

REGIONS
FOR
SOUTH AFRICA

COUNCIL
FOR THE
ENVIRONMENT

STREKE
VIR
SUID-AFRIKA

RAAD
VIR DIE
OMGEWING



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PREFACE

Political negotiations for a new constitutional dispensation are now also directed towards determining new regions for the future South Africa. The Multi-Party Negotiation Forum appointed a commission on the delimitation of regions based upon all the pertinent criteria.

The Council for the Environment believes that a new South Africa can only be built upon the effective conservation and management of its environmental resources for the sustained benefit of present and future generations of South Africans. A prosperous South Africa cannot be achieved on a bankrupt environment. For that reason environmental criteria are fundamental for determining regional boundaries.

This document outlines the application of environmental criteria and finally proposes regions for South Africa which will provide not only an adequate basis for the effective management and sustained use of South Africa's environmental resources but also provide a sound basis for its economic and human development. The Council for the Environment presented this document to the Commission on the Delimitation of Regions as its proposal for regions for South Africa.

The Council for the Environment is a statutory body constituted in terms of the Environment Conservation Act, (Act 100 of 1982 as replaced by Act 73 of 1989) to advise the Minister of Environment Affairs on environmental matters. The Council's Committee for Terrestrial and Fresh Water Systems at a meeting in Pietermaritzburg on 12 May 1993 appointed a working group to research and formulate proposals for regions for South Africa. This document is the outcome of the working group's deliberations and now constitutes the proposal by the Council for the Environment for the delimitation of regions for South Africa.

VOORWOORD

Politieke onderhandelings vir 'n nuwe grondwetlike bedeling word ook nou gerig op die bepaling van nuwe streke vir die toekomstige Suid-Afrika. Die Veelparty Onderhandelingsforum het 'n kommissie aangestel om streke af te baken wat gebaseer is op alle tersaaklike kriteria.

Die Raad vir die Omgewing glo dat 'n nuwe Suid-Afrika slegs gebou kan word op die doeltreffende bewaring en bestuur van sy omgewingshulpbronne vir die volgehoue voordeel van huidige en toekomstige geslachte Suid-Afrikanners. 'n Vooruitstrewende Suid-Afrika kan nie op 'n bankrot omgewing gebou word nie. Om daardie rede is omgewingskriteria grondliggend vir die bepaling van streeksgrense.

Hierdie dokument behandel die toepassing van omgewingskriteria en stel uiteindelik streke vir Suid-Afrika voor wat nie alleen 'n ardoende basis vir doeltreffende bestuur en volgehoue gebruik van Suid-Afrika se omgewingshulpbronne sal daartel nie, maar ook 'n gesonde basis sal verskat vir sy ekonomiese en menslike ontwikkeling. Die Raad vir die Omgewing het hierdie dokument voorgelê aan die Kommissie vir die Afbakening van Streke as sy voorstel vir streke vir Suid-Afrika.

Die Raad vir die Omgewing is 'n statutêre liggaam wat ingevolge die Wet op Omgewingsbewaring (Wet 100 van 1982 soos vervang deur Wet 73 van 1989) ingestel is om die Minister van Omgewingsake oor omgewingsaangeleenthede te adviseer. Tydens 'n vergadering te Pietermaritzburg op 12 Mei 1993 het die Raad se Komitee vir Land- en Varswaterstelsels 'n werkgroep aangestel om streke vir Suid-Afrika na te vors en voorstelle te formuleer. Hierdie dokument is die resultaat van die werkgroep se arbeid en vorm nou die Raad vir die Omgewing se voorstel vir die afbakening van streke vir Suid-Afrika.

Die Komitee vir Land- en Varswaterstelsels is soos volg saamgestel:

Prof C M Breen (voorsitter), prof P R Botha, mnr Brian A D Egan, dr N Fairall, Mnr J T Geddes Page, dr G R Hughes, mnr A von W Lambrechts, prof W R Siegfried (ondervoorsitter), dr L P Stoltz, prof N M Tainton, prof G K Theron, mnr V H Theunissen, mnr W van der Merwe en mnr J L Vosloo.

Die lede van die werkgroep oor Streke vir Suid-Afrika is:

Mnr W van der Merwe (sameroeper), prof P R Botha, prof C M Breen, mnr Brian A D Egan, prof G K Theron en mnr J L Vosloo.

Die werkgroep is voorsien van tegniese bystand in die vorm van rekenaar-gebaseerde geografiese inligtingstelsels deur GislAB, Departement Landskapargitektuur, Universiteit van Pretoria en deur die GIS-afdeling van die Departement van Waterwese in samewerking met die Nasionale Omgewingspotensiele Atlas (ENPAT) van die Departement van Omgewingsake. Prof W F van Riet, hoof van die Departement Landskapargitektuur en van GislAB aan die Universiteit van Pretoria het die tegniese programme gekoördineer.

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The Committee for Terrestrial and Fresh Water Systems constituted as follows:

Prof C M Breen (Chairman), Prof P R Botha, Mr Brian A D Egan, Dr N Fairall, Mr J T Geddes Page, Dr G R Hughes, Mr A von W Lambrechts, Prof W R Siegfried (Vice Chairman), Dr L P Stoltz, Prof N M Tainton, Prof G K Theron, Mr V H Theunissen, Mr W van der Merwe and Mr J L Vosloo.

The members of the working group on Regions for South Africa are:

Mr W van der Merwe (Convenor), Prof P R Botha, Prof C M Breen, Mr Brian A D Egan, Prof G K Theron and Mr J L Vosloo.

The working group was provided with technical assistance in the form of computer-based geographical information systems by GisLAB, Department of Landscape Architecture, University of Pretoria and by the GIS division of the Department of Water Affairs in conjunction with the National Environmental Potential Atlas (ENPAT) of the Department of Environment Affairs. Prof W F van Riet, head of the Department of Landscape Architecture and of GisLAB at the University of Pretoria co-ordinated the technical programmes.

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ENVIRONMENTAL CONSIDERATIONS FOR REGIONAL DELIMITATION

Environmental considerations which determine regional delimitation range from physiographic features to ecological systems.

Physiographic features include the physical characteristics of the South African landscape based upon its geological substructure on which the geomorphological processes generated by climate and particularly precipitation shape the topography.

The crucial processes for the maintenance of ecological integrity and life support systems for South Africa are the hydrological processes related to water yield and edaphic or soil processes relating to food production. Vegetation reflects both these ecological systems as represented by the distribution pattern of the South African biomes.

PHYSIOGRAPHIC FEATURES

Physiographic regions

The structure of South Africa features three clearly identifiable main physiographic regions. They are the plateau or highveld, the marginal slopes and the coastal plains separated by the great escarpment as shown on map 1.

Watersheds

The physiographic features determine the drainage pattern of South Africa. The escarpment is South Africa's major watershed. The coastal plains and marginal slopes beneath the escarpment contain the river catchments draining eastwards and southwards with the Orange River forming the plateau westwards. The homogeneous response

Omgewingsoorweginis wat streekafbakening bepaal wissel van fisiografiese kenmerke tot ekologiese stelsels.

OMGEWINGSOORWEGINGS VIR STREEKAFBAKENING

Fisiografiese kenmerke sluit die fisiese eienskappe van die Suid-Afrikaanse landskap in soos gebaseer op die geologiese substruktuur waarop die geomorfologiese prosesse deur klimaat en veral reënval die topografie vorm.

Die belangrikste prosesse vir die handhawing van ekologiese integriteit en lewensondersteuningsstelsels vir Suid-Afrika is die hidologiese prosesse wat verband hou met wateropbrengs en grondprosesse wat verband hou met voedselproduksie. Plantegroei weerspieël beide hierdie ekologiese stelsels soos verteenwoordig deur die verspreidingspatroon van die Suid-Afrikaanse biome.

FISIOGRAFIESE KENMERKE

Fisiografiese streke

Die bou van Suid-Afrika word gekenmerk deur drie duidelik herkenbare hoof fisiografiese streke. Hulle is die plato of hoëveld en die marginale helling en kusvlaktes wat deur die groot eskarpement geskei word soos op kaart 1 aangetoon.

Waterskeidings

Die fisiografiese kenmerke bepaal Suid-Afrika se dreineringspatroon. Die eskarpement is Suid-Afrika se belangrikste waterskeiding. Die kusvlaktes en marginale helling benede die eskarpement bevat die opvaanggebiede wat ooswaarts en suidwaarts dreineer met die

zones with the grouping of drainage regions are shown on map 2 and the primary drainage regions on map 3.

ECOSYSTEMS

Water-producing ecosystems

Rainfall and the resultant hydrological processes determine water yield as the major contributor to the crucial ecological and life support systems.

Food-producing ecosystems

The most important ecological processes relating to soil and plant production show the potential of the South African ecosystems for food production in relation to different regions.

Vegetation

The close relationship between the South African veld-types and rainfall, physiographic regions and watersheds represents an important environmental criterium for regional delimitation.

REGIONAL DELIMITATION BASED ON ENVIRONMENTAL CONSIDERATIONS

Physiographic features are the main determinants for regional delimitation. They determine watersheds which form the main territorial units for regional subdivision. They are clearly identifiable with boundaries marked by topographical highlands and unified in river basins and drainage valleys. Thus the physical features of the landscape determined by topography are the most reliable criteria to define regions. This is particularly so because physical buffers such

Fisiografiese kenmerke is die hoofdeterminante vir streekafbakening. Hulle bepaal waterskeidings wat die belangrikste gebiedseenhede vir streekindeling vorm. Hulle kan duidelik onderskei word met topografiese hooglande as grense en verenig deur opvanggebiede en dreineringsvalleie. Die fisiese kenmerke van die landskap soos deur die topografie bepaal is dus die betroubaarste kriteria vir

STREEKAFBAKENING GEBASEER OP OMGEWINGSGOORWEGINGS

Die direkte verwantskap tussen die Suid-Afrikaanse veld-tipes en reënval, fisiografiese streke en waterskeidings verteenwoordig 'n belangrike omgewingskriterium vir streekafbakening.

