

A critical review of the South African freshwater angling legislative framework

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Mini-dissertation submitted in partial fulfilment of the
requirements for the degree of **Master's in Environmental
Management** at the School of Environmental Sciences,
North-West University (Potchefstroom Campus)

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May 2010

Abstract

Prior to 1993, freshwater angling in South Africa had been governed by the respective nature conservation legislation of the four South African provinces, the four “independent homelands” and the six so-called Bantustans. In 1993 a South Africa with nine provinces was created, of which only Limpopo and Mpumalanga promulgated its own laws governing freshwater angling.

From 2008 angling for listed threatened and protected freshwater fish species has been regulated by the National Environmental Management: Biodiversity Act, supplemented by the Threatened or Protected Species Regulations. In addition, it is anticipated that the Alien and Invasive Species Regulations, which will regulate angling for listed alien and invasive freshwater fish, will be promulgated in the near future. The result is that freshwater angling is currently being governed by a plethora of pre-1993 provincial, homeland and Bantustan legislation, two post-1993 provincial acts, as well as post-1993 national legislation.

In this dissertation the South African freshwater angling legislative framework was critically analysed. It was found that the multitude of fragmented and complex laws, created 15 “angling provinces” which leads to confusion amongst anglers and government officials alike. In the process legal certainty and reasonableness, cornerstones of a sound legal system, are being compromised, indigenous freshwater fish are not adequately protected and alien or invasive freshwater fish are not properly managed.

In the light of the above, and after taking comments by anglers and enforcement officials into account, recommendations are made for an improved legislative framework for freshwater in South Africa. It is recommended that all freshwater fish species be managed and/or protected on a catchment basis, as opposed to the current provincial basis. This will ensure legal certainty and reasonableness and that all indigenous freshwater fish which are subject to the similar threats are protected adequately and uniformly.

Key words:

Alien or Invasive Species Regulations, alien species, anglers, angling, biodiversity, critically endangered species, endangered species, freshwater angling, freshwater fish, invasive species, National Environmental Management: Biodiversity Act, national legislation, nature conservation, provincial legislation, protected species, Threatened or Protected Species Regulations, threatened species, vulnerable species.

Opsomming

Suid-Afrikaanse varswaterhengel was voor 1993 deur die natuurbewaringswetgewing van die vier Suid-Afrikaanse provinsies, die vier onafhanklike tuislande, sowel as die ses sogenaamde Bantustans gereguleer. In 1993 is 'n nuwe Suid-Afrika met nege provinsies geskep. Van die nuwe provinsies het slegs Limpopo en Mpumalanga hul eie wetgewing met betrekking tot varswaterhengel daargestel.

Sedert 2008 word hengel vir gelysde bedreigde en beskermde varswater visspesies deur die Nasionale Omgewingsbestuur: Biodiversiteitswet, aangevul deur die Bedreigde of Beskermde Spesies Regulasies, gereguleer. Dit word voorsien dat die Uitheemse en Indringerspesie Regulasies, wat hengel met betrekking tot gelysde uitheemse en indringer varswater visspesies sal reguleer, in die nabye toekoms in werking sal tree. Die resultaat is dat varswater hengel in Suid-Afrika tans gereguleer word deur 'n magdom pre-1993 provinsiale-, tuisland-, en Bantustan wetgewing, sowel as twee post-1993 provinsiale wette en pre-1993 nasionale wetgewing.

In hierdie skripsie is die bogenoemde regsraamwerk vir varswaterhengel in Suid-Afrika krities geanaliseer. Die bevindinge dui daarop dat die oorfloed van gefragmenteerde en ingewikkelde wette 15 “hengelprovinsies” skep, welke tot verwarring onder beide hengelaars en wetstoepassers lei. In die proses word regsekerheid en -redelikheid, hoekstene van 'n gesonde regstelsel, in gedrang gebring, inheemse varswatervisse word nie na behore beskerm nie en uitheemse- en indringervisse word nie behoorlik bestuur nie.

In die lig van bogenoemde, met in agneming hengelaars en wetstoepassers se kommentaar, word voorstelle gemaak vir 'n verbeterde regsraamwerk vir varswaterhengel in Suid-Afrika. Dit word voorgestel dat daar weggedoen word met die provinsiale regulering van varswaterhengel en dat regulering per opvangsgebied geskied. Sodanige regulering sal regsekerheid en –redelikheid verseker, waarborg dat inheemse visse wat soortgelyke bedreigings in die gesig staar, eenvormige en voldoende beskerming verkry en dat uitheemse- en indringervisspesies behoorlik bestuur sal kan word.

Sleutelbegrippe:

Bedreigde of Beskermde Spesies Regulasies, bedreigde spesie, Biodiversiteit, beskermde spesie, hengel, hengelaars, kwesbare spesie, Nasionale Omgewingsbestuur: Biodiversiteitswet, krities bedreigde spesie, indringerspesie nasionale wetgewing, natuurbewaring, provinsiale wetgewing, uitheemse spesie, Uitheemse of Indringerspesie Regulasies, varswater hengel, varswatervis

Acknowledgements

This dissertation is the culmination of years and years of studying and pondering freshwater angling in legislation in South Africa. It required the input and co-operation of a vast number of people to whom I hereby express my sincere thanks and gratitude:

- Etienne Kriel, the editor of the Tight Lines magazine who afforded me the opportunity to write a monthly column on legislation affecting anglers and allowed me to publish the questionnaire in the magazine;
- Oom Flip Joubert, whom I've never met, but who's books "Stywe Lyne" and "Die Groot Varswaterhengelboek" inspired me since I could read;
- The anglers of the Tight Lines magazine - my brothers in arms – who regularly corresponded with me to air their views regarding angling legislation and especially those who completed the questionnaire;
- The various government officials who were always willing to assist;
- Dr Francois Retief who supported and guided me throughout the research process;
- My wife, Hettie, without whose support (and processing of the questionnaire data) I could not have completed this journey; and
- My parents, Henk and Marie Viljoen. Without my father's influence I would never have become an angler, developed a love for nature and written this dissertation;
- My father and mother in law, Professor Schalk and Rhodé Vorster, who provided me with valuable advice and who proof read this thesis.

Finally, I dedicate this dissertation to my sons, Morné and Schalk. I sincerely hope that you will, in future, still be able to partake in this wonderful experience that is South African freshwater angling.

