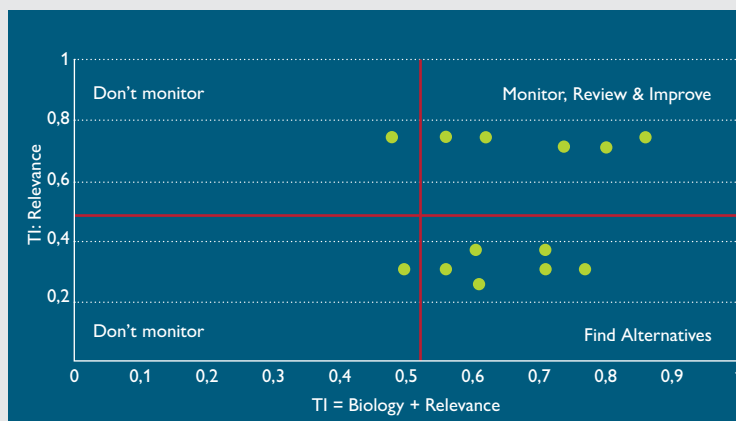
The results of 12 amphibian and reptile taxa evaluated using the Prioritisation Tool. All 12 species are rated as a high priority for S&M based on biological and relevance criteria



**A:** The Critically Endangered Rough Moss Frog, the highest S&M priority for amphibians for CapeNature.

**B:** The Critically Endangered Geometric Tortoise, the highest S&M priority for reptiles for CapeNature.

**C:** The Critically Endangered Table Mountain Ghost Frog, a very high S&M priority, but a lower priority for CapeNature as this frog occurs almost exclusively on SANParks managed land.



When considering feasibility of S&M of the same 12 taxa, the Prioritisation indicates which species are important to monitor internally and where to seek alternatives.



# SURVEILLANCE AND MONITORING PRIORITY SPECIES: FAUNA



## WATERBIRDS – INDICATORS OF THE STATE OF OUR WETLANDS

- ▶ Globally, waterbirds are in trouble
- ▶ Loss of habitat at resting and feeding stops along migration flyways is the main threat.
- ▶ In South Africa, important data on waterbirds is collected through the CWAC (Coordinated Waterbird Counts) project.
- ▶ There are 241 CWAC sites in the Western Cape.
- ▶ In 2024, CapeNature counted a total of 77,479 waterbirds at 40 sites.
- ▶ 6 of the 39 sites are Ramsar Wetlands of International Importance and 7 are in Marine Protected Areas.

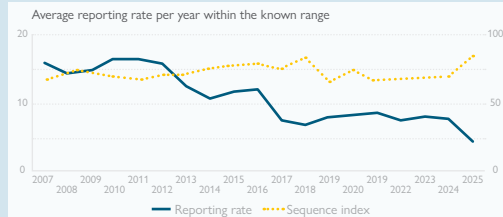


**Birdie v1.0.0** is an innovative data pipeline which pulls information from the CWAC and African Bird Atlas projects, with background statistical analyses and modelling.