Plantegroei

Die belangrikste ekologiese prosesse wat verband het met grond en plantproduksie toon die potensiaal van die Suid-Afrikaanse ekosistels vir voedselproduksie in verhouding tot die verskillende streke.

Voedselproduserende ekosisteme

Reënval en die voortspruitende hidrologiese prosesse bepaal wateropbrengs as die hoofbydrae tot die belangrike ekologiese en lewensondersteuningsstelsels.

Waterproduserende ekosisteme

EKOSISTEME

Oranjerivier wat die plato weswaarts dreineer. Die homogene respons sones met die groepering van dreineringsstreke word op kaart 2 getoon en die primêre dreineringsstreke op kaart 3.

streekindeling. Dit is veral só omdat fisiese buffers soos bergreekse relatief homogene natuurstelsels, menslike vestiging en ekonomiese aktiwiteit binne verenigde opvanggebiede omsluit. Omgewings-eienskappe het op hierdie wyse 'n diepgaande invloed op die geskiedenis van menslike vestiging in die algemeen en in Suidelike Afrika in die besonder gehad. Bergreekse skei en riviervalleie verenig. Om hierdie rede moet riviere nie politieke of administratiewe grense vorm nie.

Dit is ook aksiomaties dat water die mees strategiese omgewingshulpbron vir die toekomstige ontwikkeling van Suid-Afrika is. Die volgehoue gebruik daarvan, beide wat hoeveelheid en gehalte betref, kan slegs bereik word deur geïntegreerde waterbestuur binne verenigde wateropvanggebiede wat ononderbroke is deur oorvleuelende, en dikwels, kompeterende owerhede. Hierdie vereiste maak dit ook wenslik dat streke en wateropvanggebiede ooreenstem.

Lewensondersteuningstelsels en veral daardie wat verband hou met water, voedselproduksie en die Suid-Afrikaanse biome, is belangrike ekologiese determinante. Alhoewel dit 'n volledige prentjie gee van die omgewingseienskappe wat verband hou met streke is hierdie faktore egter nie die belangrike omgewingskriteria vir afbakening nie. Die belangrikste determinante bly steeds die fisiografiese kenmerke. Op hierdie wyse sal die voorgestelde streke egter die raamwerk voorsien vir die effektiewe holistiese bestuur van al die omgewingshulpbronne en lewensondersteuningstelsels onder verenigde bestuur.

Die groot voordeel vir doeltreffende omgewingsbestuur gebaseer op streke afgebaken volgens omgewingskriteria is grootliks gebaseer op die oorsprong van Suid-Afrika se waterproduksie. Dit is duidelik dat die eskarpement en sy verwante bergreekse die hoofbron van Suid-Afrika se water is. Deur die eskarpement en ander bergreekse as streekgrense te gebruik kan hulle strategiese waterproduksiefunksie effektief beskerm en bestuur word. Die moontlikheid bestaan selfs

The great advantage for effective environmental management based upon regions delimited according to environmental criteria is based largely on the origins of South Africa's water production. It is clear that the escarpment and its associated mountain ranges are the major source of South Africa's water. By delineating the escarpment and other mountain ranges as boundary lines between regions their vital water production function can be effectively protected and managed. It may even provide the opportunity for expanding a single line

Life support systems, and particularly those relating to water, food production and the South African biomes are important ecological determinants. Although they provide a complete picture of the environmental characteristics related to regions, these factors are however not the major environmental criteria for delimitation. The major determinants remain the physiographic features. However, in this way the proposed regions will provide the framework for the effective holistic management of all the environmental resources and life support systems under unified management.

It is also axiomatic that water is the most strategic environmental resource for the future development of South Africa. Its sustained use, both as far as quantity and quality are concerned, can only be achieved by integrated water management within unified watersheds unbroken by overlapping and often, competing authorities. This requirement also makes it highly desirable for regions to coincide with watersheds.

as mountain ranges define relatively homogeneous natural systems, human settlements and economic activity within unified river basins. In this way environmental characteristics have had a profound influence upon the history of human settlement in general and in Southern Africa in particular. Mountain ranges divide and river valleys unite. For this reason rivers should not form political or administrative boundaries.

boundary to become a boundary zone. Such a mountain reserve boundary zone will cover all of the mountain highlands and preferably be managed by a single mountain authority. The legislative basis for this already exists in the Mountain Catchment Areas Act, 1970 (Act 63 of 1970) which provides for the conservation and management of mountains and their water resources.

Map 4 is the synthesis of the application of environmental criteria to regional delimitation for South Africa. It presents the proposal of the Council for the Environment for regions for South Africa based upon environmental criteria. Map 6 shows some alternative boundaries which can be selected. Both maps 4 and 6 are repeated on maps 5 and 7 to be able to clearly compare both the proposal for the regions (map 4) and the alternative regions (map 6) with all the existing boundaries of provinces and independent and self-governing states. A full description of the regions appears further on.

Although the proposal is therefore primarily based upon environmental criteria it will also stand the test when measured against the other criteria for regional delimitation such as political administration, economy, culture and population distribution. It will therefore provide a basis not only for effective environmental management for the sustained use of our environmental resources but also for economic development, human settlement and political administration.

Finally it needs to be noted that South Africa is now developing a national strategy for ecotourism based upon the policy directives contained in the 1992 White Paper on Tourism. Such a strategy must be founded upon ecotourism destinations linked to unique natural attractions and upon ecotourism development plans for each region. Where regions are determined by environmental considerations, such as in this proposal, ecotourism with its huge potential for foreign revenue earning can be optimally developed.

om enkellyngrense uit te brei na grenssones. Sulke bergreservaat grenssones sal al die berghooglande insluit en verkieslik deur 'n enkele bergowerheid bestuur word. Die statutêre basis hiervoor bestaan reeds in die Wet op Bergopvanggebiede, 1970 (Wet 63 van 1970) wat voorsiening maak vir die bewaring en bestuur van berge en hulle waterbronne.

Kaart 4 is die sintese van die toepassing van omgewingskriteria op streekafbakening vir Suid-Afrika. Dit verteenwoordig die voorstel van die Raad vir die Omgewing vir streke vir Suid-Afrika gebaseer op omgewingskriteria. Kaart 6 toon sommige alternatiewe grense wat gekies kan word. Beide kaarte 4 en 6 word op kaarte 5 en 7 herhaal ten einde duidelik te kan vergelyk tussen die voorstel vir die streke (kaart 4) en die alternatiewe streke (kaart 6) met alle bestaande provinsiale grense asook dié van onafhanklike en selfregerende state. 'n Volledige beskrywing van die streke verskyn later.

Alhoewel die voorstel dus hoofsaaklik gebaseer is op omgewingskriteria sal dit ook die toets deurstaan wanneer dit opgeweeg word teen die ander kriteria vir streekafbakening soos politieke administrasie, ekonomie, kultuur en bevolkingsverspreiding. Dit sal dus 'n basis voorsien vir nie slegs doeltreffende omgewingsbestuur vir die volgehoue gebruik van ons omgewingshulpbronne nie, maar ook vir ekonomiese ontwikkeling, menslike vestiging en politieke administrasie.

Ten slotte is dit belangrik om daarop te let dat Suid-Afrika tans 'n nasionale strategie vir ekotoerisme, gebaseer op die beleidsdirektiewe van die 1992 Witskrif vir Toerisme, ontwikkel. So 'n strategie moet gebou word op ekotoerisme bestemmings by unieke natuurlike bates en op ekotoerisme ontwikkelingsplanne vir elke streek. Waar streke afgebaken word op grond van omgewingsoorwegings, soos in hierdie voorstel, kan ekotoerisme met sy geweldige potensiaal as verdienster van buitelandse valuta, optimaal ontwikkel word.

PRIMêRE STREKE

Die primêre streke is die volgende:

1. ORANJE/VAAL

Dit is die groot Sentrale Plato wat bestaan uit die opvanggebied van die Oranje- en Vaalriviere. Dit sluit die Oranje-Vrystaat, Wes-Transvaal, Noordwes-Kaap en die hele Groot Karoo tot by die mond van die Oranjerivier in.

2. LIMPOPO/OLIFANTS

Noordelike en Oostelike Transvaal sluit die waterskeidings in wat weswaarts na die Limpopo en ooswaarts na die Laeveld dreineer. Dit sluit Pietersburg en Louis Trichardt in die noorde en Nelspruit in die ooste in. Venda, Gazankulu, Lebowa, KwaNdebele en die oostelike gedeelte van Bophuthatswana val daarbinne.

3. TUGELA/MGENI

Hierdie KwaZulu-Natalgebied sluit die meeste van die opvanggebiede in wat vanaf die Drakensberg na die Indiese Oseaan dreineer. Die suidelike en noordelike grense is geleë op die waterskeiding van sekondêre rivieropvanggebiede. Dit bestaan uit KwaZulu, die Newcastle-Durban en die Noord- en Suidkus ontwikkelingsasse.

4. KEI/UMZIMVUBU

Dit is die Oostelike Provinsie wat die Ciskei en Transkei insluit met die Oos-Londen-Queenstown as.

PRIMARY REGIONS

The primary regions are the following:

1. ORANGE/VAAL

It is the great Central Plateau consisting of the basins of the Orange and Vaal Rivers. It includes all of the Orange Free State, Western Transvaal, North Western Cape and all of the Great Karoo to the mouth of the Orange River.