LIST OF ACRONYMS

AIS Regulations	Draft Alien and Invasive Species Regulations
C&R	Catch and Release
DEA	Department of Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism
GDARD	Gauteng Department of Agriculture and Rural Development
LEDET	Limpopo Department of Economic Development, Environment and Tourism
LEMA	Limpopo Environmental Management Act
MLRA	Marine Living Resources Act
NEMA	National Environmental Management Act
NEMBA	National Environmental Management: Biodiversity Act
NWA	National Water Act
NWDACE	North-West Department of Agriculture, Conservation and Environment
SAALAA	South African Artificial Lure Angling Association
SADSAA	South African Deep Sea Angling Association
TOPS Lists	Lists of Critically Endangered, Endangered, Vulnerable and Protected Species
TOPS Regulations	Threatened or Protected Species Regulations

TABLE OF CONTENTS

Abstract	ii
Opsomming	iii
Acknowledgements	iv
List of Acronyms	v
CHAPTER 1	
INTRODUCTION	1
1.1 Background and problem statement	1
1.2 Research objectives	10
1.3 Structure of the dissertation	10
CHAPTER 2	
METHODOLOGY	13
2.1 Literature review	13
2.2 Questionnaire results	15
2.3 Limitations to the research	16
CHAPTER 3	
LITERATURE REVIEW	19
3.1 Provincial legislation	20
3.1.1 Gauteng	21
3.1.1.1 To whom does the legislation apply?	23
3.1.1.2 Is an angling licence required?	25
3.1.1.3 Permissible angling methods	28

3.1.1.4	What are the bag and size limits for angling species?	33
3.1.1.5	What is the purpose of the Gauteng freshwater angling legislation?	38
3.1.2	Limpopo	38
3.1.2.1	To whom does the legislation apply?	42
3.1.2.2	Is an angling licence required?	43
3.1.2.3	Permissible angling methods	45
3.1.2.4	What are the bag and size limits for angling species?	46
3.1.2.5	What is the purpose of the Limpopo freshwater angling legislation?	47
3.1.3	Mpumalanga	48
3.1.3.1	To whom does the legislation apply?	51
3.1.3.2	Is an angling licence required?	51
3.1.3.3	Permissible angling methods	52
3.1.3.4	What are the bag and size limits for angling species?	56
3.1.3.5	What is the purpose of the Mpumalanga freshwater angling legislation?	57
3.1.4	Free State	58
3.1.4.1	To whom does the legislation apply?	61
3.1.4.2	Is an angling licence required?	61
3.1.4.3	Permissible angling methods	62
3.1.4.4	What are the bag and size limits for angling species?	63
3.1.4.5	What is the purpose of the Free State freshwater angling legislation?	65
3.1.5	Northern Cape	65
3.1.5.1	To whom does the legislation apply?	69
3.1.5.2	Is an angling licence required?	70
3.1.5.3	Permissible angling methods	70
3.1.5.4	What are the bag and size limits for angling species?	72

3.1.5.5	What is the purpose of the Northern Cape freshwater angling legislation?	76
3.1.6	Western Cape	77
3.1.6.1	To whom does the legislation apply?	78
3.1.6.2	Is an angling licence required?	78
3.1.6.3	Permissible angling methods	78
3.1.6.4	What are the bag and size limits for angling species?	78
3.1.6.5	What is the purpose of the Western Cape freshwater angling legislation?	80
3.1.7	Eastern Cape	81
3.1.7.1	To whom does the legislation apply?	89
3.1.7.1.1	Former Cape Province	89
3.1.7.1.2	Former Ciskei	89
3.1.7.1.3	Former Transkei	89
3.1.7.2	Is an angling licence required?	90
3.1.7.2.1	Former Cape Province	90
3.1.7.2.2	Former Ciskei	90
3.1.7.2.3	Former Transkei	92
3.1.7.3	Permissible angling methods	92
3.1.7.3.1	Former Cape Province	92
3.1.7.3.2	Former Ciskei	92
3.1.7.3.3	Former Transkei	94
3.1.7.4	What are the bag and size limits for angling species?	95
3.1.7.4.1	Former Cape Province	95
3.1.7.4.2	Former Ciskei	95
3.1.7.4.3	Former Transkei	98
3.1.7.5	What is the purpose of the Eastern Cape freshwater angling legislation?	98
3.1.7.5.1	Former Cape Province	98

3.1.7.5.2	Former Ciskei	99
3.1.7.5.3	Former Transkei	99
3.1.7.6	Conclusions regarding the legislation governing freshwater angling in the Eastern Cape	100
3.1.8	North-West Province	100
3.1.8.1	To whom does the legislation apply?	104
3.1.8.1.1	Former Transvaal	104
3.1.8.1.2	Former Cape Province	104
3.1.8.1.3	Former Bophuthatswana	104
3.1.8.2	Is an angling licence required?	105
3.1.8.2.1	Former Transvaal	105
3.1.8.2.2	Former Cape Province	105
3.1.8.2.3	Former Bophuthatswana	105
3.1.8.3	Permissible angling methods	105
3.1.8.3.1	Former Transvaal	105
3.1.8.3.2	Former Cape Province	105
3.1.8.3.3	Former Bophuthatswana	106
3.1.8.4	What are the bag and size limits for angling species?	107
3.1.8.5	What is the purpose of the North-West Province freshwater angling legislation?	108
3.1.8.5.1	Former Transvaal	108
3.1.8.5.2	Former Cape Province	108
3.1.8.5.3	Former Bophuthatswana	109
3.1.8.6	Conclusions regarding the legislation governing freshwater angling in the North-West Province	109
3.1.9	KwaZulu-Natal	109
3.1.9.1	To whom does the legislation apply?	113
3.1.9.1.1	Former Natal	113
3.1.9.1.2	Former Transkei	114

3.1.9.2	Is an angling licence required?	114
3.1.9.2.1	Former Natal	114
3.1.9.2.2	Former Transkei	116
3.1.9.3	Permissible angling methods	116
3.1.9.3.1	Former Natal	116
3.1.9.3.2	Former Transkei	118
3.1.9.4	What are the bag and size limits for angling species?	118
3.1.9.4.1	Former Natal	118
3.1.9.4.2	Former Transkei	120
3.1.9.5	What is the purpose of the KwaZulu-Natal freshwater angling legislation?	121
3.1.9.5.1	Former Natal	121
3.1.9.5.2	Former Transkei	121
3.1.9.6	Conclusion regarding the legislation governing freshwater angling in the KwaZulu-Natal	121
3.1.10	Conclusion regarding provincial freshwater angling legislation	121
3.2	National legislation	133
3.2.1	The Constitution	133
3.2.2	National Environmental Management Act	138
3.2.3	The National Environmental Management: Biodiversity Act	141
3.2.3.1	Threatened or Protected Species	147
3.2.3.2	Alien and invasive species	148
3.2.3.2.1	Alien species	148
3.2.3.2.2	Invasive species	149
3.2.3.3	Permits	151
3.2.3.4	The TOPS Regulations and Lists	152
3.2.3.4.1	Which freshwater fish are listed in the TOPS regulations?	153
3.2.3.4.2	Are the NEMBA and TOPS Regulations applicable to freshwater anglers?	155
3.2.3.4.3	Concerns regarding the impact of the TOPS Regulations on	

	freshwater anglers	157
3.2.3.4.4	The effect of the NEMBA and TOPS regulations on freshwater angling and listed freshwater fish	167
3.2.3.5	Draft Alien and Invasive Species Regulations	169
3.2.4	National Water Act	172
3.2.4.1	The purpose of the National Water Act	173
3.2.4.2	Entitlement to water use	174
3.2.4.3	Water pollution control	174
3.2.4.4	Water management areas	175
3.2.5	Marine Living Resources Act	177

