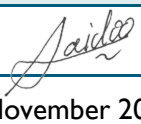
WESTERN CAPE NATURE CONSERVATION BOARD	
POLICY DOCUMENT CONTROL	
DIRECTORATE:	Biodiversity Capabilities
POLICY NAME:	Transport and utilisation of indigenous freshwater fishes in the Western Cape Province
RESOLUTION NUMBER:	3 of 2025/16
RECOMMENDED BY CHIEF EXECUTIVE OFFICER	
SIGNATURE:	
DATE:	13 November 2025
APPROVED BY BOARD CHAIRPERSON	
SIGNATURE:	
DATE:	13 November 2025
EFFECTIVE FROM DATE:	13 November 2025

REVISION

Revision Number	Revision Date	Type of Change	Proponent
2	October 2025	The review changes are mostly editorial and formatting in nature, improving consistency, layout, and readability. There are no major substantive policy alterations. Changes largely seek clarifications or formatting checks rather than introducing new content or removing policy provisions.	

EXTERNAL STAKEHOLDER ENGAGEMENTS (REGULATORY POLICIES)

Not applicable

CAPENATURE POLICY

Table of Contents

1. DEFINITIONS

Term	Definition
Alien Invasive species	Any species whose establishment and spread outside its natural distribution range - (a) threatens ecosystems, habitats or other species or has demonstrable potential to threaten ecosystems, habitats or other species; and (b) may result in economic or environmental harm or harm to human health; (see Section 1 of NEMBA).
Biodiversity Management Plan for Species	Species management plan aimed at ensuring long-term survival of a particular species in the wild.
Diadromous	Fish species migrating between freshwater and seawater environments (Skelton, 2024).
Endemic	Any taxon confined to, or exclusive to, a particular specified area within, in this case, the Western Cape Province (WCP).
Evolutionary significant unit (ESU)	A genetically differentiated population within a species that require separate genetic management and has a high priority for separate conservation (Frankham et al., 2002).
Extra-limital	A species indigenous to South Africa that is translocated or intended to be translocated to a place outside its natural or historic distribution range, but not an indigenous species that has extended its natural distribution range by natural means of migration or dispersal without human intervention (see Section 1 of NEMBA).
Freshwater	Fresh aquatic inland water bodies, including but not limited to; rivers, lakes, streams, springs, and wetlands.
Ichthyological	Derived from "ichthyology" meaning the scientific study of fishes (Skelton, 2024).
Indigenous species	A species that occurs, or has historically occurred, naturally in a free state in nature within the borders of the WCP but excludes a species that has been introduced in the WCP as a result of human activity.

Landowner	The legal owner of the land in question as defined by the term "owner" in the Western Cape Nature Conservation Laws Amendment Act (Act No. 3 of 2000)
Natural distribution range	The area within which a species occurs naturally, or occurred naturally in historic times, and includes range extensions by means of natural migration or dispersal without human intervention.
Protected area	Includes special nature reserves, nature reserves (including wilderness areas), protected environments, world heritage sites, specially protected forest areas, forest nature reserves and forest wilderness areas declared in terms of the National Forests Act, 1998 (Act No. 84 of 1998), and mountain catchment areas declared in terms of the Mountain Catchment Areas Act, 1970 (Act No. 63 of 1970) (see Sections 1 and 9 of NEM:PAA).
Species	For the purposes of this policy, a group of animals that does not normally interbreed with individuals of another group, and includes any sub-species, geographic race, ecotype, strain, hybrid or geographically separate population; (see Section 1 of NEMBA).
Species conservation management plan	A management plan compiled according to relevant IUCN guidelines or NEM:BA legislation.
Threatened	Any species listed as threatened according to the criteria of the International Union for the Conservation of Nature (IUCN). Threatened includes those species listed as vulnerable, endangered and critically endangered. Threatened also includes those species listed as threatened or protected according to Section 56(1) of NEMBA.

2. INTRODUCTION

The National Environmental Management: Biodiversity Act (NEMBA) (Act No. 10 of 2004) was promulgated to provide for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act (Act No.107 of 1998) and the protection

of species and their associated ecosystems that warrant national protection as stated in the National Environmental Management: Protected Areas Act (Act No. 57 of 2003), as well as the sustainable use of indigenous biological resources. The conservation and utilisation of the biodiversity of the Western Cape Province (WCP) is provisioned for in the Western Cape Biodiversity Act (No. 6 of 2021) and is managed by the Western Cape Nature Conservation Board (hereafter referred to as CapeNature). The following policy was formulated to serve as a guiding document for the conservation and ecologically sustainable utilisation of the indigenous freshwater fishes of the WCP.

Rationale for a policy on the utilisation of indigenous freshwater fishes of the WCP

The Cape Fold Ecoregion (CFE) is one of the eight aquatic ecoregions of South Africa (Abell et al., 2008). This region, situated mainly within the borders of the WCP, contains the highest number of endemic and threatened freshwater fish species in South Africa (Chakona et al., 2022) as indicated in Table 1. Numbers of endemic and threatened taxa continue to increase as a result of ongoing morphological and genetic studies (Chakona and Swartz, 2013; Chakona et al., 2013; Chakona et al., 2014; Chakona and Skelton, 2017; Kambikambi et al., 2020, Zarei et al., 2025a, b).