2. LIMPOPO/OLIFANTS

Northern and Eastern Transvaal cover the watersheds draining westwards to the Limpopo and eastwards down into the Lowveld. It includes Pietersburg and Louis Trichardt to the north and Nelspruit in the east. Venda, Gazankulu, Lebowa, KwaNdebele and the eastern portion of Bophuthatswana falls within it.

3. TUGELA/MGENI

This KwaZulu - Natal region includes most of the river catchments draining from the Drakensberg to the Indian Ocean. The southern and northern boundaries are on the dividing line of secondary river catchments. It consists of KwaZulu, the Newcastle - Durban and the North and South Coast development axis.

4. KEI/UMZIMVUBU

This is the Eastern Province containing Ciskei and Transkei with the East London-Queenstown axis.

5. CAPE

South Western Cape covers the watersheds south and west of the escarpment including the folded sandstone mountain ranges of the Western Province up to the Cederberg and eastwards to the western edge of the Fish River basin. It contains the Cape Town and Port Elizabeth urban areas. The Little Karoo and the Cape Midlands are included.

6. PWV

Pretoria - Witwatersrand - Vereeniging is the major metropolitan region of economic activity. It cannot be defined on environmental criteria and therefore straddles the upper reaches of three watersheds. Although the present boundary of the PWV is shown on the map, this could be adjusted according to economic or other non-environmental criteria.

The 6 primary regions therefore are the following:

- 1 Orange/Vaal
- 2 Limpopo/Olifants
- 3 Tugela/Mgeni
- 4 Kei/Umzimvubu
- 5 Cape
- 6 PWV

The major boundaries of these primary regions are delineated on map 4. On map 9 alternative boundaries are shown. These alternative or additional boundaries may be selected to follow the boundaries of secondary watersheds or selected on criteria other than environmental.

5. KAAP

Die suidwestelike Kaap sluit die waterskeidings suid en wes van die eskarpement in. Dit bevat ook die gevoude sandsteen bergreekse van die Westelike Provinsie tot by die Sederberge en ooswaarts tot die westelike grens van die Visrivieropvanggebied. Dit bevat die stedelike gebiede van Kaapstad en Port Elizabeth. Die Klein Karoo en die Kaapse Middellandse word ook ingesluit.

6. PWV

Pretoria-Witwatersrand-Vereeniging is die belangrike metro-politaanse gebied van ekonomiese aktiviteit. Dit kan nie omskryf word aan die hand van omgewingskriteria nie en lê dus bo-oor die bolope van drie waterskeidings. Alhoewel die bestaande grens van die PWV op die kaart aangetoon word, kan dit aangepas word volgens ekonomiese of ander nie-omgewingskriteria.

Die 6 primêre streke is dus die volgende:

- 1 Oranje/Vaal
- 2 Limpopo/Olifants
- 3 Tugela/Mgeni
- 4 Kei/Umzimvubu
- 5 Kaap
- 6 PWV

Die belangrikste grense van hierdie primêre streke word op kaart 4 aangedui. Kaart 6 wys alternatiewe grense. Hierdie alternatiewe of bykomstige grense kan gekies word om die grense van sekondêre waterskeidings te volg of volgens kriteria anders as omgewingskriteria.

ALTERNATIEWE STREKE

1. 1A ORANJE/1B VAAL

Die Sentrale Oranje-Vaalstreek kan in twee afsonderlike streke verdeel word. 1A (Oranje) sal die Groot Karoo en Noordwes-Kaap insluit en 1B (Vaal) die meeste van die huidige Oranje-Vrystaat en Wes-Transvaal.

2. 2A LIMPOPO/2B OLIFANTS/2C BOPHUTHATSWANA

Noordelike en Oostelike Transvaal kan drie streke word met die hoofskedding tussen die oostelike waterskeidings (Streek 2B) en dié wat weswaarts na die Limpopo dreineer (Streek 2A). Die noordwestelike gebied kan 'n aparte streek wees met grense op Botswana, noord by Thabazimbi en suid benede Kuruman. Dit sal meebring dat die hele Bophuthatswana in streek 2C val.

3. TUGELA/MGENI

Betreklik min verandering sal heelwaarskynlik nodig wees wat betref die suidelike grens. Die noordelike grens kan suid afgeskuif word om ooreen te stem met die noordelike grens van die Pongola-opvanggebied.

4. KEI/UMZIMVUBU

Kan Port Elizabeth en die Kaapse Middellande òf insluit òf uitsluit deur die grens te plaas langs die waterskeiding tussen die Vis- en Sondagsriviere of wes van die Gamtoos-opvanggebied.

5. KAAP

Die noordelike grens kan suidwaarts verskuif word om meer van die noordelike gedeelte van die Weskus by die Sentrale

May either include or exclude Port Elizabeth and the Cape Midlands by situating the boundary along the catchment divide between the Fish and Sundays Rivers or west of the Gamtoos catchment.

4. KEI/UMZIMVUBU

Not much change is probably necessary as far as the southern boundary is concerned. The northern boundary may be moved south to coincide with the northern edge of the Pongola catchment.

3. TUGELA/MGENI

Northern and Eastern Transvaal can become three regions with the main dividing line between the eastern watersheds (Region 2B) and those draining westwards to the Limpopo (Region 2A). The north-western area can be a separate region with boundaries on Botswana, north at Thabazimbi and south below Kuruman. This will provide for all of Bophuthatswana in region 2C.

2. 2A LIMPOPO/2B OLIFANTS/2C BOPHUTHATSWANA

The Central Orange - Vaal region can be divided into two separate regions. 1A (ORANGE) will include the Great Karoo and North Western Cape and 1B (VAAL) most of the present Orange Free State and Western Transvaal.

1. 1A ORANGE/1B VAAL

ALTERNATIVE REGIONS

Die vraag is: hoe vergelyk die twee voorstelle? Kaarte 5a en 7a wys die Kommissie se voorstel in vergelyking met die Raad vir die

Julie 1993 gelewer.

Sedert die Raad vir die Omgewing hierdie voorstel vir Streke vir Suid-Afrika voorgelê het op 8 Julie 1993 het die Kommissie vir die Afbakening van Streke sy verslag aan die Onderhandelingsraad op 31

VERGELYKING MET DIE STREKE SOOS VOORGESTEL DEUR DIE KOMMISSIE VIR DIE AFBAKENING VAN STREKE

6	PWV
5	Kaap
4	Kei/Umzimvubu
3	Tugela/Mgeni
2C	Bophuthatswana
2B	Olifants
2A	Limpopo
1B	Vaal
1A	Oranje

Bogenoemde alternatiewe afbakening vermeerder dus die aantal streke van 6 tot 9. Die 9 streke sal dus die volgende wees:-

PWV - streksgrense kan volgens ekonomiese of ander nie-omgewingskriteria aangepas word.

6. PWV

Oranjerivierstreek in te sluit. Die oostelike grens kan aangepas word om Port Elizabeth en die Kaapse Middellandse uit te sluit of ooreen te stem met die westelike grens van die Kei/Umzimvubu-streek wat hierbo beskryf is.

5. CAPE

The northern boundary may be moved down southwards to include more of the northern section of the West Coast into the Central Orange River region. Its eastern boundary can be adjusted to exclude Port Elizabeth and the Cape Midlands or to coincide with the western boundary of the Kei/Umzimvubu region described above.

6. PWV

PWV - region boundaries may be adjusted according to economic or other non-environmental criteria.

The above alternative delimitation may increase the number of regions from 6 to 9. The 9 regions will therefore be the following:

1A	Orange
1B	Vaal
2A	Limpopo
2B	Olifants
2C	Bophuthatswana
3	Tugela/Mgeni
4	Kei/Umzimvubu
5	Cape
6	PWV

COMPARISON WITH THE REGIONS AS PROPOSED BY THE COMMISSION FOR THE DELIMITATION OF REGIONS

Since the submission by the Council for the Environment of these proposals for regions for South Africa on 8 July 1993, the Commission for the Delimitation of Regions has presented its

proposal to the Negotiating Council on 31 July 1993.

The question is: how do these two proposals compare? Maps 5a and 7a show the Commission's proposal compared with that of the Council for the Environment. The former proposes 9 regions and the Council 6 (primary) and 9 (alternative) regions. There is, therefore, general agreement. To bring the Commission's proposals for regional boundaries more in line with environmental considerations certain adjustments will have to be made. In this way South Africa's natural resources will be conserved and managed in the best manner to ensure sustainable use for future generations. The following adjustments are necessary -

1. Regional boundaries should follow natural boundaries and not magisterial district boundaries.
2. The boundary between the Northern and Western Cape regions should coincide with the escarpment.
3. The boundary between the Northern Cape, the Eastern Cape and the Orange Free State should not be the Orange River. There are two possible solutions. Firstly, the southern Orange Free State boundary can be moved northwards to coincide with the boundary of the Orange River catchment. Secondly, the easterly point of the Northern Cape boundary can be moved southwards to place the boundary with the Eastern Cape on the escarpment.
4. The boundary between North-Western Transvaal and the Orange Free State should coincide with the boundary of the Vaal River Catchment, placing it more north-westerly than the proposed boundary.
5. The boundary between Northern and Eastern Transvaal follows the Olifants River. It is wrong for boundaries to

6. Die grens tussen die Wes-Kaap en Oos-Kaap moet ooswaarts skuif na die westelike grens van die Sondagsrivier-opvanggebied.

5. Die grens tussen Noord- en Oos-Transvaal is op die loop van die Olifantsrivier. Dit is verkeerd omdat grense nie op riviere hoort nie. Die grens moet of suidwaarts maar verkieslik noordwaarts skuif na die waterskeiding van die Olifantsrivier.