CHAPTER 4

	QUESTIONNAIRE RESULTS	178
4.1	Introduction	178
4.2	Do you think we should have angling licences in SA at all?	178
4.3	What should the licence fees be used for?	179
4.4	How much are you willing to pay for a national angling licence (per year)?	180
4.5	Is there a need for a single national angling licence?	181
4.6	Should there be a single, national law for angling?	182
4.7	Should there be separate licences for fresh and salt water angling?	183
4.8	Should there be separate legislation for each province, each with its own licence?	184
4.9	Should there be separate legislation for each province which is summarised on a single national angling licence?	184
4.10	Should there be separate legislation and licences for each province?	185
4.11	Where should one be able to obtain an angling licence?	185
4.12	How many rods should an angler be allowed to fish with?	186
4.13	How many hooks per rod should an angler be allowed to fish with?	187
4.14	Should anglers be prohibited from using keep nets?	188

4.15	Should all species of fish caught be released?	189
4.16	Should feeding places be allowed?	189
4.17	Should markers for feeding places be allowed?	190
4.18	Should fresh water anglers be allowed to fish with live bait?	191
4.19	Should anglers be forced not to return any alien invasive species (bass, carp & trout) to our waters?	192
4.20	Should fishing with gill nets/any other manner of fishing that does not involve a rod and reel be allowed?	193
4.21	Should anglers in possession of an angling licence be allowed to enter any angling waters, without having to pay an entrance fee?	193
4.22	Conclusion	195

CHAPTER 5

CONCLUSION		196
5.1	The purpose of South African freshwater angling legislation	196
5.1.1	The Constitution	196
5.1.2	The NEMA	197
5.1.3	The NEMBA	198
5.1.4	Provincial legislation	198
5.1.5	Conclusion	199
5.2	Is the current legislative framework for freshwater angling in South Africa aligned with the purpose thereof?	199
5.2.1	Does South African freshwater angling legislation facilitate the conservation and sustainable use of freshwater fish?	200
5.2.2	Is the South African freshwater angling legislation reasonable, as is required by the Constitution?	201
5.2.3	Does South African freshwater angling legislation facilitate intergovernmental coordination and harmonisation between the different spheres and departments of government?	202
5.2.4	Does South African freshwater angling legislation facilitate comply with the postulates of justice?	202

5.2.5	Conclusion	204
5.3	What are the views of anglers regarding the current legislative framework for freshwater angling in South Africa?	204
5.4	Recommendations for an improved legislative framework for freshwater angling in South Africa	205
5.4.1	Update the existing legislation	206
5.4.2	Integrated permits	207
5.4.3	Create a new national legislative framework for freshwater angling	208
5.4.4	Recommended option	212
5.5	Areas for further research	212
5.6	Conclusion	213

BIBLIOGRAPHY	215
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ANNEXURES

Annexure 1	Tight Lines anglers questionnaire	224
Annexure 2	Questionnaire circulated at the Yellowfish Working Group Conference, 2009	226
Annexure 3	Questionnaire results	229
Annexure 4	TOPS permit application processes	232
Annexure 5	Largemouth Yellowfish (<i>Labeobarbus kimberleyensis</i>)	235
Annexure 6	Draft list of prohibited alien species	236
Annexure 7	List of Invasive Freshwater Fish Species	239

LIST OF TABLES

CHAPTER 1

Table 1.1	Legislation governing fresh water angling in South Africa, prior to 1993.	2
Table 1.2	Legislation currently governing fresh water angling in South Africa	6
Table 1.3	Structure of dissertation	12

CHAPTER 3

Table 3.1	Provincial legislation applicable to freshwater angling in Gauteng	21
Table 3.2	Gauteng freshwater angling definitions	22
Table 3.3	Comparison of Administrator's Notice 700 of 20 September 1950 and the Transvaal Ordinance	26
Table 3.4	Declared trout waters in terms of Gauteng angling legislation	29
Table 3.5	Bag and size limits of fish that may be caught and retained in Gauteng	34
Table 3.6	Angling legislation of former provinces, Bantustans and homelands which now form part of Limpopo	39
Table 3.7	Provincial legislation applicable to freshwater angling in Limpopo	39
Table 3.8	Limpopo freshwater angling definitions	40
Table 3.9	Bag and size limits of fish that are sometimes enforced in Limpopo	46
Table 3.10	Angling legislation of former provinces, Bantustans and homelands which now form part of Mpumalanga	49
Table 3.11	Provincial legislation applicable to freshwater angling in Mpumalanga	49
Table 3.12	Mpumalanga freshwater angling definitions	49
Table 3.13	Mpumalanga fly-fishing waters	53

Table 3.14	Bag and size limits for Mpumalanga	56
Table 3.15	Angling legislation of former provinces, Bantustans and homelands which now form part of the Free State	59
Table 3.16	Provincial legislation applicable to freshwater angling in the Free State	59
Table 3.17	Free State freshwater angling definitions	59
Table 3.18	Bag and size limits of fish that may be caught and retained in the Free State	63
Table 3.19	Provincial legislation governing freshwater angling in the Northern Cape.	66
Table 3.20	Northern Cape freshwater angling definitions	66
Table 3.21	Sections of the Cape Ordinance which are not applicable to owners of privately owned inland waters	69
Table 3.22	Bag and size limits for freshwater fish in the Northern Cape	72
Table 3.23	Specially Protected fish in terms of the Northern Cape Nature Conservation Act (Not commenced yet)	73
Table 3.24	Protected fish in terms of the Northern Cape Nature Conservation Act (Not commenced yet)	75
Table 3.25	Invasive fish in terms of the Northern Cape Nature Conservation Act (Not commenced yet)	76
Table 3.26	Provincial and homeland legislation currently governing freshwater angling in the Western Cape	77
Table 3.27	Provincial and homeland legislation currently governing freshwater angling in the Eastern Cape	82
Table 3.28	Ciskei freshwater angling definitions	83
Table 3.29	Transkei freshwater angling definitions	86
Table 3.30	Ciskei trout waters	90
Table 3.31	Bag and size limits in the area formerly known as Ciskei	96
Table 3.32	Protected fish in the Transkei	98
Table 3.33	Provincial and homeland freshwater angling legislation applicable to freshwater angling in the North-West Province	102