Presently there are 26 described primary freshwater fish species, and an additional 11 known lineages present in the WCP. Of these, 27 (73%) are endemic and 24 (65%) are threatened (Critically Endangered n=4, Endangered n=13, Vulnerable n=7). The number of unique taxa are expected to further increase as undescribed genetic diversity exist within some described species such as the Cape kurper *Sandelia capensis* (Bronaugh et al. 2020). The presence of new species and lineages present a conservation challenge and requires that the precautionary approach should be followed with the management of these taxa. The five primary reasons for taking a conservative approach to the utilisation of the indigenous species of the WCP are as follows: (1) most of the unique lineages are in the process of being described as new species; (2) most of the unique lineages are potentially highly threatened; (3) many of them can potentially hybridise with each other; (4) the distribution ranges of most of the unique lineages have not yet been established; and (5) the environmental requirements for most of the unique lineages are not known.

The first major step taken by the Western Cape provincial conservation authorities to control the utilisation of indigenous freshwater fishes was in 1974 with the proclamation of the Nature Conservation Ordinance (Ordinance 19 of 1974) ("Ordinance"). This Ordinance afforded protection to indigenous freshwater fishes listed on its Schedule 1 (Endangered Wild Animals) and was applicable

to the entire former Cape Province. The Ordinance has since been amended by the Western Cape Nature Conservation Laws Amendment Act (Act No. 3 of 2000). The Ordinance is currently in the process of being revised by CapeNature. Four freshwater fish species in the province are presently listed as Threatened and Protected Species (ToPS) in terms of section 56(1) of the NEMBA (2004) regulations. It must be noted that while this policy only deals with primary freshwater species, it is also applicable to diadromous species such as freshwater eels (*Anguilla spp.*) and mullets (Family *Mugilidae*) in cases where it does not conflict with the National Marine Living Resources Act (Act 18 of 1998) or any other legislation relating to the conservation and utilisation of these species.

As a requirement of the Ordinance, a permit system has been used to control the collection, possession, transport, export and import of all the freshwater fishes indigenous to the former Cape Province, including the alien fishes occurring in the province. This system was reviewed and updated in 2009 and now allows for capturing GPS localities and allows for the use of draft NEMBA Alien Invasive Species (AIS) maps and National Freshwater Ecosystem Priority Areas (NFEPA) fish sanctuaries as decision support tools. In addition to the above-mentioned legislation and the permit system, and in response to research showing high levels of genetic differentiation, the present policy was developed to guide the utilisation of all indigenous freshwater fishes. It is envisaged that species-specific management plans will be developed for a number of species according to the Norms and Standards for Biodiversity Management Plans for Species (BMP-S) that were promulgated in 2009. Candidate species for a BMP-S will be listed and prioritised according to their conservation status and severity of threats to the species. At the time of publication of this policy, a BMP was gazetted (*Gazette* No. 39899) for the Clanwilliam sandfish (*Labeo seeberi*) and a plan had been initiated for the Tradouw redfin (*Pseudobarbus burchelli*).

Table 1: Current conservation status of the 26 described freshwater fishes of the WCP and a further 11 undescribed lineages included in the latest IUCN assessment (Chakona et al., 2022). Key: CR = Critically Endangered, E = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern, DD = Data deficient. * = Species endemic to the WCP, # = species near-endemic to the WCP.

Species	Common name	Status	Distribution
**Austroglanis barnardi*	Barnard's rock catfish	EN	Endemic to Olifants-Doring River system.
**Austroglanis gilli*	Clanwilliam rock catfish	NT	Endemic to Olifants-Doring River system.
#Cheilobarbus serra	Clanwilliam sawfin	NT	Endemic to Olifants-Doring River system
**Cheilobarbus capensis*	Berg-Breede River whitefish	EN	Berg and Breede River systems
**Enteromius anoplus*	Chubbyhead barb	VU	Endemic to Gouritz River system.
#Enteromius cernuus	Olifants-Doring chubbyhead barb	VU	Endemic to Olifants-Doring river system.
Enteromius mandelai	Eastern Cape chubbyhead	LC	Mostly in the Eastern Cape Province, distribution in Gamtoos River system extends into the WCP.
#Galaxias zebratus	Mountain galaxias	DD	Olifants River south to False Bay.
**Galaxias dubius*	Cloudy galaxias	NA	South Coast from Agulhas to Plettenberg Bay.
**Galaxias punctifer*	Vlei galaxias	NA	Lowland streams and wetlands of the Atlantic coast, from Verlorenvlei south to False Bay.
**Galaxias sp. nov. 'Breede'*	Undescribed *Galaxias* lineage	EN	Known from three locations within a single quaternary catchment in upper Breede River.
**Galaxias sp. nov. 'Goukou'*	Undescribed *Galaxias* lineage	VU	Endemic to the Goukou River system.