4. Die grens tussen Noordwes-Transvaal en die Oranje Vrystaat moet met die Vaalrivieropvanggebied se grens saamval, dus noordweswaarts van die voorgestelde grens.

3. Die grens tussen Noord-Kaap, Oos-Kaap en die Oranje Vrystaat moet nie die Oranjerivier wees nie. Twee oplossings is moontlik. Eerstens kan die Oranje Vrystaat suidegrens noordwaarts skuif om met die grens van die Oranjerivier-opvanggebied ooreen te kom. Tweedens kan die Noord-Kaap grens op sy oostepunt suidwaarts skuif om die grens met die Oos-Kaap op die eskarpement te plaas.

2. Die grens tussen die Noord- en Wes-Kaapstreke moet met die eskarpement saamval.

1. Streekgrense moet natuurlike grense volg en nie landdrosdistriktgrense nie.

Die volgende aanpassings is nodig.

Omgewing s'n. Eersgenoemde stel 9 streke voor en die Raad 6 (primêre) of 9 (alternatiewe) streke. Daar is dus 'n breë ooreenstemming. Sekere aanpassings aan die Kommissie se streke is egter noodsaaklik om dit nader aan die Raad s'n en dus meer in ooreenstemming met omgewingsoorwegings te bring. Sodoende sal Suid-Afrika se natuurlike hulpbronne ten beste vir die volhoubare gebruik van toekomstige geslagte bewaar en bestuur kan word.

follow rivers. The boundary should either be southwards or preferably northwards on the catchment boundary of the Olifants River.

6. The boundary between the Western and Eastern Cape should move easterly to the western boundary of the Sundays River catchment.

On 5 September 1993 the Commission also posed an open invitation for comments on specific aspects of its proposal. These aspects and the Council's response to them (as presented to the Commission orally and in writing) are the following:

- a) Eastern Transvaal: the proposed borders, with reference to the question of whether this region should include Pretoria, KwaNdebele, Bronkhorstspuit, Middelburg, and Witbank. The position of the Kruger National Park.

No comments on the PWV boundaries or the inclusion of Pretoria. The position of the Kruger National Park is dealt with in 5 above.

- b) PWV: whether this region should exclude Sasolburg, Pretoria and those parts of Bophuthatswana located in it. Secondly, whether Pretoria should be located in the Witwatersrand-Vereeniging region.

No comment from an environmental point of view.

- c) Orange Free State: whether this region should be combined with the North West region:

See 4 above.

- d) Eastern Cape/Transkei/Ciskei: whether this region should be one or two regions and the boundaries thereof:

Die Kommissie het ook op 5 September 1993 'n openbare uitnodiging gerig vir kommentaar oor spesifieke aspekte van sy voorstel. Die aspekte en die Raad vir die Omgewing se reaksie daarop (soos aan die kommissie skriftelik en mondelings voorgedra) is die volgende.

- a) Oos-Transvaal: voorgestelde grense, na aanleiding van die vraag of die streek Pretoria, KwaNdebele, Bronkhorstspuit, Middelburg en Witbank moet insluit. Die posisie van die Nasionale Krugerwildtuin.

Geen kommentaar op die PWV-grense of die insluiting daarvan van Pretoria. Die posisie van die Nasionale Krugerwildtuin word behandel in 5.

- b) PWV: of die streek Sasolburg, Pretoria en die dele van Bophuthatswana wat daartoe geleë is, moet uitsluit. Ten tweede, moet Pretoria in die Witwatersrand-Vereenigingsstreek geleë wees?

Geen kommentaar uit 'n omgewingsoogpunt nie.

- c) Oranje-Vrystaat: of die streek en die noordwestelike streek saamgevoeg moet word.

Sien 4.

- d) Oos-Kaapland/Transkei/Ciskei: of die streek een of twee streke moet wees, en die grense daarvan.

Sien 6 en soos in die teks uiteengesit.

- e) Wes-Kaapland: of die streek met 'n deel van Noord-Kaapland gekombineer moet word om een streek te vorm.

Sien 2.

See 6 above. Details are also contained in the original proposal of the Council of the Environment.

- e) Western Cape: whether this region should be combined with part of the Northern Cape to make one region:

See 2 above.

- f) Northern Transvaal: whether this region should include Pretoria, Groblersdal, Pilgrim's Rest and Hammanskraal. The position of the Kruger National Park:

See 5 and a) above.

- g) Northern Cape: whether the northern boundary of this region should include Kuruman and Postmasburg, and whether Namaqualand should be excluded from the region:

The Council's proposal includes Kuruman in its region 2c and Namaqualand in region 1a (Northern Cape).

- h) KwaZulu/Natal: whether the Umzumkhulu/Mount Currie area should be included in this region:

No comment from an environmental point of view.

MAPS

The following computer-generated maps were included in the presentation to the Commission on the Delimitation of Regions as shown here:

- 1 Structure of South Africa showing the plateau and the coastal plains and marginal slopes with the great escarpment in between.

4 Voorgeselde streke vir Suid-Afrika.

3 Primêre dreineringsstreke.

streke.

2 Homogene responsone met die groepering van dreinerings-

1 Bou van Suid-Afrika toon die plato en die kusvlaktes en marginale hellings met die groot eskarpement tussenin.

Die volgende rekenaargebaseerde kaart was ingesluit in die voorlegging aan die Kommissie vir die Afbakening van Streke:

KAARTE

Geen kommentaar uit 'n omgewingsoogpunt nie.

ingesluit word in hierdie streek.

h) KwaZulu/Natal: of die gebied Umzumkhulu/Mount Currie

Namakwaland by streek 1a (Noord-Kaapland).

Die Raad se voorstel sluit Kuruman by sy streek 2c in en

uitgesluit moet word van hierdie streek.

g) Noord-Kaapland: of die noordelike grens van die streek Kuruman en Postmasburg moet insluit, en of Namakwaland

Sien a) en 5.

Nasionale Krugerwildtuin.

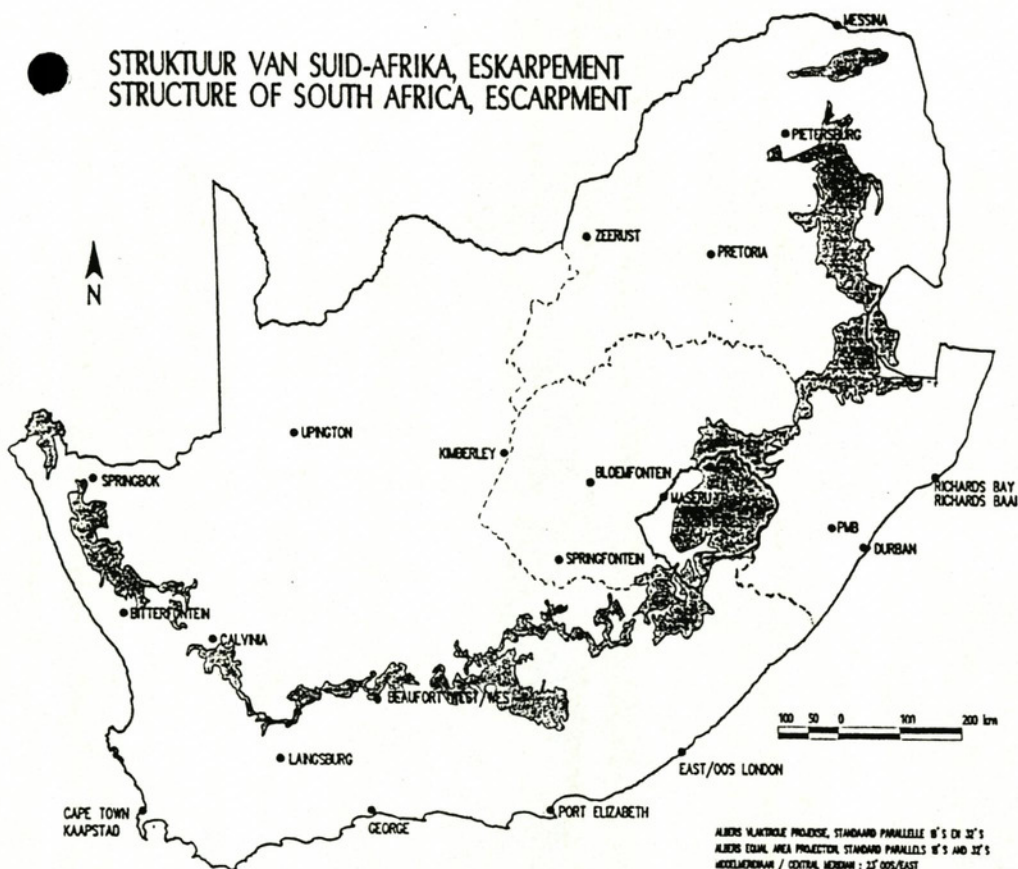
f) Noord-Transvaal: of die streek Pretoria, Groblersdal, Pilgrimskraal en Hammanskraal moet insluit. Die posisie van die

- 2 Homogeneous response zones with the grouping of drainage regions.
 - 3 Primary drainage regions.
 - 4 Proposed regions for South Africa.
 - 5 Proposed regions compared to the existing boundaries of the provinces and the independent and self governing states.
 - 5a Proposed regions compared to the proposal of the Commission for the Delimitation of Regions as well as to existing boundaries of the provinces and the independent and self governing states.
 - 6 Alternative regions.
 - 7 Alternative regions compared to the existing boundaries of the provinces and the independent and self governing states.
 - 7a Alternative regions compared to the proposal of the Commission for the Delimitation of Regions as well as to existing boundaries of the provinces and the independent and self governing states.
- In the presentation to the Commission the following colour coded maps were also used, but are not included in this publication:
- 8 Water production of the various river basins.
 - 9 Potential food production in terms of biomass.
 - 10 South African biomes.
 - 11 Veld types in relation to the escarpment.
 - 12 Present language distribution based upon language dominance in comparison with the proposed regions.