Table 3.34	Bophuthatswana angling definitions	103
Table 3.35	Bag and size limits in the North-West Province	107
Table 3.36	Provincial legislation governing freshwater angling in KwaZulu-Natal	111
Table 3.37	KwaZulu-Natal angling definitions	111
Table 3.38	Bag and size limits in KwaZulu-Natal	118
Table 3.39	Fish that may not be exported from or imported into KwaZulu-Natal, except if permit has been granted therefore.	120
Table 3.40	Comparison of provincial angling legislation	122
Table 3.41	NEMA principles relevant to freshwater angling	140
Table 3.42	NEMBA definitions relevant to freshwater angling	143
Table 3.43	Critically endangered freshwater fish	153
Table 3.44	Endangered freshwater fish	153
Table 3.45	Vulnerable freshwater fish	153
Table 3.46	Protected freshwater fish	154
Table 3.47	National Water Act definitions relevant to freshwater angling	172

LIST OF MAPS

CHAPTER 1

Map 1.1	South Africa pre 1993	1
Map 1.2	Provinces of South Africa post 1993	4

CHAPTER 3

Map 3.1	Transvaal	21
Map 3.2	Gauteng	21
Map 3.3	Bophuthatswana	38
Map 3.4	Lebowa	38
Map 3.5	Gazankulu	39

Map 3.6	Limpopo	39
Map 3.7	Bophuthatswana	48
Map 3.8	Lebowa	48
Map 3.9	KaNgwane	48
Map 3.10	Mpumalanga	48
Map 3.11	Bophuthatswana	58
Map 3.12	Qwaqwa	58
Map 3.13	Free State	58
Map 3.14	Cape of Good Hope Province	65
Map 3.15	Northern Cape Province	65
Map 3.16	Cape of Good Hope Province	77
Map 3.17	Western Cape Province	77
Map 3. 18	Cape of Good Hope Province	81
Map 3. 19	Ciskei	81
Map 3. 20	Transkei	81
Map 3. 21	Eastern Cape province	81
Map 3. 22	Transvaal	101
Map 3. 23	Cape of Good Hope	101
Map 3. 24	Bophuthatswana	101
Map 3. 25	North-West	101
Map 3. 26	Natal	110
Map 3. 27	KwaZulu	110
Map 3.28	Transkei	110
Map 3.29	KwaZulu-Natal	110
Map 3.30	South Africa's water management areas	176
 CHAPTER 5		
Map 5.1	Vaal River catchment	211

LIST OF FIGURES

CHAPTER 3

Figure 3.1	Comparison of fish species and abundances recorded at invaded and non-invaded sites during seasonal surveys of the Rondegat in 2003	79
Figure 3.2	Length frequency distributions for all yellowfish recorded at study sites during seasonal surveys in 2003	80

CHAPTER 4

Figure 4.1	What should the licence fees be used for?	180
Figure 4.2	How much are you willing to pay for a national angling licence?	181
Figure 4.3	Where should one be able to obtain an angling licence?	185
Figure 4.4	How many rods should an angler be allowed to fish with?	187
Figure 4.5	How many hooks per rod should an angler be allowed to fish with?	188
Figure 4.6	Should anglers be forced not to return any alien invasive species (bass, carp & trout) to our waters?	192
Figure 4.7	Should anglers in possession of an angling licence be allowed to enter any angling waters, without having to pay an entrance fee?	194

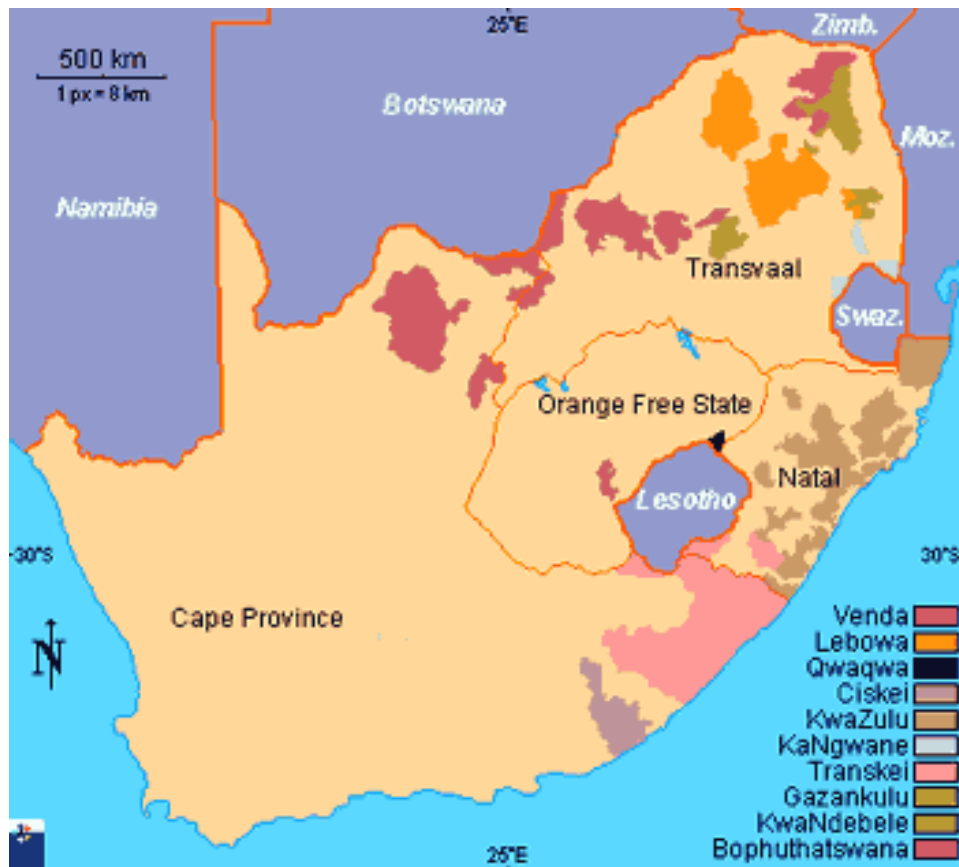
CHAPTER 1

INTRODUCTION

1.1. Background and problem statement

Prior to 1993 South Africa consisted of four provinces, namely the Transvaal, Orange Free State, Natal and the Cape Province. It also included the so-called "independent homelands", namely the Transkei, Bophuthatswana, Venda and the Ciskei, as well as six so-called Bantustans, namely Qwaqwa, Lebowa, KaNgwane, KwaZulu, KwaNdebele and Gazankulu, which were not regarded as independent. Map 1 indicates South Africa's provinces, homelands and Bantustans prior to 1993 (www.sahistory.org.za).