**Galaxias sp. nov. 'Gourits'*	Undescribed *Galaxias* lineage	VU	Endemic to Weyers River sub-catchment of Gouritz system.
**Galaxias sp. nov. 'Heuningnes'*	Undescribed *Galaxias* lineage	EN	Restricted to the Heuningnes and Ratel River system on the Agulhas Plain.
**Galaxias sp. nov. 'Klein'*	Undescribed *Galaxias* lineage	EN	Restricted to sections of the Klein, Uilkraals and Haelkraal River systems on the Agulhas Plain.
**Galaxias sp. nov. 'Riviersonderend'*	Undescribed *Galaxias* lineage	VU	Upper Riviersonderend River and six of its tributaries. Also occurs in the Palmiet River system.
**Galaxias sp. nov. 'slender'*	Undescribed *Galaxias* lineage	CR	Only known from a single locality at Franskraal in the Uilkraals River system.
**Galaxias sp. nov. 'Verlorenvlei'*	Undescribed *Galaxias* lineage	EN	Endemic to the Verlorenvlei River system.
Glossogobius callidus	River goby	LC	East coast rivers and estuaries from Mozambique to Swartvlei region in the Southern Cape.
#Labeo seeberi	Clanwilliam sandfish	EN	Indigenous and endemic to Olifants-Doring system.
Labeo umbratus	Moggel	LC	Gouritz and Gamtoos River systems, widespread in rest of South Africa.
#Labeobarbus seeberi	Clanwilliam yellowfish	NT	Endemic to Olifants-Doring River system, extralimital population in the Twee River catchment.
#Pseudobarbus asper	Smallscale redfin	VU	Gouritz and Gamtoos River systems.
**Pseudobarbus burchelli*	Tradouw redfin	CR	Tradouw catchment, Breede River system.
**Pseudobarbus burgi*	Berg River redfin	EN	Berg River system.
**Pseudobarbus phlegethon*	Fiery redfin	EN	Cederberg tributaries of the Olifants River system.
**Pseudobarbus skeltoni*	Giant redfin	EN	Breede River system
**Pseudobarbus vulneratus*	Breede River redfin	VU	Breede River system

**Pseudobarbus* sp. 'Doring'	Doring River redfin	CR	Restricted to tributaries of the Doring River system.
**Pseudobarbus outeniqua*	Outeniqua redfin	NT	Occurs in several coastal river systems from the Tsitsikamma to the Klein Brak River system.
**Pseudobarbus* sp. 'Heuningnes'	Agulhas redfin	EN	Endemic to the Heuningnes River system.
**Pseudobarbus* sp. 'Keurbooms'	Keurbooms slender redfin	EN	Restricted to the Keurbooms and Bitou River catchments.
**Pseudobarbus tenuis*	Slender redfin	NT	Gouritz River system.
**Pseudobarbus verloreni*	Verlorenvlei redfin	EN	Verlorenvlei River system.
**Sedercypris calidus*	Clanwilliam redfin	NT	Olifants-Doring River system.
**Sedercypris erubescens*	Twee River redfin	CR	Twee River catchment, Olifants River system
#Sandelia capensis	Cape kurper	DD	Indigenous and near-endemic to the WCP but extralimital in the Twee River catchment.

3. POLICY AIMS

This policy serves as a formal document, based on published science, expert knowledge and best management practices, to guide the transport and utilisation of the indigenous freshwater fishes of the WCP. This is to ensure the conservation and long-term survival of all indigenous species, allowing for sustainable and equitable utilisation of these species, while at the same time not conflicting with conservation goals, objectives and deliverables.

4. POLICY PRINCIPLES

In alignment with relevant national and provincial conservation legislation, this policy includes, but is not limited to, the following key principles.

4.1 Promotion and facilitation of the conservation of healthy natural populations of indigenous freshwater fishes and their associated habitats and to attempt to prevent any extinctions.

4.2 Ensuring that any use of indigenous freshwater fishes is carried out in a professional and sustainable manner that will at no time threaten the species, its genetic integrity or its associated habitat.

4.3 Conserving genetic integrity of freshwater fish populations based on current genetic data and best conservation management practices. In the absence of genetic data, this is ensured by not allowing the movement of individual fish outside their immediate catchments as a precautionary approach.

4.4 Prevent the stocking of indigenous fish species outside their natural and existing known extra-limital distribution ranges.

4.5 Ensuring that the costs of environmental damage, and subsequent rehabilitation and restoration, caused by unintentional escapes as well as unauthorised stockings of indigenous fishes, are borne by the responsible party according to the "polluter pays" principle.

4.6 Ensuring that no indigenous species listed in Schedule 1 of the Ordinance is commercially traded or kept in home aquaria or garden ponds without a permit.