- 5 Voorgeselde streke vergelyk met bestaande grense van die provinsies en die onafhanklike en selfregerende state.
- 5a Voorgeselde streke vergelyk met die voorstel van die Kommissie vir die Afbakening van Streke sowel as met bestaande grense van die provinsies en die onafhanklike en selfregerende state.
- 6 Alternatiewe streke.
- 7 Alternatiewe streke vergelyk met bestaande grense van die provinsies en die onafhanklike en selfregerende state.
- 7a Alternatiewe streke vergelyk met die voorstel van die Kommissie vir die Afbakening van Streke sowel as met bestaande grense van die provinsies en die onafhanklike en selfregerende state.
- In die voorlegging aan die Kommissie was die volgende kleurkaarte ook gebruik, maar is nie in hierdie publikasie opgeneem nie:
- 8 Waterproduksie van die verskillende rivieropvanggebiede.
- 9 Potensiële voedselproduksie in terme van biomassa.
- 10 Die Suid-Afrikaanse biome.
- 11 Veldtipes in verhouding met die eskarpement.
- 12 Huidige taalverspreiding gebaseer op taaldominansie vergelyk met die voorgestelde streke.



STRUKTUUR VAN SUID-AFRIKA, ESKARPEMENT STRUCTURE OF SOUTH AFRICA, ESCARPMENT



SLEUTEL / LEGEND

- PROVINSIALE GRENSE
PROVINCIAL BOUNDARIES
- RSA GRENSE / RSA BOUNDARY
- DORPE/STEDE / MAJOR TOWNS
- ESKARPEMENT / ESCARPMENT

KAARTMAP 1 JULIE/JULY 1993

- DEPARTEMENT VAN WATERWESSE
DEPARTMENT OF WATER AFFAIRS
- GEOGRAFIESE INJUNTINGSTELSEL-
LABORATORIUM
GEOGRAPHIC INFORMATION SYSTEMS
LABORATORY
- RAAD VIR DIE OMGEWING
COUNCIL FOR THE ENVIRONMENT
- DEPARTEMENT VAN OMGEWINGSAKE
DEPARTMENT OF ENVIRONMENT
AFFAIRS

ALERS VAKTROSE PROJESIE, STANDAARD PARALLELE 18° S EN 22° S
ALERS EQUAL AREA PROJECTION, STANDARD PARALLELS 18° S AND 22° S
AUSLANDERMAN / CENTRAL MERIDIAN : 25° OOS/ EAST

SLEUTEL / LEGEND

- PROVINSIALE GRENSE
PROVINCIAL BOUNDARIES
- RSA GRENSE / RSA BOUNDARY
- DORPE/STEDE / MAJOR TOWNS
- VOORGESTELDE STREEKS/GRENSE
PROPOSED REGIONAL BOUNDARIES
- ADDISIONELE ONDERVERDELING/
ADDITIONAL SUBDIVISION
- ALTERNATIEWE GRENSE/
ALTERNATIVE BOUNDARIES
- OOR VOORGESTELDE STREEKE
OOR PROPOSED REGIONS

STREEK/REGION

- 1A ORANJE/ORANGE
- 1B VAAL
- 2A LIMPOPO
- 2B OLFANTS
- 2C BOPHUTHATSWANA
- 3 TUGELA / UGEDI
- 4 KEE / UMZINYUBU
- 5 CAPE
- 6 PWV

■ TBVC STATE / STATES

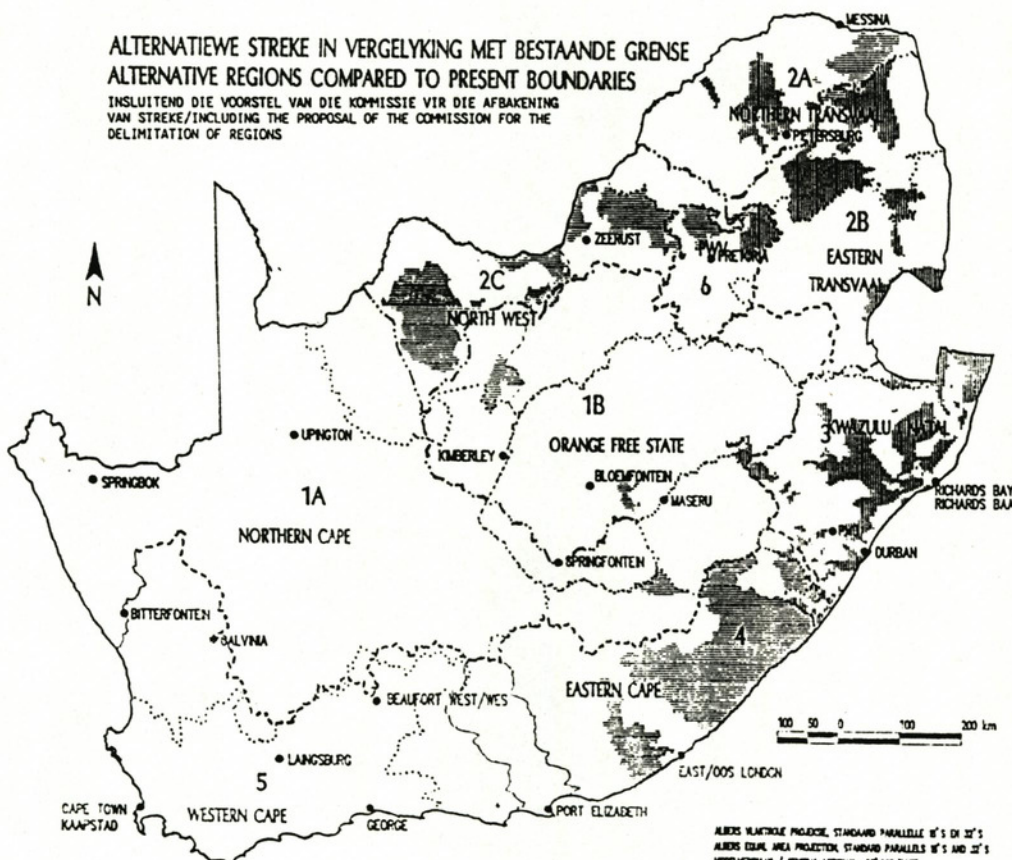
■ NATIONALE STATE / NATIONAL STATES

KAARTMAP 7 a JULIE/JULY 1993

- DEPARTEMENT VAN WATERWESSE
DEPARTMENT OF WATER AFFAIRS
- GEOGRAFIESE INJUNTINGSTELSEL-
LABORATORIUM
GEOGRAPHIC INFORMATION SYSTEMS
LABORATORY
- RAAD VIR DIE OMGEWING
COUNCIL FOR THE ENVIRONMENT
- DEPARTEMENT VAN OMGEWINGSAKE
DEPARTMENT OF ENVIRONMENT
AFFAIRS

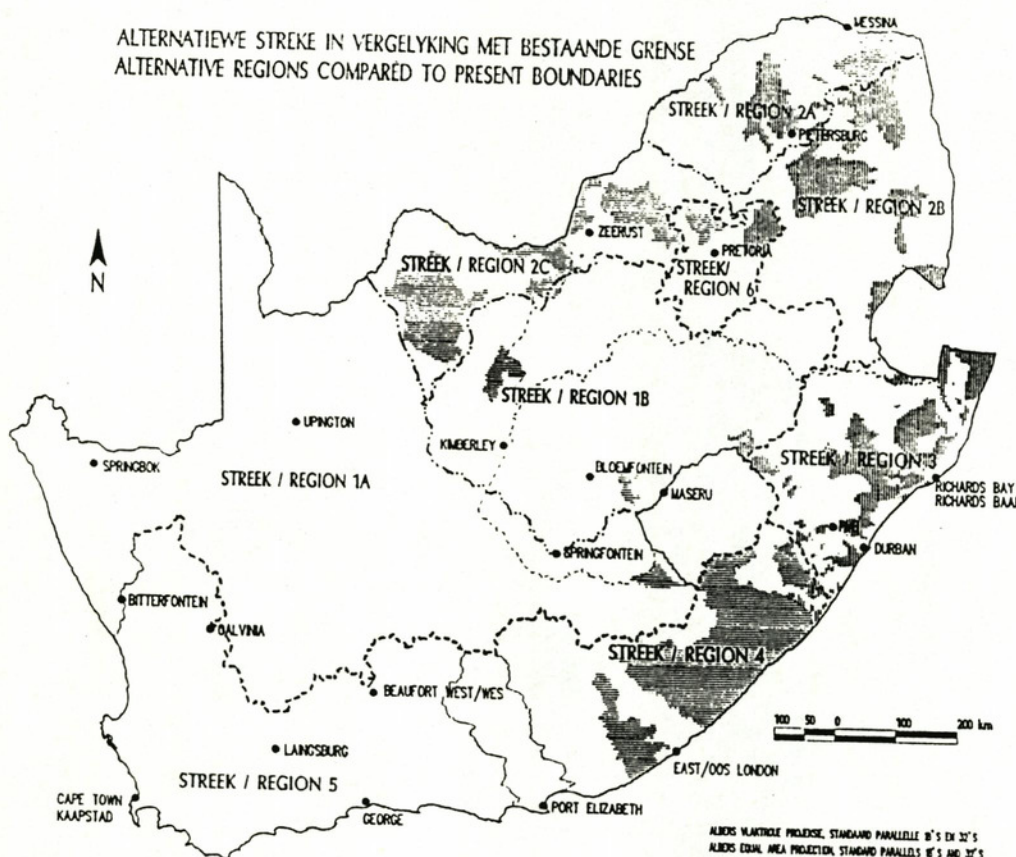
ALTERNATIEWE STREEKE IN VERGELYKING MET BESTAANDE GRENSE ALTERNATIVE REGIONS COMPARED TO PRESENT BOUNDARIES