Map 1.1: South Africa pre-1993



At that stage freshwater angling was governed by the nature conservation legislation of each province, homeland and Bantustan, with the exception of KwaNdebele which did not have its own nature conservation legislation (Table 1.1).

Table 1.1: Legislation governing freshwater angling in South Africa, prior to 1993

Province	Applicable Legislation
Transvaal	Transvaal Nature Conservation Ordinance 12 of 1983 ("Transvaal Ordinance") Transvaal Nature Conservation Regulations 2030 of 1983 ("Transvaal Regulations")
Free State	Free State Nature Conservation Ordinance of 1969 ("Free State Ordinance") Free State Nature Conservation Regulations 184 of 1983 (Free State Regulations")
Cape Province	Cape of Good Hope Nature & Environmental Conservation Ordinance 19 of 1974 ("Cape Ordinance") Cape of Good Hope Nature & Environmental Conservation Regulations 955 of 1975 ("Cape Regulations")
Natal	Natal Nature Conservation Ordinance 15 of 1974 ("Natal Ordinance") Natal Freshwater Fish Regulations 141 of 1974 ("Natal Regulations")
Ciskei	Ciskei Nature Conservation Act 10 of 1987
Transkei	Decree 9 (Environmental Conservation) of 1992
Bophuthatswana	Bophuthatswana Nature Conservation Act 3 of 1973 ("Bophuthatswana Act")
Qwaqwa	Qwaqwa Nature Conservation Act 5 of 1976 ("Qwaqwa Act")
Lebowa	Lebowa Nature Conservation Act 10 of 1973 ("Lebowa Act")
KaNgwane	KaNgwane Nature Conservation Act 3 of 1981 ("KaNgwane Act")
Gazankulu	Gazankulu Nature Conservation Act 5 of 1975 ("Gazankulu Act")

Venda	Nature Conservation and National Parks Act 20 of 1986 (“Venda Act”)
KwaZulu	KwaZulu Nature Conservation Ordinance 8 of 1975 (KwaZulu Ordinance”)

Although a multitude of legislation existed, it was quite simple for an angler to know which legislation was applicable to him, as it was - mainly because of the strict enforcement of apartheid - easy to know in which province, homeland or Bantustan he was finding himself in.

With the enactment of the Constitution of the Republic of South Africa Act 200 of 1993 ("the previous constitution") in 1993, the provincial structure of South Africa was changed and nine new provinces were created, namely Gauteng, the Northern Province (the name was subsequently changed to “Limpopo”), Mpumalanga, North-West, Free State, KwaZulu-Natal, Eastern Cape, Western Cape and the Northern Cape (South Africa, 1993).

When the previous constitution was subsequently repealed by the Constitution of The Republic of South Africa Act 104 of 1996 ("the Constitution") the nine provinces remained and the borders of the provinces are currently defined in terms of Section 103(1), and (2) and Schedule 1A of the Constitution (South Africa, 1996). In this regard, please refer to Map 1.1.

In certain instances, some of the current provinces were created by joining together portions of more than one previous province, homeland or Bantustan. The current North-West Province, for example, comprises areas which formerly formed part of the Cape of Good Hope and Transvaal provinces, as well as certain parts of Bophuthatswana.

Map 1.2: Provinces of South Africa post 1993 (www.nationsonline.org)



In terms of Section 241 and Schedule 6(1) of the Constitution, all laws that were in force when the Constitution took effect (“old order legislation”), continue to be in to be force, unless they have been repealed or are inconsistent with the Constitution (South Africa, 1996). In terms of Schedule 6(2) of the Constitution, the old order legislation does not have a wider territorial application than it had before the commencement of the old Constitution (South Africa, 1996). Since 1993 only Limpopo and Mpumalanga enacted their own laws governing freshwater angling.

The effect of Section 241 and Schedule 6 of the Constitution is that all the pre-1993 provincial, homeland and Bantustan legislation is still in force in the area it was specifically enacted for. For example, the laws applicable to the pre-1993 Transvaal, remain in force in all areas which formed part of the former Transvaal province (e.g.

Gauteng, North-West, Limpopo and Mpumalanga) unless they have been repealed by a specific province. Similarly, legislation enacted by Bophuthatswana or the Ciskei remains in force in the homeland areas that existed prior to the enactment of the previous Constitution. The current situation in the North-West Province, for example, is that freshwater angling is governed by the Transvaal, Cape and the Bophuthatswana legislation. Freshwater angling in the other provinces is still governed by the legislation drafted for the four pre-1993 provinces, homelands and Bantustans.

In 2004 the National Environmental Management: Biodiversity Act 10 of 2004 ("NEMBA") was promulgated (South Africa, 2004(a)). In 2007 the Threatened or Protected Species Regulations 152 of 2007 ("TOPS Regulations") and the Lists of Critically Endangered, Endangered, Vulnerable and Protected Species (TOPS Lists) were published in terms of the NEMBA (South Africa, 2007(a) and (b)). The TOPS Regulations and Lists came into effect on 1 February 2008 (DEA, 2007:31). The NEMBA read together with the TOPS Regulations and Lists has a direct impact on freshwater angling, as certain freshwater angling species are listed therein.

In April 2009 the Department of Environmental Affairs ("DEA") published for comment the Draft Alien and Invasive Species Regulations ("AIS Regulations") which will govern angling for listed alien and invasive freshwater fish species (South Africa, 2009(a)). The AIS Regulations is not in force yet. The NEMBA, TOPS and AIS Regulations will be implemented by both the DEA and the provincial departments managing environmental matters.

The result is that freshwater angling in South Africa is currently being governed by a plethora of contradicting pre-1993 provincial, homeland and Bantustan legislation, two post-1993 provincial acts, as well as post-1993 national legislation (see Table 1.2).