4.7 Ensuring consistency in application of the policy objectives.

5. SCOPE AND INTENDED AUDIENCE OF THE POLICY

5.1 This policy applies to any person in their private or professional capacity, as well as any association or institution who/that wishes to utilise any of the indigenous freshwater fishes of the WCP for scientific, private or commercial use.

5.2 The policy must be read concurrently with any/all applicable national and provincial legislation and any/all associated CapeNature policies, species conservation management plans or species recovery plans.

5.3 This policy requires compliance with all relevant national and provincial transport, import and export permit conditions required for administrative, veterinary or any other purposes.

5.4 Any deviation/exemption from the contents of this policy may only occur if there is written motivation for such an action and the action is recommended by CapeNature's Wild Animal Advisory Committee and approved at the Director Level.

5.5 All relevant proposals/permit applications regarding utilisation of indigenous fish species will be assessed by CapeNature's Wild Animal Advisory Committee.

5.6 The conservation principles endorsed in this policy and associated documents will not be compromised by socio-economic considerations.

6. POLICY STATEMENT

POLICY OBJECTIVE 1. To promote sustainable utilisation of indigenous freshwater fish species through the development of a sound knowledge base and by supporting partnership development

Action 1.1 Establish a provincial inventory

1.1.1 CapeNature will, in partnership with parties involved in freshwater fishes inventories and research (such as museums and universities), establish and maintain a provincial inventory on the distribution ranges as well as taxonomic and conservation status of the freshwater fishes in the WCP. The most recent version of the IUCN Red List criteria will be applied.

1.1.2 Private individuals are encouraged to submit records (as photographs and GPS points) to iNaturalist.

1.1.3 CapeNature will establish and maintain an electronic database of all permit applications controlling the movement, culture and stocking of indigenous fishes in the WCP.

Action 1.2 Promote ichthyological research

1.2.1 CapeNature supports research on the biology and ecology of the WCP's indigenous freshwater fishes. All research is subjected to a valid research permit from CapeNature. When considering applications to conduct research, no distinction will be made between South African and foreign scientists, although it is required that foreign scientists affiliate with a South African tertiary

educational institutions. All biological material collected by a foreign scientist must be lodged at the South African Institute for Aquatic Biodiversity (SAIAB) and these materials can be loaned to the scientist/institution in question under a legal Benefit Sharing Agreement.

1.2.2 Research applications will be dealt with according to CapeNature's permit application procedures and the relevant Standard Operating Guideline (SOG).

1.2.3 All applicants, researchers and research projects must be affiliated to a recognised South African tertiary and/or other scientific research institution and the application must be endorsed in writing by the head of the relevant department from that South African tertiary and/or scientific research institution. In addition, and if relevant, approval is required from the Animal Ethics Committee of the relevant institution. If an Animal Ethics Committee does not exist for an institution, CapeNature will prescribe appropriate ethical procedures as part of the permit conditions. This will be guided by the South African National Standard on the care and use of animals for scientific purposes (SANS 10386:2021).

1.2.4 Research data and findings, especially conservation management recommendations, must be made available to CapeNature when the research project is completed. This includes scientific papers, popular articles and reports related to such research.

1.2.5 Representative samples of all relevant biological material (voucher specimens and/or DNA samples) that were collected as part of the project must be sent to SAIAB within six months of completing the project.

Action 1.3 Initiate and support opportunities for capacity building and the raising of awareness

CapeNature both implements and supports activities, events, projects and programmes that are aimed at building local capacity, raising awareness, and promoting the conservation of indigenous freshwater fishes and their associated habitats. All information used must be scientifically sound, not in conflict with conservation objectives, and preferably verified by CapeNature.

Action 1.4 Monitoring of conservation status

1.4.1 CapeNature will actively monitor the conservation status of the indigenous freshwater fishes of the WCP through dedicated threatened species monitoring programmes. Partner organisations (e.g. SAIAB and universities) will contribute to monitoring through research projects.

1.4.2 Monitoring may involve the capture of fish, which will be regulated by research permits for non-CapeNature organisations and individuals. All monitoring must ensure positive species identification, collection of voucher specimens where applicable, and written results. All relevant data and distribution records must be made available to CapeNature for incorporation into the State of Biodiversity database and be supplied to SAIAB (see previous Action points).

POLICY OBJECTIVE 2. To establish guidelines for the utilisation of indigenous freshwater fishes

Action 2.1 Use for research purposes.

2.1.1 In considering research project proposals (see Action 1.2), CapeNature will review the number of specimens required in relation to the species conservation status and local population sizes. The total number of specimens required must be motivated for by the applicant as part of a formal project proposal (see 1.2.2). The presence of a designated CapeNature official may be required, upon the entity's discretion, when the specimens are collected, especially if the researcher has not worked in the WCP before, the researcher is inexperienced, the species is threatened, or it occurs in a sensitive habitat.

2.1.2 When executing research involving indigenous fish species, all fish will be handled in an ethical manner in accordance with accepted ethical guidelines and/or SANS standards (SANS 10386: 2021).