INSLUITEND DIE VOORSTEL VAN DIE KOMMISSIE VIR DIE AFBAKENING
VAN STREEKE/INCLUDING THE PROPOSAL OF THE COMMISSION FOR THE
DELIMITATION OF REGIONS



ALERS VAKTROSE PROJESIE, STANDAARD PARALLELE 18° S EN 22° S
ALERS EQUAL AREA PROJECTION, STANDARD PARALLELS 18° S AND 22° S
AUSLANDERMAN / CENTRAL MERIDIAN : 25° OOS/ EAST

ALTERNATIEWE STREEKE IN VERGELYKING MET BESTAANDE GRENSE ALTERNATIVE REGIONS COMPARED TO PRESENT BOUNDARIES



SLEUTEL / LEGEND

- PROVINSIALE GRENSE / PROVINCIAL BOUNDARIES
- RSA GRENS / RSA BOUNDARY
- DORPE/STEEDE / MAJOR TOWNS
- VOORGESTELDE STREEKSREYSE / PROPOSED REGIONAL BOUNDARIES
- ADDSIONELE ONDERVERDELING / ADDITIONAL SUBDIVISION
- ALTERNATIEWE GRENSE / ALTERNATIVE BOUNDARIES

STREEK/REGION

- | | |
|----|------------------|
| 1A | ORANJE/ORANGE |
| 1B | VAAL |
| 2A | LIMPOPO |
| 2B | OLIFANTS |
| 2C | BOPHUTHATSWANA |
| 3 | TUGELA / WGEN |
| 4 | KET / UMZINYWELU |
| 5 | CAPE |
| 6 | PNV |

TBVC STATE / STATES

NASIONALE STATE / NATIONAL STATES

KAART/MAP 7 JULIE/JULY 1993



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GEOGRAFIESE INLIGTINGSTELSEL-
LABORATORIUM
GEOGRAPHIC INFORMATION SYSTEMS
LABORATORY



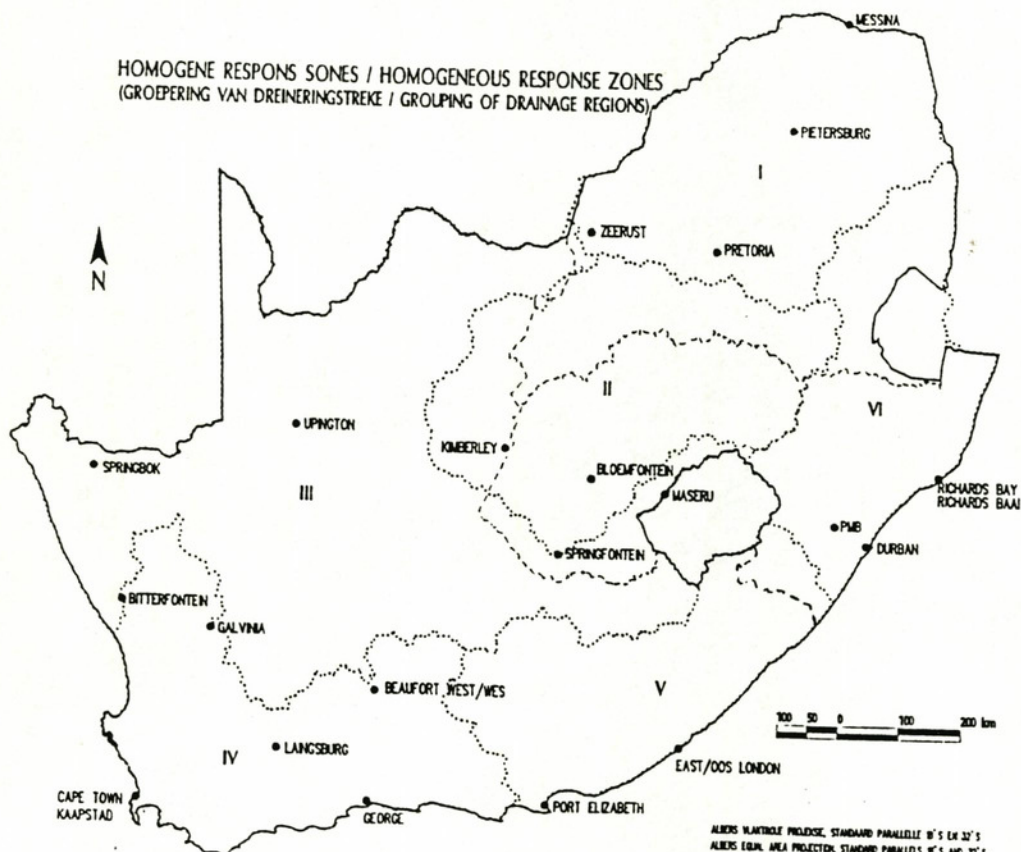
RAAD VIR DIE OMGEWING
COUNCIL FOR THE ENVIRONMENT



DEPARTMENT VAN OMGEWINGSAKE
DEPARTMENT OF ENVIRONMENTAL
AFFAIRS

ALDERS VLAKTIGE PROJEKSE, STANDAARD PARALLELE 10° S EN 32° S
ALDERS EQUAL AREA PROJECTION, STANDARD PARALLELS 10° S AND 32° S
MEZELMERIDIAN / CENTRAL MERIDIAN: 31° OOS/EAST

HOMOGENE RESPONS SONES / HOMOGENEOUS RESPONSE ZONES (GROEIERING VAN DREINERINGSSTREEKE / GROUPING OF DRAINAGE REGIONS)



SLEUTEL / LEGEND

- PROVINSIALE GRENSE / PROVINCIAL BOUNDARIES
- RSA GRENS / RSA BOUNDARY
- DORPE/STEEDE / MAJOR TOWNS
- RESPONS SONE GRENS / RESPONSE ZONE BOUNDARY

- | | |
|-----|--|
| I | LIMPOPO-OLIFANTS |
| II | VAAL |
| III | ORANJE/ORANGE |
| IV | WESTELIKE KAAP / WESTERN CAPE |
| V | OOSTELIKE KAAP / EASTERN CAPE |
| VI | OOSTELIKE ESKEPPEMENT / EASTERN ESCARPMENT |

KAART/MAP 2 JULIE/JULY 1993



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ALDERS VLAKTIGE PROJEKSE, STANDAARD PARALLELE 10° S EN 32° S
ALDERS EQUAL AREA PROJECTION, STANDARD PARALLELS 10° S AND 32° S
MEZELMERIDIAN / CENTRAL MERIDIAN: 31° OOS/EAST

SLEUTEL / LEGEND

- PROVINSIALE GRENSE
PROVINCIAL BOUNDARIES
- RSA GRENS / RSA BOUNDARY
- DORPE/STEDE / MAJOR TOWNS
- DRENERINGSTREKKE GRENS
DRAINAGE REGION BOUNDARY
- RESPONS SONE GRENS
RESPONSE ZONE BOUNDARY

- A - LIMPOPO
B - OLIFANTS
C - VAAL
D - ORANJE / ORANGE
E - OLIFANTS (WES-KAAP/WESTERN CAPE)
F - BUFFELS
G - BERG
H - BRE
I - GOURITZ
J - GROOT/GREAT BRAK / KROM
K - GROOT/GREAT VES
L - SWARTKOP
M - SONDRAGS
N - KARREKA / BOESMAN
O - GROOT/GREAT VES
P - KEISKALAMA
Q - GROOT/GREAT VES
R - KEISKALAMA
S - GROOT/GREAT VES
T - KEISKALAMA
U - KEISKALAMA
V - KEISKALAMA
W - KEISKALAMA
X - KEISKALAMA

KAARTMAP 3 JULIE/JULY 1993



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SLEUTEL / LEGEND

- PROVINSIALE GRENSE
PROVINCIAL BOUNDARIES
- RSA GRENS / RSA BOUNDARY
- DORPE/STEDE / MAJOR TOWNS
- VOORGESTELDE STREEKS/GRENSE
PROPOSED REGIONAL BOUNDARIES
- ADDISIONELE ONDERVERDELING/
ADDITIONAL SUBDIVISION
- ALTERNATIEWE GRENSE/
ALTERNATIVE BOUNDARIES