Table 1.2: Legislation currently governing freshwater angling in South Africa

Province	Applicable Legislation
Gauteng	• Transvaal Nature Conservation Ordinance • Transvaal Nature Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
Limpopo	• Limpopo Environmental Management Act • Limpopo Environmental Management Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
Mpumalanga	• Mpumalanga Nature Conservation Act • Mpumalanga Nature Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
Free State	• Free State Nature Conservation Ordinance • Free State Nature Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
Northern Cape	• Cape of Good Hope Nature and Environmental Conservation Ordinance • Cape of Good Hope Nature and Environmental Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
Western Cape	• Cape of Good Hope Nature and Environmental Conservation Ordinance • Cape of Good Hope Nature and Environmental Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations

Eastern Cape	Areas formerly part of Cape Province • Cape of Good Hope Nature and Environmental Conservation Ordinance • Cape of Good Hope Nature and Environmental Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations Areas formerly part of Ciskei • Ciskei Nature Conservation Act • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations Areas formerly part of Transkei • Transkei Decree 9 (Environmental Conservation) of 1992 • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
North-West	Areas formerly part of Cape Province • Cape of Good Hope Nature and Environmental Conservation Ordinance • Cape of Good Hope Nature and Environmental Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations Areas formerly part of Transvaal • Transvaal Nature Conservation Ordinance • Transvaal Nature Conservation Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations

	Areas formerly part of Bophuthatswana • Bophuthatswana Nature Conservation Act • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations
KwaZulu-Natal	Areas formerly part of Natal • Natal Nature Conservation Ordinance • Natal Freshwater Fish Regulations • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations Areas formerly part of Transkei • Transkei Decree • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations Areas formerly part of KwaZulu • KwaZulu Nature Conservation Ordinance 8 of 1975 • National Environmental Management: Biodiversity Act • Threatened or Protected Species Regulations

Because each province views angling and angling permits, conservation and management of its freshwater resources differently (De Villiers, 2007(a)), they often differ regarding various angling issues, such as bag and size limits for specific angling species, whether a fishing licence is required or not and which types of bait may be used, even in instances where water courses are shared.

While one cannot criticise the fact that a province has the authority to enact specific legislation governing the protection or use of its biological resources (such as freshwater fish) or the management of certain activities within its borders (such as freshwater

angling), the sheer volume of legislation and the complexity thereof are confusing to the average angler. The following examples can be used to illustrate the point:

- A freshwater angler in Gauteng is less than two hours drive away from angling waters in Mpumalanga, Limpopo, North-West and the Free State, each with its own legislation. In some of the provinces the angler must be in possession of an angling licence, in others not.
- Should an angler find himself in the North-West Province, it will be extremely difficult for him to know which legislation is applicable to him as it is nearly impossible for him to know whether he finds himself in the old Transvaal, Cape Province or Bophuthatswana.
- The provincial legislation differs even where watercourses are shared. A case in point is the Vaal River which is being shared by the Mpumalanga, Gauteng, Free State and Northern Cape provinces. Angling for a specific fish species in such shared watercourses is governed by contradicting provincial legislation. The bag and size limits for smallmouth yellowfish, for example, differ from province to province, although the fish is caught in the same river.

In addition to the above-mentioned legislation which deals with the protection and management of South Africa's biodiversity *per se*, the National Water Act 36 of 1998 ("NWA"), which mainly deals with the protection and management of South Africa's freshwater resources, also comes into play. Section 2(g) states that one of the purposes of the NWA is to protect "*aquatic and associated ecosystems and their biological diversity*" (South Africa, 1998(a)). Section 19 of the NWA, read together with the definitions of "pollution" and "resource quality", makes provision for the protection of the "*aquatic organisms*", "*biological characteristics of water*" as well as the "*characteristics, condition and distribution of aquatic biota*" (South Africa, 1998(a)).

While a lawyer, after numerous hours of research, may be able to ascertain the correct position regarding the legislation governing angling for a specific freshwater fish species in a given area, the multitude of laws ultimately leads to confusion amongst anglers and government officials alike. The author has been writing a column "*The Angler and the*

Law" for the Stywe Lyne/Tight Lines magazine ("Tight Lines") since July 2005 and has received numerous questions from readers and even provincial government officials regarding which laws are applicable to freshwater angling in specific instances and how such laws should be interpreted. The situation clearly becomes untenable if even the civil servants, who must apply these laws, are confused.

As a result, legal certainty and reasonableness, cornerstones of a sound legal system, are compromised. This may ultimately lead to freshwater angling species not being protected or managed as it ought to be or that the purpose of freshwater angling legislation not being achieved.

1.2. Research objectives

In the light of the problem exposition above, the main objective of this dissertation is to critically review the South African freshwater angling legislative framework.

In order to achieve the main objective, the following sub-objectives will be addressed:

- 1.2.1. To establish what the purpose of legislation governing freshwater angling in South Africa is or should be;
- 1.2.2. To establish whether the current legislative framework for freshwater angling in South Africa is aligned with such purpose;
- 1.2.3. To gauge the views of anglers on the current legislative framework; and
- 1.2.4. To make recommendations for an improved legislative framework for freshwater angling in South Africa.

1.3. Structure of the dissertation

In order to reach the research objectives, a structured research process was followed. The clear linkage between the research objectives, the methodology applied to reach

the objectives and the chapters dealing with same is provided in Table 1.3 below to allow for easy interpretation of the research results. This dissertation is divided into five chapters:

Chapter 1: Introduction

This chapter introduces the research by providing the background to the research, presents the problem statement and introduce the research objectives. It concludes by setting out the structure of this mini-dissertation.

Chapter 2: Methodology

This chapter outlines the research methodology that was adopted in order to be able to reach the research objectives.

Chapter 3: Literature review

In this chapter both provincial and national legislation governing freshwater angling in South Africa are critically analysed.

Chapter 4: Questionnaire results

Questionnaires regarding freshwater angling legislation were completed by anglers, the results of which are discussed and analysed in this chapter.

Chapter 5: Conclusion

In this chapter, conclusions are drawn from the data obtained. The purpose of legislation governing freshwater angling in South Africa and whether the current legislative framework is in line therewith are discussed and possible solutions and areas for future research are recommended.

Table 1.3 Structure of Dissertation

RESEARCH OBJECTIVES (see Sections 1.4)		METHODS (see Chapter 2)	CHAPTERS (see Section 1.3)	Chapters 1 and 2: Introduction and Methodology
1. What should the purpose legislation governing freshwater angling in South Africa be?		Literature review (See Chapter 3)	Chapter 3: Literature review: Critical analysis of legislation governing freshwater angling	
2. Is the current legislative framework for freshwater angling in South Africa aligned with the purpose thereof?		Literature review (see Chapter 3)	Chapter 3: Literature review: Critical analysis of legislation governing freshwater angling	
3. What are the views of anglers on the current legislative framework?		Questionnaire results (see Chapter 4)	Chapter 4: Questionnaire results	
4. How can the legislative framework for freshwater angling in South Africa be improved?		Literature review (See Chapter 3)	Chapter 5: Conclusions and Recommendations	
RESEARCH OBJECTIVE				
To critically review the South African freshwater angling legislative framework.				