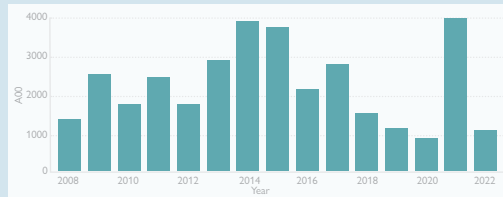


## RED FLAG: GREAT CRESTED GREBE

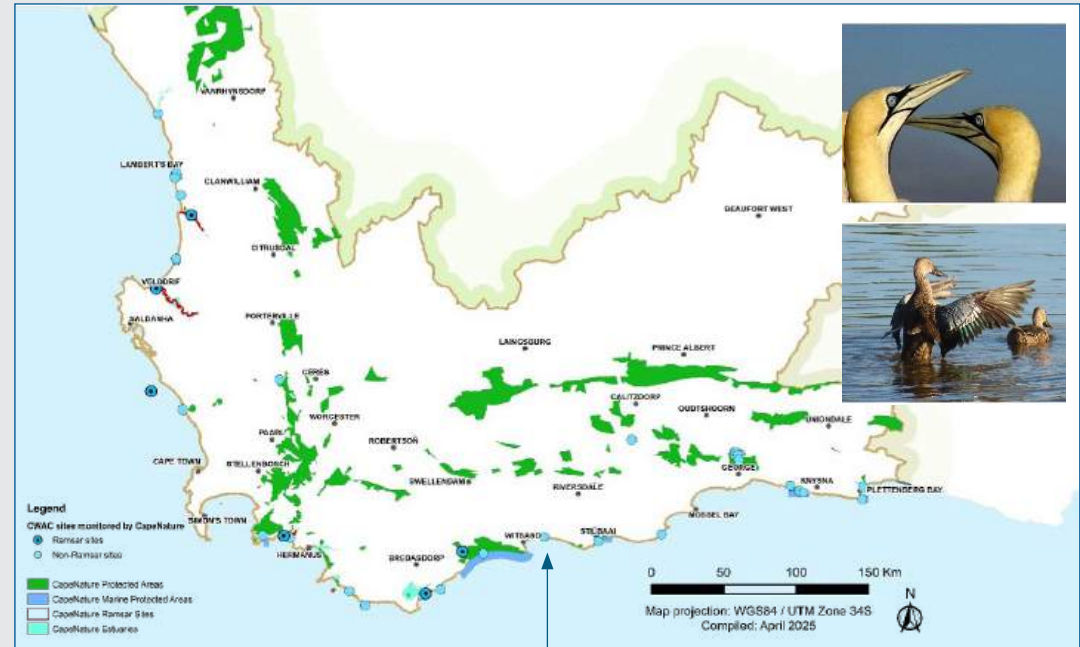
- ▶ Western Cape supports most of the national population.
- ▶ Classified as Least Concern but status likely to worsen due to a severe overall population decline and a decrease in Area of Occupancy.
- ▶ De Hoop Vlei is the CWAC site with the highest average and maximum counts (189 and 558 respectively) for this species, although numbers are influenced by rainfall and vlei level.



The average reporting rate per year for Great Crested Grebe shows a declining population (extracted from SABAP2).

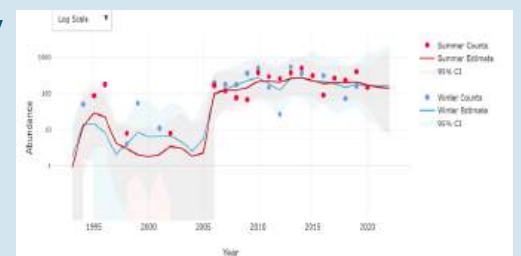


Change in Area of Occupancy of Great Crested Grebe indicates a shrinking distribution (extracted from Birdie)



## DE HOOP VLEI

- ▶ A globally important wetland.
- ▶ An important tourist attraction.
- ▶ The oldest Ramsar site in South Africa.
- ▶ 63 CWAC counts since 1992.
- ▶ Supports on average more than 8000 birds of 97 species.
- ▶ 12,224 birds of 40 species counted in summer 2024.
- ▶ Threatened species include Greater Flamingo (NT) and Great White Pelican (VU).
- ▶ Over a 10-year period, numbers of 17 species have increased and 24 have decreased



De Hoop Vlei population trend, Great Crested Grebes (extracted from Birdie)





# SURVEILLANCE AND MONITORING PRIORITY SPECIES: FAUNA

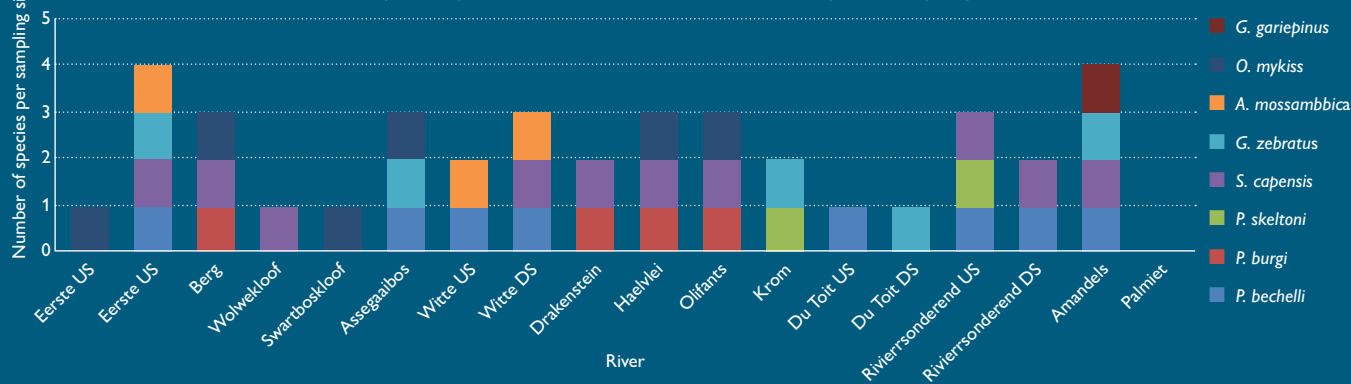


**Surveillance:** Data collected through either ad hoc observations or focal biodiversity surveys providing occurrence information which is useful for determining species persistence or changes in species distribution. An example on one surveillance project is the Boland Mountain Complex Fish Survey.