STREEK/REGION

- 1A ORANJE/ORANGE
1B VAAL
2A LIMPOPO
2B OLIFANTS
2C BOPHUTHATHWANA
3 TUGELA / WOEN
4 KEI / UMZIMVUBU
5 CAPE
6 PWV

KAARTMAP 6 JULIE/JULY 1993



DEPARTEMENT VAN WATERWESSE
DEPARTMENT OF WATER AFFAIRS



GEOGRAFIESE INLIGTINGSTELSEL
LABORATORIUM
GEOGRAPHIC INFORMATION SYSTEMS
LABORATORY

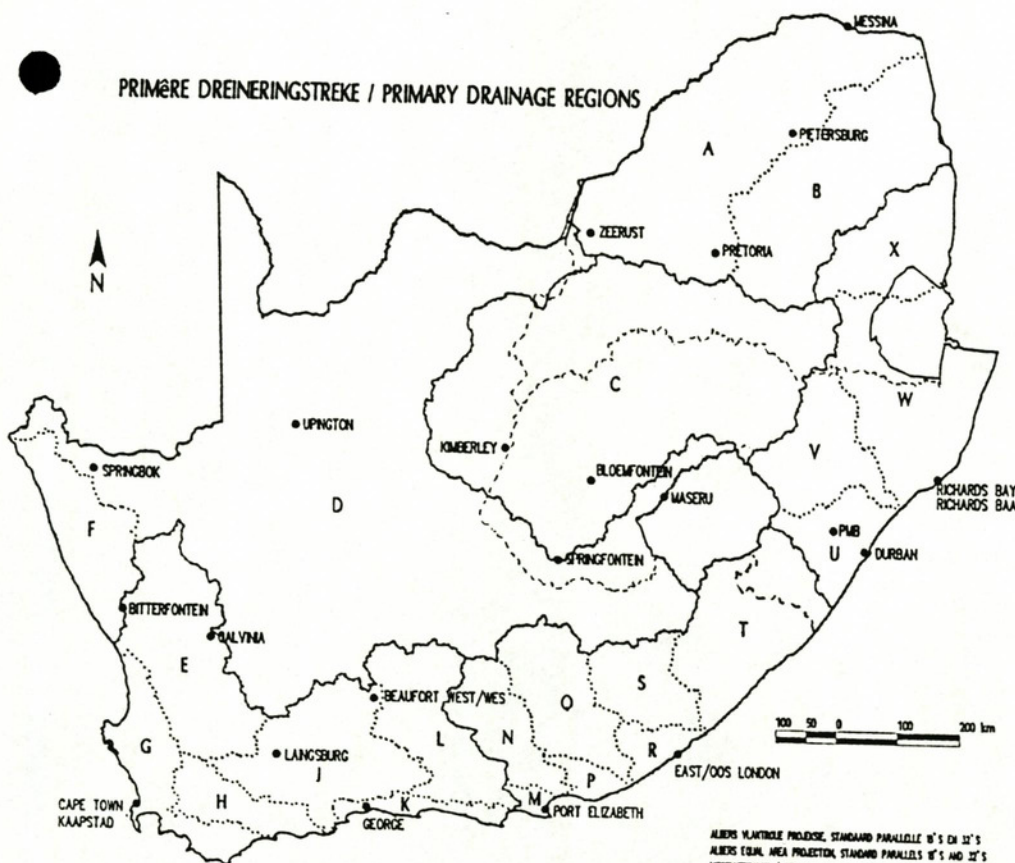


RAAD VIR DIE OMGEWING
COUNCIL FOR THE ENVIRONMENT



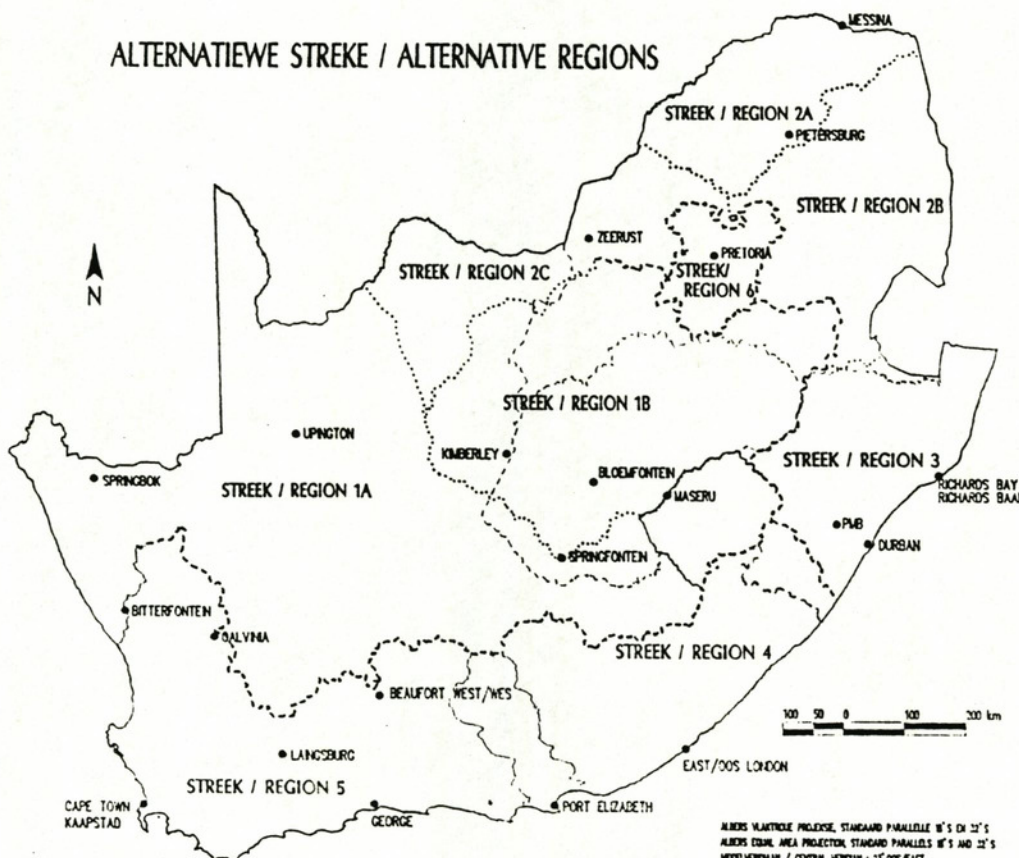
DEPARTEMENT VAN OMGEWINGSAKE
DEPARTMENT OF ENVIRONMENT
AFFAIRS

PRIMÊRE DREINERINGSSTREKE / PRIMARY DRAINAGE REGIONS

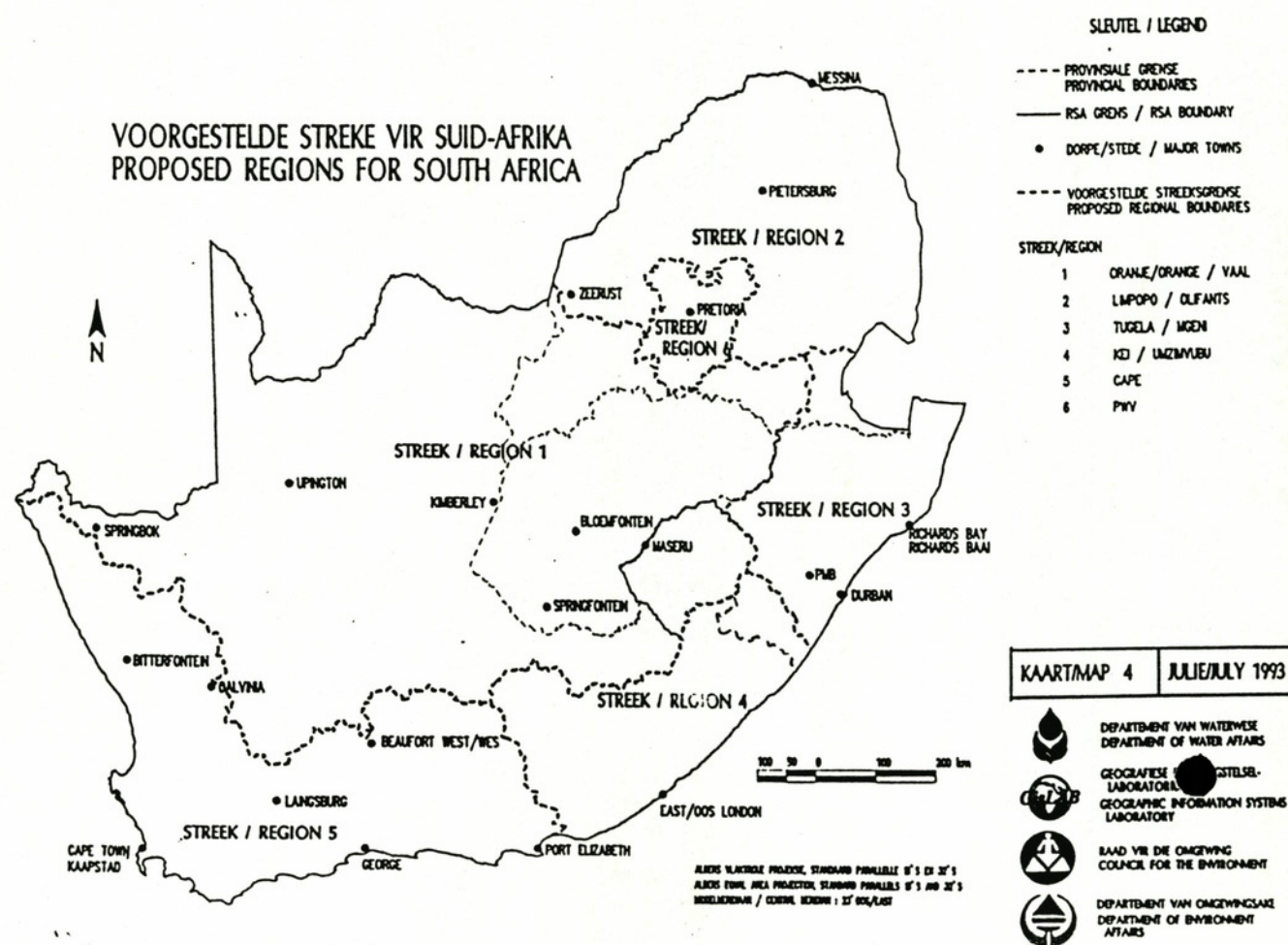
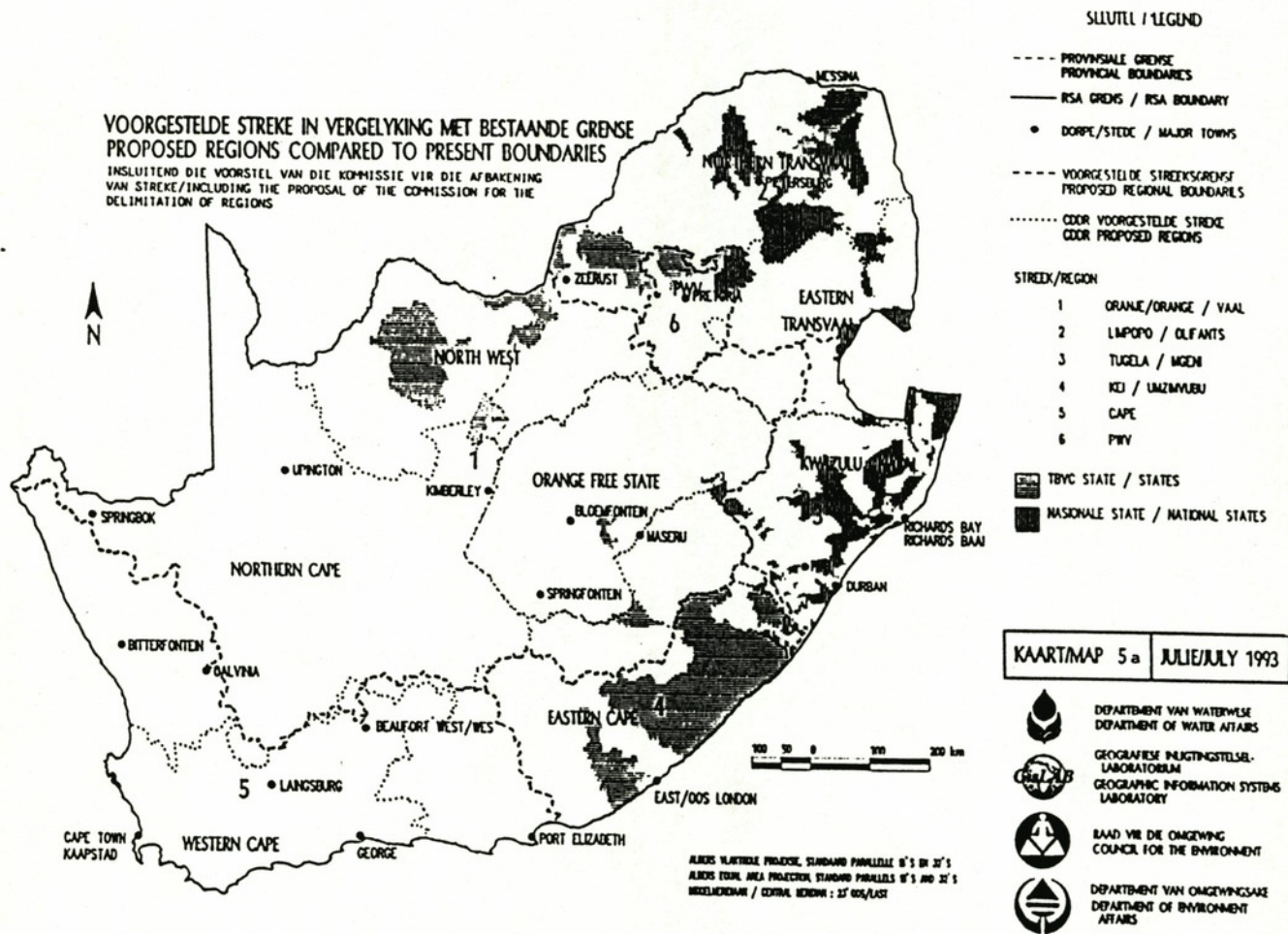