2.1.3 Where appropriate, non-destructive means of sampling is encouraged (e.g., snorkelling, under water video analysis, fyke netting, electrofishing, etc.). All techniques should be scientifically sound and defensible and take into consideration the well-being of the animals.

2.1.4 The keeping of live specimens in captivity for research purposes requires the use of low escape risk facilities approved by CapeNature. These facilities must consider the well-being of the animals and conform to standards prescribed in the SANS guidelines (SANS 10386:2021).

2.1.5 Fish kept in captivity may not be returned to the wild. Fish may be returned to CapeNature or euthanised as described in Section 3.1.5.

2.1.6 CapeNature will support relevant research programmes and projects by providing supervision, guidance and review where appropriate.

Action 2.2 Capture, transport and possession

2.2.1 Any person in possession of indigenous freshwater fishes in the WCP must have proof of the

legal acquisition of the animals, that is, a valid collection and transport permit from CapeNature. This excludes fish that have just been caught whilst angling with an angling licence and which must be released.

2.2.2 A freshwater angling licence is required when angling in any inland waters. When caught, no indigenous fish may be killed, and all such fish must be released alive. Upon implementation of the NEMBA: ToPS regulations, an additional permit may be required to fish for listed species.

2.2.3 Applications by members of the public who wish to keep indigenous fishes in captivity for non-commercial purposes will be evaluated by the CapeNature fish permit committee, provided these applications aim to address a valid research objective, and such captivity facilities are based at a South African tertiary and/or scientific research institution.

2.2.4 Holding facilities for the keeping of indigenous freshwater fishes in captivity must meet holding requirements as defined in the SANS guidelines or as prescribed by CapeNature.

2.2.5 Indigenous fishes destined to members of the public in possession of a valid CapeNature permit must be caught and delivered by a designated and competent CapeNature official in an official capacity at no cost, or by a designated member of the public in possession of a permit for such capture and transport activities. This process will be guided by CapeNature and the relevant species conservation management plans.

2.2.6 Indigenous fish species may only be stocked into dams from the immediate catchment area within the natural distribution range of the species concerned for conservation reasons, subject to formal species conservation management plans and subject to valid stocking and transport permits. Until such time as species management plans are in place, the Best Management Practices stipulated in Appendix 1 will apply to any request to stock indigenous species. If the species occurred in the catchment before but has since gone extinct, the nearest appropriate genetic stock may be considered, if there is a benefit for overall species and genetic conservation.

2.2.7 CapeNature will allow zoological gardens and public aquaria to obtain indigenous freshwater fishes of the WCP for educational and display purposes. Such permit applications will be evaluated by CapeNature.

2.2.8 Live indigenous fish species from the WCP listed on Schedule 1 may not be commercially harvested/collected or sold in the aquarium/pet trade in South Africa and may not be exported.

2.2.9 Indigenous fish species from the WCP listed in Schedule 1 may not be kept in home aquaria and garden ponds without a permit.

2.2.10 Any commercial fishery for alien freshwater fishes in the WCP will be assessed by CapeNature to ensure that bycatch of indigenous species is at an acceptable level (<1%). This will be assessed by a competent CapeNature official. Such bycatch is to be released immediately or, if dead, be surrendered to CapeNature for research purposes.

Action 2.3 Breeding of indigenous freshwater fishes as part of a species conservation management plan

2.3.1 CapeNature does not support the commercial breeding of indigenous freshwater fish species.

2.3.2 Captive breeding of indigenous freshwater fishes is not supported, except if it is required as a measure to save a species. Breeding will only be allowed in facilities associated with institutions such as universities, national institutions, government facilities and parastatal entities. Captive breeding should preferably be done within the current natural distribution range of the species but can be allowed elsewhere provided that all associated risks are mitigated. All activities associated with captive breeding must conform to requirements of species conservation management plans approved by CapeNature and supported by the Wild Animal Advisory Committee where relevant.

Action 2.4 Reintroduction/translocation for conservation purposes

2.4.1 All reintroductions/translocations for conservation purposes must align with the IUCN guidelines for reintroductions and other conservation translocations (IUCN, 2013).

2.4.2 Fish may only be reintroduced into an area where it has been confirmed that they have gone extinct, where there is sound scientific evidence that they occurred there before and once the threat that caused their reduction or disappearance has been removed. If there is doubt that the species occurred in a specific area, expert opinion will be obtained from SAIAB prior to making a decision. Suitability of a site for restocking will be evaluated by a site inspection and fish survey by designated CapeNature officials. If required, a desktop or genetic study will also have to be conducted to recommend guidelines for conserving genetic diversity.

2.4.3 Reintroduction of any fish species must be part of a dedicated species conservation management plan or a plan approved by CapeNature and where relevant, be supported by the Wild Animal Advisory Committee.

2.4.4 Fish for reintroduction in rivers must be sourced from the immediate catchment's rivers or nearest appropriate populations identified by genetic management recommendations.

2.4.5 All stockings of threatened fish must be regularly monitored to determine whether the new population has established successfully and whether any negative impacts occurred. Any deviation from expected results as outlined in the management plan must be documented and submitted to the CapeNature to improve future decisions.