CHAPTER 2

RESEARCH METHODOLOGY

This Chapter describes the research methodology applied in order to reach the research objectives, namely to critically review the South African freshwater angling legislative framework.

In order to reach the research objective, a literature review was conducted, interviews were held with government officials and questionnaires were completed by anglers.

2.1. Literature review

During the literature review (which is set out in Chapter 3 of this dissertation), all available legislation and departmental guidelines which govern or have an effect on freshwater angling were analysed and compared in order to ascertain:

- The relationship between provincial and national legislation;
- Which legislation is applicable to freshwater anglers in any given area in South Africa; and
- Whether any conflicts regarding these laws exist.

With regard to provincial legislation specifically, the following issues were addressed:

- To whom does the legislation apply?
- Is an angling licence required?
- Permissible angling methods:
 - Permissible number of hooks and lines;
 - The use of live bait;
 - Feeding places; and
 - The stocking of water with fish

- What are the bag and size limits for angling species?
- What is the purpose of the legislation?

With regard to national legislation the following legislation will be analysed:

- The Constitution;
- The National Environmental Management Act;
- The National Environmental Management: Biodiversity Act;
 - The Threatened or Protected Species Regulations and the Lists of Critically Endangered, Endangered, Vulnerable and Protected Species ;
 - The Draft Alien and Invasive Species Regulations;
- The National Water Act (“NWA”); and
- The Marine Living Resources Act

In order to prevent this dissertation being a mere armchair criticism of the relevant legislation, interviews were held with certain officials of the national department dealing with biodiversity management (formerly known as the Department of Environmental Affairs Tourism (“DEAT”), but subsequently as the Department of Environmental Affairs (“DEA”)) [South Africa, 2009 (b)]. For the purposes of this dissertation the department will be referred to as the DEA. The purpose of the interviews was, *inter alia*, to ascertain whether the DEA was aware of the fragmented and complex nature of angling legislation and to find possible solutions to highlighted problems.

Certain provincial government officials were also interviewed, or their views were obtained in the same questionnaire completed by the anglers, which is discussed in paragraph 2.2 and Chapter 4 of this dissertation. The input of provincial government officials was important as they are the persons who must enforce the legislation and who have expressed frustration with the current legislative framework for freshwater angling in South Africa. The views expressed by the various government officials will be dealt with when analysing the relevant legislation.

As national legislation only started playing a role regarding freshwater angling with the coming into effect of the NEMBA (South Africa, 2004(b)) and the TOPS regulations (South Africa, 2007(b)), the focus will first fall on the provincial freshwater angling legislation on a province by province basis, after which the impact of national legislation thereon will be analysed.

2.2. Questionnaire results

In order to reach the research objective, anglers were requested to complete a questionnaire regarding the angling legislation which has a direct impact on them (it is the “rules of their game”). The questionnaire was published in the December 2008 issue of the Tight Lines Magazine as it is, in the author’s opinion, the leading angling magazine in South Africa. A copy of the published questionnaire is attached as Annexure 1. Due to space constraints in the Tight Lines, the last three questions of the questionnaire had to be omitted.

The complete version of the questionnaire (attached as Annexure 2), which contained three extra questions, was e-mailed to certain members of the angling community including:

- Members of angling organisations such as the South African Deep Sea Angling Association (SADSAA) and the South African Artificial Lure Angling Association (SAALAA);
- The editor of the “Africa’s Original Flyfishing Magazine”;
- Members of Non Governmental Organisations such as the Eko-Care Trust; and
- Angling websites such as Fishingowl.co.za;

The complete questionnaire was also circulated to anglers, ichthyologists and government officials (the majority of whom are also anglers) at the 2009 Yellowfish Working Group’s annual general meeting (YWG AGM) which was held at the Sterkfontein Dam.

In total, 113 responses were received: 64 from the readers of the Tight Lines, 28 e-mail responses and 21 responses from the YWG AGM. The overall results are indicated in Annexure 3. Although the responses can not be considered representative of all anglers in South Africa (such a survey would be unviable), they do present a sample of recreational anglers (i.e. readers of the Tight Lines magazine), as well as a sample of a key representation of the organised freshwater angling community in South Africa (i.e. the YWG).

It is important to note the following:

- Not all the questions had mere “yes” or “no” answers;
- More than one answer could be given to one question (e.g. to the question “What should the licences fees be used for?” the respondents were allowed to give more than one answer).
- Some of the questionnaires were not completed in full, i.e. some questions were left unanswered. In these cases, the results were compiled by focussing on the number of answers given to the specific question, rather than the total number of respondents.
- The first 10 questions are related to angling laws and licences in general and the remainder deal with issues that should be addressed in the licence itself.

The analysis of the questionnaires is set out in Chapter 4 of this dissertation.

2.3. Limitations to the research

- This dissertation only deals with the catching of fish by means of **angling**, i.e. *“catching fish using a fishing rod, line and hooks”* (author’s definition):
 - Legislation dealing with the catching of fish by means of nets, spearguns, set-lines, jigging, subsistence angling or any other means is not dealt with herein.

- The legislative requirements dealing with commercial fishing (i.e. fishing with the purpose of selling the fish caught - even if done by means of angling) and sport fishing (e.g. angling competitions) did not form part of the focus area of this dissertation.
 - In summary, the focus of this dissertation is specifically on the legislative requirements governing recreational angling.
- The legislation analysed in this dissertation does not deal with freshwater angling exclusively, but is applicable to nature conservation and environmental management in general. Freshwater angling forms only a small component of the legislation that was analysed.
 - Finding legislation that was applicable to the homelands and Bantustans proved to be problematic. It was even more difficult to ascertain whether the legislation is still applicable. This is due to the following factors:
 - The legislation is not readily available.
 - The legislation was drafted prior to the “electronic era”. Scanned hard copies of the homeland legislation could be found in some instances, but it still proved difficult to ascertain whether it was ever enacted.
 - Very little assistance could be obtained from the provincial government officials in this regard. This is mainly due to the fact that the staff who enforced the pre-1993 homeland legislation are no longer employed by the relevant department and the current provincial government officials do not have any knowledge of the homeland legislation and are themselves confused as to which laws are applicable.
 - The land comprising Bophuthatswana was scattered over various portions of South Africa and it was quite difficult to ascertain where the Bophuthatswana legislation was, and in some instances still is, applicable. Author’s research indicated that portions of Bophuthatswana existed in the current North-West, Mpumalanga and Free State Provinces.