## BOLAND MOUNTAIN COMPLEX FISH SURVEY

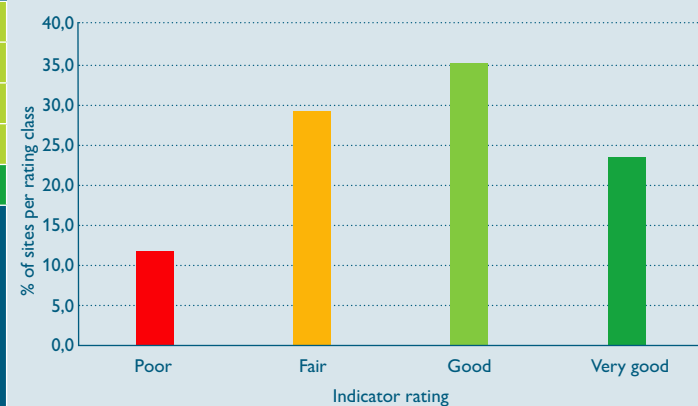
- Four reserves were surveyed namely Hawequas, Hottentots-Holland, Theewaters and Jonkershoek. Eighteen sites were surveyed in 14 rivers located in both the Berg and the Breede River systems.
- More than 50% of sites sampled could be categorised into the “Good” and “Very good” categories in terms of the indicator rating for the Complex.
- The persistence of the Endangered Giant redbfin was confirmed for two of the three known populations but remain highly threatened in the Krom River due to the presence of invasive fish.

Fish Community Composition for Boland Mountain Complex Sampling Sites



### Indicator Ratings To Define The Condition Of The Freshwater Fish Community

| Key attribute                  | Indigenous freshwater fish species composition                                                                              |                                                                                                                     |                                                                                                                        |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Indicator                      | % Indigenous fish species composition and age class                                                                         |                                                                                                                     |                                                                                                                        |
| Indicator Ratings              |                                                                                                                             |                                                                                                                     |                                                                                                                        |
| Poor                           | Fair                                                                                                                        | Good                                                                                                                | Very Good                                                                                                              |
| Indigenous fish species absent | 50% or less of expected indigenous fish species present, only 1 age class present. Some invasive alien fish species present | >50% of expected indigenous fish species present, 1-2 age classes present. Some invasive alien fish species present | 100% of expected indigenous fish species present and all 3 age classes present. No invasive alien fish species present |





# SURVEILLANCE AND MONITORING PRIORITY SPECIES: FAUNA

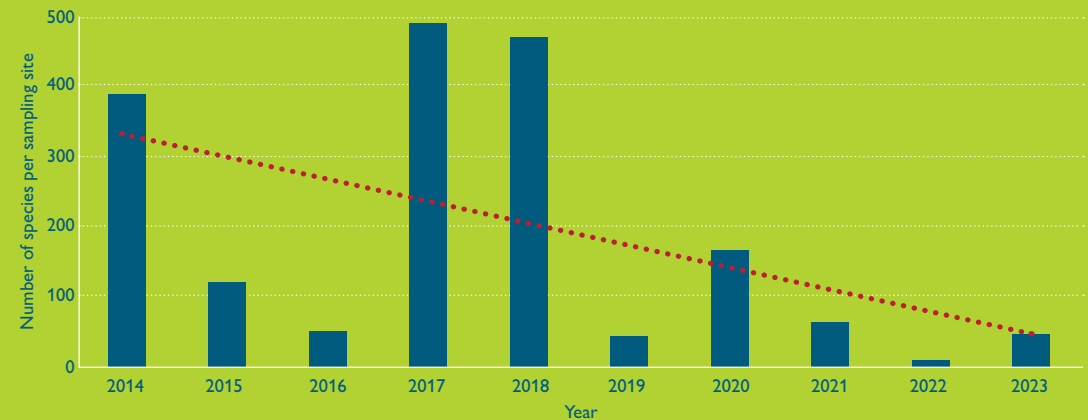


**Surveillance:** Data collected through either *ad hoc* observations or focal biodiversity surveys providing occurrence information which is useful for determining species persistence or changes in species distribution. An example of long-term plant monitoring of *Sorocephalus imbricatus* has been shown here.