POLICY OBJECTIVE 3. To establish guidelines for the disposal of confiscated and unwanted freshwater fishes

3.1 All indigenous freshwater fishes that are found illegally in the possession of any person, in contravention of the Nature Conservation Ordinance (Ordinance 19 of 1974), and the regulations promulgated in accordance with this act, may be confiscated.

3.2 Freshwater fishes confiscated by CapeNature will be dealt with according to international best practice and the decision on the disposal of confiscated live animals will be based on the IUCN Guidelines for the Placement of Confiscated Animals.

3.3 In accordance with the above, CapeNature may donate the confiscated or unwanted freshwater fishes to approved institutions, as stated in 2.2.7

3.4 Confiscated and unwanted freshwater fishes, including surplus freshwater fishes from research projects will not be returned to the wild.

3.5 Failing the placement of freshwater fishes with institutions as described in 3.3, CapeNature may/will consider the euthanasia of confiscated animals the only viable alternative. Euthanasia must be undertaken using ethically approved methods that are appropriate for the species in question.

7. RELATIONSHIP WITH REGULATORY FRAMEWORKS

This policy will be implemented under the auspices of the:

- The National Environmental Management: Biodiversity Act (Act No. 10 of 2004);
- National Environmental Management: Protected Areas Act (Act No. 57 of 2003);
- National Environmental Management Act (Act No.107 of 1998); Nature Conservation Ordinance (Ordinance 19 of 1974) ("the Ordinance");
- Nature Conservation Regulations, Provincial Notice 955 of 29 August 1975; and
- Western Cape Biodiversity Act (Act 63 of 2021).

8. ROLES AND RESPONSIBILITIES

This policy will be implemented to assist decision-making with regard to the transport and utilisation of primary indigenous freshwater fishes in the WCP. The Directorate: Biodiversity Capabilities, through its Permit Section, will be responsible for the consideration and administration of applications for activities related to this policy.

9. POLICY REVIEW

The policy will be reviewed every five years, or sooner as and when required should new information become available or new legislation prescribe as such. The monitoring and review of the policy will be undertaken by the Biodiversity Capabilities Directorate.

10. ENFORCEMENT OF POLICY

If the requirements under this policy are not met, it will result in non-compliance and permits for activities relating to the transport and utilisation of freshwater fishes cannot be issued.

Failure to acquire the proper permissions will thus not allow certain activities. The exercising of said activities without the proper permit could render that activity an offence, which could result in prosecution and/or a fine in terms of the Nature Conservation Ordinance (Ordinance 19 of 1974, including other applicable legislation.

Non-compliance with these policy requirements will be dealt with by the full suite of legislative tools available, namely the the Ordinance and Regulations, as well as the list of offences and fines, and the (Western Cape) Biodiversity Act 6 of 2021.

11. INCEPTION DATE

The inception date shall be the date upon which this policy is approved by the Board.

12. REFERENCES

Abell R, Thieme ML, Revenga C, Bryer M, Kottelat M, Bogutskaya N, Coad B, Mandrak N, Balderas SC, Bussing W & Stiassny ML. 2008. Freshwater ecoregions of the world: a new map of biogeographic units for freshwater biodiversity conservation. *BioScience* 58(5): 403-414.

Bronaugh WM, Swartz ER, Sidlauskas BL. 2020. Between an ocean and a high place: Coastal drainage isolation generates endemic cryptic species in the Cape kurper *Sandelia capensis* (Anabantiformes: Anabantidae), Cape region, South Africa. *Journal of Fish Biology* 96(5):1087-99.

Chakona A, Swartz ER. 2013. A new redfin species, *Pseudobarbus skeltoni* (Cyprinidae, Teleostei), from the Cape Floristic Region, South Africa. *Zootaxa* 3686(5): 565-577.

Chakona A, Swartz ER, Gouws G. 2013. Evolutionary drivers of diversification and distribution of a southern temperate stream fish assemblage: testing the role of historical isolation and spatial range expansion. *PLoS ONE* 8(8): e70953.

Chakona A, Swartz ER & Skelton PH. 2014. A new species of redfin (Teleostei, Cyprinidae, *Pseudobarbus*) from the Verlorenvlei River system, South Africa. *ZooKeys* 453: 121-137.

Chakona A & Skelton PH. 2017. A review of the *Pseudobarbus afer* (Peters, 1864) species complex (Teleostei, Cyprinidae) in the eastern Cape Fold Ecoregion of South Africa. *ZooKeys* 657: 109-140.

Chakona A, Jordaan MS, Raimondo DC, Bills RI, Skelton PH. & van Der Colff D. 2022. Diversity, distribution and extinction risk of native freshwater fishes of South Africa. *Journal of Fish Biology* 100(4): 1044-1061.

Frankham R, Ballou JD, Briscoe DA. 2002. Introduction to conservation genetics. Cambridge University Press, UK.