ALERS NANTIELE PROJEK, STANDARD PARALLELE 16° S EN 33° S
ALERS ESKAL AREA PROJEK, STANDARD PARALLELE 16° S EN 33° S
MIDDELMEER / CENTRAL MERE: 21° 00'S/EAST

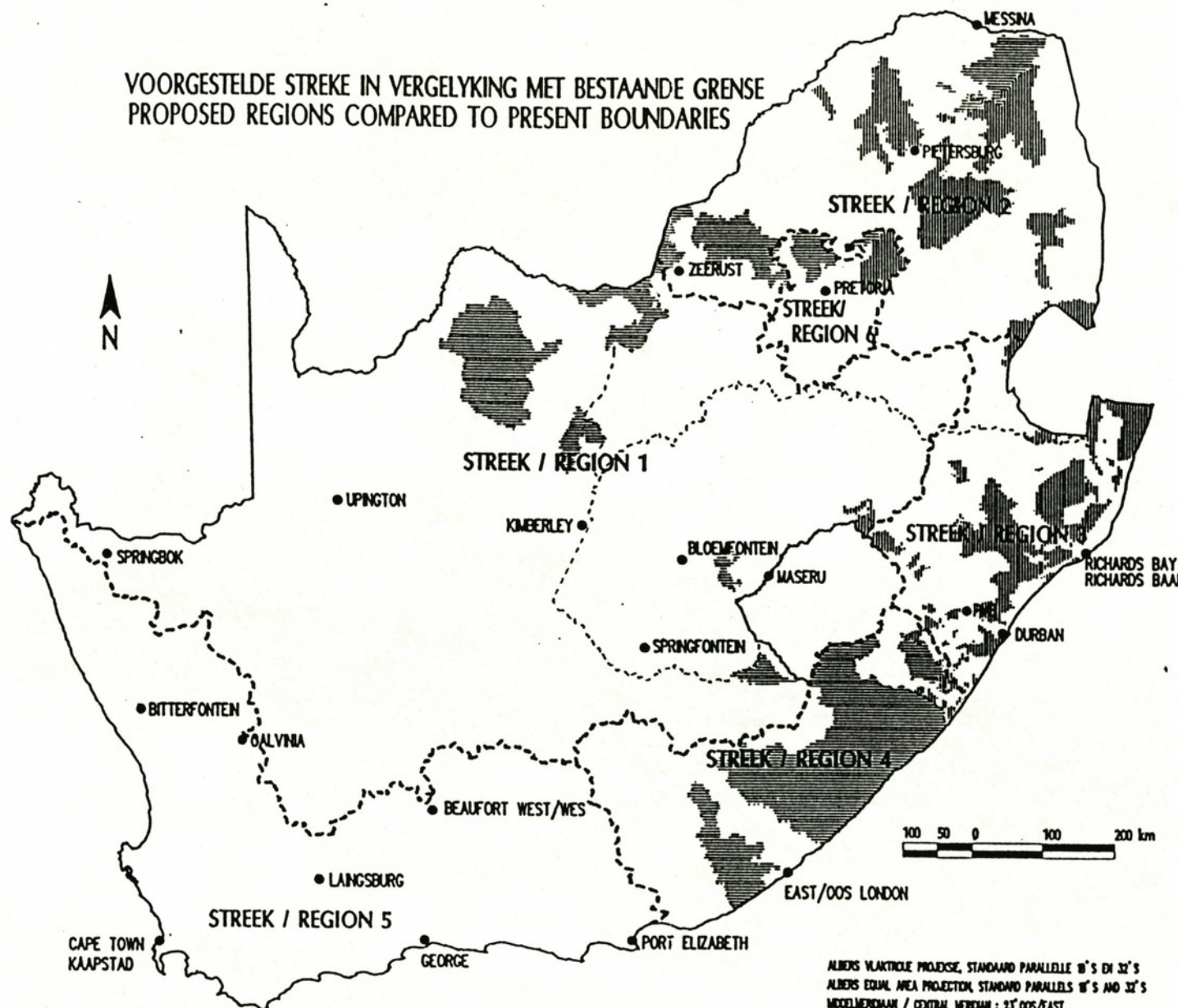
ALTERNATIEWE STREEKE / ALTERNATIVE REGIONS



ALERS NANTIELE PROJEK, STANDARD PARALLELE 16° S EN 33° S
ALERS ESKAL AREA PROJEK, STANDARD PARALLELE 16° S EN 33° S
MIDDELMEER / CENTRAL MERE: 21° 00'S/EAST



VOORGESTELDE STREKE IN VERGELYKING MET BESTAANDE GRENSE
PROPOSED REGIONS COMPARED TO PRESENT BOUNDARIES



SLEUTEL / LEGEND

- PROVINSIALE GRENSE
PROVINCIAL BOUNDARIES
- RSA GRENS / RSA BOUNDARY
- DORPE/STEDE / MAJOR TOWNS
- VOORGESTELDE STREEKSGRENS
PROPOSED REGIONAL BOUNDARIES

STREEK/REGION

- 1 ORANJE/ORANGE / VAAL
- 2 LIMPOPO / OLFANTS
- 3 TUGELA / MGEN
- 4 KEI / UMZIMVUBU
- 5 CAPE
- 6 PWV

■ TBVC STATE / STATES

■ NASIONALE STATE / NATIONAL STATES

KAART/MAP 5 JULIE/JULY 1993



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RAAD VIR DIE OMGEWING
COUNCIL FOR THE ENVIRONMENT



DEPARTEMENT VAN OMGEWINGSAKE
DEPARTMENT OF ENVIRONMENTAL
AFFAIRS

ALTIERS VLAKTROE PROJEKSE, STANDAARD PARALLELE 18° S EN 32° S
ALTIERS EQUAL AREA PROJECTION, STANDARD PARALLELS 18° S AND 32° S
MODELMEERDMAN / CENTRAL MERIDIAN : 25° 00'S/EAST