- ▶ Critically Endangered *S. imbricatus* occurs at three sites in the Waterval Nature Reserve.
- ▶ Long-term monitoring revealed threats beyond fire and invasive plants.
- ▶ *Phytophthora cinnamomi* was discovered, causing severe population decline.
- ▶ Early detection enabled conservation actions to mitigate population decline.

- ▶ <160 mature individuals; population declining.
- ▶ Most subpopulations have <10 mature individuals, with high mortality in both immature and mature individuals.
- ▶ The species has been rescued by CapeNature, SANBI, Millennium Seed Bank, and CREW to support *ex-situ* conservation efforts.

## CapeNature Protected Area Long Term Plant Monitoring Sites



This graph was generated using average population counts per year of *S. imbricatus*.



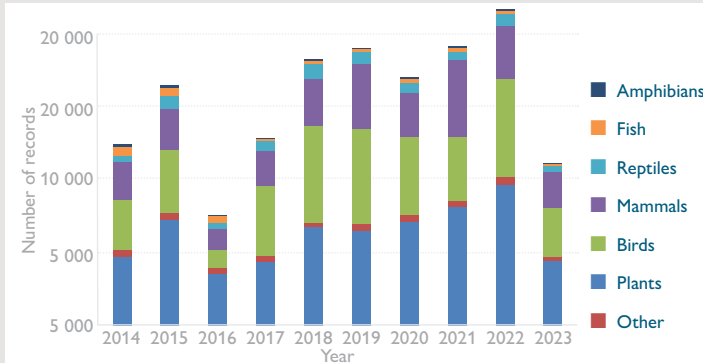


# CAPENATURE'S DATA RESOURCES (ASSETS)



## DATA MANAGEMENT AND TECHNOLOGY

Conservation data management is critical for making informed conservation decisions at CapeNature. This requires regular investment into and review of the latest technology and ways to improve efficiencies and integration with internal and partner data systems. The **FireWeb** and **CMSi** systems are examples of CapeNature's recent investment to improve data management and reporting efficiencies.



*Biodiversity data records collected from 2014 to 2023*

## CAPENATURE DATASETS

CapeNature collects various datasets that fall into broad conservation management and legally-mandated categories:

- ▶ Indigenous species distribution, population and status
- ▶ Conservation Estate
- ▶ Invasive Alien Plants
- ▶ Fire history and veld age
- ▶ Environmental Law enforcement
- ▶ Ecological, Management and Tourism infrastructure
- ▶ Land-use advice
- ▶ Freshwater monitoring
- ▶ Biodiversity Spatial Planning

## EXTERNAL DATASETS

CapeNature relies on several partners who share data to inform its operations:

- ▶ iNaturalist
- ▶ Custodians of Rare and Endangered Wildflowers (CREW, TSP)
- ▶ Research permit data
- ▶ SANBI biodiversity data
- ▶ National Biodiversity Assessment
- ▶ SAEON

## CAPENATURE'S CONTRIBUTION TO THE IUCN RED LIST



The IUCN Red List for Threatened Species is a global indicator of the health of the world's biodiversity. The list is used to inform conservation policy, decisions and actions and contains information on species range, population, habitat, ecology, utilisation and threats. CapeNature contributes biodiversity data to the IUCN Red List via SANBI's Threatened Species Programme who collect data from various sources, including provinces, like the Western Cape.

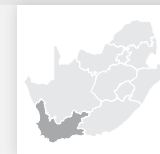
## DATA STANDARDS

CapeNature adheres to international data standards for consistency, comparison and interoperability:

- ▶ IUCN
- ▶ Darwin Core
- ▶ Conservation Standards



# PARTNERSHIPS FOR CONSERVATION SUCCESS



CapeNature acknowledges the need for collaboration in sustaining biodiversity conservation and the Biodiversity Economy. CapeNature values and pursues working with communities, private landowners, civil society, conservation organisations, researchers, tertiary institutions and other spheres of government to deliver on conservation targets. CapeNature engages in numerous, valued, formal and informal working collaborations.