IUCN/SSC (2013). *Guidelines for Reintroductions and Other Conservation Translocations. Version 1.0*. Gland, Switzerland: IUCN Species Survival Commission, viiii + 57 pp.

Kambikambi MJ, Kadye WT, Chakona A. 2021. Allopatric differentiation in the *Enteromius anoplus* complex in South Africa, with the revalidation of *Enteromius cernuus* and *Enteromius oraniensis*, and description of a new species, *Enteromius mandelai* (Teleostei: Cyprinidae). *Journal of Fish Biology* 99(3): 931-954.

National Environmental Management Act (No. 107 of 1998)

National Environmental Management: Biodiversity Act (No 10 of 2004)

National Environmental Management: Protected Areas Act (No 57 of 2003)

Nature Conservation Ordinance (Ordinance 19 of 1974)

Skelton PH. 2024. Freshwater fishes of South Africa: A complete guide. Penguin Random House, South Africa.

South African National Standard. 2021. The care and use of animals for scientific purposes. Published by the South African Bureau of Standards (SABS Standards Division)

Western Cape Nature Conservation Laws Amendment Act (No 3 of 2000)

Zarei F, Bragança PH, Skelton PH & Chakona A. 2025a. *Pseudobarbus outeniqua* sp. nov., a new redfin species (Teleostei, Cyprinidae) from the Cape Fold Ecoregion of South Africa. *ZooKeys 1239*: 231-255.

Zarei F, Martin MB, Skelton PH. & Chakona A. 2025b. Systematic review of *Pseudobarbus burchelli* (Teleostei, Cyprinidae), with revalidation of *P. vulneratus* and description of a new species. *Zoosystematics and Evolution* 101(3): 1271-1296.

13. APPENDICES

Appendix 1

Best management practices for stocking of indigenous freshwater fishes in the absence of a species conservation or species management plan

This document must be read concurrently with the Indigenous Fish Utilisation Policy. The aim is to provide the criteria for the stocking of indigenous freshwater fishes to ensure that correct conservation principles are followed that are aligned with the BMP-S process and the IUCN guidelines for translocation and reintroduction. Permits for the stocking of indigenous freshwater fishes will only be considered if there is conservation value to the stocking i.e., if it is a refuge population that is being established. CapeNature does not support the stocking of any indigenous freshwater fishes purely for recreational angling purposes. Prior to issuing a stocking permit, the following criteria must be met.

1. If the species in question has a known extra-limital distribution range, stocking will only be allowed within an area zoned for a species according to the species maps used by CapeNature. Maps used will be those produced as part of the NEMBA AIS process and are based on current knowledge and expert opinion. This is applicable for the following species: Clanwilliam yellowfish (*Labeobarbus capensis*) and Clanwilliam sawfin (*Barbus serra*).
2. In all other circumstances stocking will only be allowed in the recognised historical distribution range for the species. Stocking localities should preferably be situated within areas that have been mapped as Critical Biodiversity Areas (CBAs) for indigenous freshwater fish according to the National Freshwater Ecosystem Priority Areas (NFEPA) project.
3. The proposed stocking locality should form part of a recognised protected environment. This includes but is not limited to private nature reserves, conservancies and formally recognised Protected Environments. The freshwater fish that are stocked must be managed as a refuge population and it is important that the water body where the stocking takes place is not open to the public for angling and that there is restricted access. This is to reduce the risk of illegal

movement of freshwater fish between water bodies and the potential illegal introductions of alien species. The water body that is being stocked should not be utilised as an irrigation dam, to avoid the risk of the dam being pumped dry, unless there is an adequate management mechanism in place with regard to ensuring a minimum water level.

4. The person/business/organisation requesting the stocking must have a history of being conservation minded and must preferably be part of a recognised conservation initiative (e.g. Biodiversity and Wine Initiative).
5. Freshwater fish must be sourced from genetically appropriate populations (generally the nearest source population), and an appropriate number of freshwater fish must be stocked to allow for a genetically viable population (refer to additional criteria listed below).
6. Water bodies to be stocked must not be pumped from rivers or other water bodies where there are alien species present unless there is sufficient evidence to prove that alien freshwater fish introduction cannot occur. All proposed stocking localities requires a site visit by a competent CapeNature official. No alien species may be stocked in addition to the indigenous fish. Once the freshwater fish are stocked, CapeNature views the freshwater fish as being a refuge population that must be managed as such by the landowner.
7. Once the stocking permit has been issued, freshwater fish will be stocked by CapeNature in an official capacity, provided that a Memorandum of Understanding (MoU) is signed by the landowner stating that the freshwater fish will be managed as a refuge population and that no freshwater fish will be moved from the water body where the fish have been stocked. In the event that the property where the freshwater fish have been stocked is sold, the existing owner must inform the new owner and CapeNature timeously (three months).