**The partners with whom the entity has formal agreements for biodiversity conservation are listed below.**

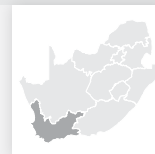
|    |                                                                                              |
|----|----------------------------------------------------------------------------------------------|
| 1  | Afritrails                                                                                   |
| 2  | Berg River Municipality                                                                      |
| 3  | BirdLife South Africa                                                                        |
| 4  | Boland-Grootwinterhoek SWSA Collective                                                       |
| 5  | Buffalo Valley Trust                                                                         |
| 6  | Cape Agency for Sustainable Integrated Development in Rural Areas (CASIDRA)                  |
| 7  | Cape Floristic Region Partnership                                                            |
| 8  | Cape Floristic Region Protected Areas World Heritage Site: DFFE, CapeNature, SANParks, ECPTA |
| 9  | Cape Peninsula Fire Protection Association (CPFPA)                                           |
| 10 | Cape Peninsula University of Technology (CPUT)                                               |
| 11 | Cape Winelands District Municipality                                                         |
| 12 | Centre for Estuarine Research and Conservation (CERC)                                        |
| 13 | Centre for Invasion Biology (CIB)                                                            |
| 14 | Chrysalis Academy                                                                            |
| 15 | City of Cape Town                                                                            |
| 16 | Conservation at Work                                                                         |
| 17 | Conservation Outcomes                                                                        |
| 18 | Department of Agriculture                                                                    |
| 19 | Department of Forestry Fisheries and the Environment (DFFE)                                  |
| 20 | Department of Infrastructure                                                                 |
| 21 | Dyer Island Conservation Trust (DICT)                                                        |
| 22 | Die Galg Farm                                                                                |
| 23 | Educo South Africa                                                                           |

|    |                                                             |
|----|-------------------------------------------------------------|
| 24 | Endangered Wildlife Trust (EWT)                             |
| 25 | False Bay TVET College (FBC)                                |
| 26 | Flower Valley Conservation Trust                            |
| 27 | Forge                                                       |
| 28 | Friends of the Tollhouse                                    |
| 29 | Garden Route District Municipality                          |
| 30 | Gift of the Givers/Waqful Wagfin Foundation                 |
| 31 | Greater Cederberg Fire Protection Association (GCFPA)       |
| 32 | Greater Overberg Fire Protection Association (GOFPA)        |
| 33 | Grootbos                                                    |
| 34 | Heuningvlei Community                                       |
| 35 | Hospitality Property Fund                                   |
| 36 | Invasive Fish Species Management (IFSM)                     |
| 37 | Kaapjag                                                     |
| 38 | Kishugu Training                                            |
| 39 | Leisure Charitable Trust: Berg Estuary                      |
| 40 | Leisure Charitable Trust: Walker Bay                        |
| 41 | Leisure Conservation Trust                                  |
| 42 | Logos, Ethos & Pathos Consulting (Pty) Ltd t/a Nightsbridge |
| 43 | Mapula Trust                                                |
| 44 | Mountain Runner Events (Pty) Ltd                            |
| 45 | Mountains to Oceans (MTO) Forestry                          |
| 46 | National Department of Tourism                              |
| 47 | National Research Foundation (NRF)                          |
| 48 | Nature Connect: Sustainable Schools                         |

|    |                                                                             |
|----|-----------------------------------------------------------------------------|
| 49 | Ocean Finance Company                                                       |
| 50 | On The Ball College (OTBC)                                                  |
| 51 | Outward Bound South Africa                                                  |
| 52 | Overberg Renosterveld Conservation Trust                                    |
| 53 | Overstrand Municipality                                                     |
| 54 | Rocklands Landowners Agreement                                              |
| 55 | Sanbona Wildlife Reserve                                                    |
| 56 | SCOUTS                                                                      |
| 57 | South African Hikers Network                                                |
| 58 | South African Institute for Aquatic Biodiversity (SAIAB)                    |
| 59 | South African National Biodiversity Institute (SANBI)                       |
| 60 | South African National Parks (SANParks)                                     |
| 61 | South African Shark Conservancy (SASC)                                      |
| 62 | Southern African Foundation for the Conservation of Coastal Birds (SANCCOB) |
| 63 | Southern Cape Fire Protection Association (SCFPA)                           |
| 64 | Swartland Municipality                                                      |
| 65 | The Nature Conservancy (TNC)                                                |
| 66 | University of the Western Cape (UWC)                                        |
| 67 | Volunteer Wildfire Services (VWS)                                           |
| 68 | Warrior on Wheels                                                           |
| 69 | West Coast District Municipality (WCDM)                                     |
| 70 | Western Cape Government (PDMC)                                              |
| 71 | Winelands Fire Protection Association (WFPA)                                |
| 72 | Working on Fire (WoF)                                                       |
| 73 | World Wildlife Fund (WWF)                                                   |



## FURTHER READING BIBLIOGRAPHY



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