Additional best management practice criteria:

1. No dam stockings that have the potential to result in new invasive populations or which can threaten the genetic integrity of riverine populations will be considered.
2. Potential source populations of freshwater fishes will be assessed by CapeNature staff to confirm that sufficient numbers of freshwater fishes are present for capture and stocking purposes. No more than 15% of the existing population at a collection site will be removed to prevent negative impacts on this population.
3. A minimum of 100 freshwater fish per species should be stocked and sourced from an appropriate dam population (known source population) or alternatively from at least two

capture sites of the nearest river, provided that adequate numbers of freshwater fish are present (refer to point 2).

4. To obtain the minimum number of freshwater fish to be stocked, it may be necessary to stock at least twice from such sources, as numbers caught may not meet these targets in the first capture effort.
5. Freshwater fish intended for stocking shall be examined by a competent fish parasitologist prior to stocking to ensure that they are clinically healthy and to minimise the risks of pathogen transfer to new stocking sites.
6. A stocking report will be completed by the CapeNature official in charge of the stocking, within 60 days of the stocking.
7. Within five years of a dam being stocked, a freshwater fish survey shall be done and a report written by CapeNature staff to ascertain the effectiveness of the stocking.

Appendix II

Stakeholder identification and engagement process

Stakeholders were identified as either being internal (CapeNature) or external (non-CapeNature) and the policy was circulated for comment internally before being presented to external stakeholders.

(a) Internal stakeholder engagement

(i) Aims

The aims of the internal stakeholder engagement process were to:

- Ensure that all CapeNature staff involved in implementing the policy is informed of the conservation status of indigenous freshwater fishes of the WCP and the need for developing a policy to guide utilisation.
- Ensure that all staff members involved in implementation of the policy recognise and understand the conservation principles underpinning the policy.
- Ensures that the objectives and the goals of the policy are clear and supported by all relevant CapeNature staff members involved in implementation.
- Ensure consistency in communicating and implementing the policy.

(ii) List of CapeNature stakeholders

Stakeholders were identified mainly per management region. Exceptions were relevant programme managers and the Wild Animal Advisory Committee (WAAC) members. The following staff members from each region were invited to comment:

- Landscape Managers, Landscape Ecologists, Ecological Coordinators, Conservation Managers, Stakeholder Engagement Managers and Officers.

(iii) Routes of engagement

An overview of the policy was presented at the third quarter round of Landscape Ecological meetings (LEMs) of 2011 where an opportunity was presented for questions and queries with regard to the policy principles and content. All stakeholders identified in (ii) will receive a copy of the policy document and be given an opportunity for comment according to the process and deadlines stated in (iv)

(iv) Commenting process

- Disseminate policy to stakeholders along with formal letter requesting comments and stating deadlines for comments.
- Thirty days for formal written comments after which all comments will be reviewed by authors.
- Review of policy if necessary.
- Finalising of policy and submission to Executive for sign-off and initiation of external stakeholder engagement process.

Note: During the QEMs, all relevant managers were asked to collate comments/questions from their staff members in order to streamline the commenting process.

(b) External stakeholder engagement

(i) Aims

The aims of the *external* stakeholder engagement process were to:

- Ensure that all users of the resource (i.e. indigenous freshwater fishes) to which the policy relates are informed of the conservation status of the indigenous freshwater fishes of the WCP and the need for developing a policy to guide utilisation.
- Ensure that all resource user groups affected by the implementation of the policy recognise and understand the conservation principles underpinning the policy.
- Ensures that the objectives and the goals of the policy are clear and supported by all relevant stakeholders affected by the implementation of the policy.

(ii) List of external stakeholders

Stakeholders were identified as any user group that will be affected by a policy on the use of indigenous freshwater fishes and are listed below:

- freshwater angling sector, government (aquaculture/inland fisheries sector), scientific community, zoos and public aquaria, relevant NGOs.

(iii) *Routes of engagement*

Two routes of engagement were followed: one was a stakeholder engagement process whereby stakeholders were asked to comment on the content of the policy and the other was a stakeholder information process whereby the stakeholders were informed of the policy and its objectives.

- Freshwater angling sector - engage through CapeNature Freshwater Angling Forum which includes representatives of various organised angling groups. (Stakeholder engagement)
- Government (Department of Agriculture, Forestry and Fisheries; Department of Agriculture Western Cape; Department of Water Affairs: Resource Protection (including catchment management agencies and water user associations); Department of Environmental Affairs and Development Planning; SANParks). (Stakeholder information)
- Scientific community - direct liaison with the South African Institute for Aquatic Biodiversity (SAIAB), South African National Biodiversity Institute (SANBI) & relevant university departments. (Stakeholder engagement)
- Zoos and public aquaria – Stakeholder information
- Relevant NGOs: Endangered Wildlife Trust, WESSA. (Stakeholder information)

(iv) Commenting process

- Disseminate policy to stakeholders along with formal letter requesting comments and stating deadlines for comments for those stakeholders where stakeholder engagement is required. Disseminate policy to stakeholders along with formal letter requesting compliance and implementation where stakeholder information process is required.
- Thirty days for formal written comments after which all comments will be reviewed by authors.
- Review of policy where necessary.
- Finalising of policy and submission to Executive for sign-off and implementation.