- Although the author did find references to the legislation of Lebowa, KaNgwane, Qwaqwa, Venda, KwaZulu and Gazankulu, copies thereof could not be obtained.
 - No references to legislation relevant to freshwater angling in KwaNdebele were found.
- It must be pointed out, however, that the impact of the above-mentioned challenges are mitigated to a certain extent as some of the homeland and Bantustan legislation was repealed and replaced by current provincial legislation. This is discussed in more detail in Chapter 3. Repealed legislation was not analysed as the focus of this dissertation is on legislation that is still in force.
 - It is a well-known fact that South African environmental legislation changes quite regularly. Because the focus of this dissertation is on the current freshwater angling legislative framework, draft legislation, or even final legislation that has been published but which has not commenced on 1 March 2010, were not analysed in depth, although it is mentioned, where appropriate.

Even though the above-mentioned challenges presented themselves during this study, it can be regarded as proof in itself of the fragmented and complex nature of the main research objective. It can, nevertheless, be safely stated that, despite the above-mentioned challenges, the research objective was reached successfully.

CHAPTER 3

LITERATURE REVIEW

In this chapter the current South Africa legislative freshwater angling framework is discussed and critically analysed. Before this can be done, however, the relationship between national and provincial legislation should be analysed.

The provincial, homeland and Bantustan legislation were drafted prior to the enactment of the national legislation pertaining to freshwater angling. However, it should be borne in mind that, although Section 40(1) of the Constitution states that “... *national, provincial and local spheres of government ... are distinctive, interdependent and interrelated*” (South Africa: 1996), it also provides in Section 146(2)(a) that:

“National legislation that applies uniformly with regard to the country as a whole prevails over provincial legislation if ... the national legislation deals with a matter that cannot be regulated effectively by legislation enacted by the respective provinces individually.” (South Africa: 1996.)

In addition, Sections 8(1)(b) and (2)(b) of the NEMBA state that if NEMBA and the regulations issued in terms thereof are in conflict with provincial legislation, such conflict must be resolved in terms of Section 146 of the Constitution (South Africa, 2004(a)).

As will be shown in this chapter, provincial legislation does not regulate angling effectively. It is argued, therefore, that in the case of freshwater fish listed as threatened or protected in terms of the TOPS Regulations, the national legislation takes precedence over the provincial legislation. In the light hereof, the enactment of the NEMBA and TOPS Regulations may have a marked impact on the provincial management of freshwater angling, but only insofar as provincial legislation is in contradiction with the NEMBA or TOPS Regulations. The provincial legislation should,

therefore, not be read in isolation, but it must be interpreted together with the relevant national legislation.

The abovementioned analysis does not mean that the provincial legislation should be merely discarded, as only a handful of freshwater fish are listed as threatened or protected in terms of the TOPS Regulations. Some of the remaining freshwater fish species are governed by the provincial legislation, while some species are not governed by any law whatsoever.

The legislative freshwater angling framework for each province will be dealt with first, upon completion of which the spotlight will be focused on national legislation. The ultimate purpose of this chapter is, from a legal perspective, to ascertain what the purpose of freshwater angling legislation should be and whether the current legislative framework is aligned with such purpose. The outcome will be discussed in depth in Chapter 5.

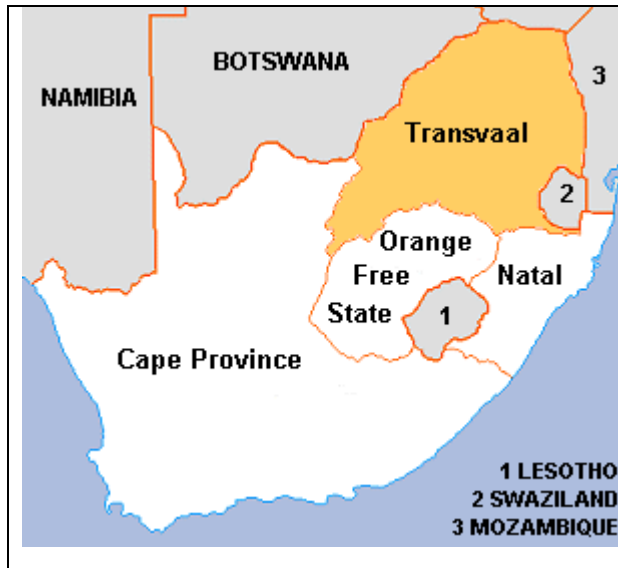
3.1. Provincial legislation

It is important to note that the provincial legislation to be analysed deals with environmental conservation and management in general (e.g. hunting, provincial nature reserves, so-called “problem animals”, protection of indigenous and rare species of *fauna* and *flora*, etc.) and was not drafted to regulate freshwater angling only. In most cases, the catching of freshwater fish is dealt with in a separate chapter within the relevant act, ordinance or regulation. Those chapters do not only deal with angling (i.e. catching fish with a line and fish-hook), but the catching of fish by whatever means e.g. by means of nets, spearguns, jigging etc.). For the purposes of this dissertation, only those sections of the legislation pertaining to angling are analysed.

3.1.1. Gauteng

Ascertaining which legislation is applicable to freshwater angling, Gauteng's situation proved to be the easiest of the South African provinces. Gauteng consists of a part of the old Transvaal province (Maps 3.1 and 3.2).

Map 3.1: Transvaal



Map 3.2: Gauteng



In terms of Proclamation No. 22 of 31 March 1995, the administration of the Transvaal Ordinance and Regulations were assigned to the Gauteng Province (Gauteng, 1995). Gauteng has not yet promulgated its own environmental management legislation. It follows that both the Transvaal Ordinance and Regulations are applicable to freshwater angling in Gauteng (Table 3.1).

Table 3.1: Provincial legislation applicable to freshwater angling in Gauteng

Gauteng	Transvaal Nature Conservation Ordinance (Sections 67 – 85) Transvaal Nature Conservation Regulations (Regulations 37 – 40)
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Before the Ordinance and Regulations are discussed, certain terminology must first be addressed. The definitions set out in Table 3.2 are described in Section 1 of the Ordinance (Transvaal, 1983(a)).

Table 3.2: Gauteng freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angle	The catching of fish by the use of a line and fish-hook, whether or not a rod is used
Artificial lure or spoon	A device which by the simulation of life or by the colour or appearance thereof may delude or lure fish into seizing it
Catch	Using any means or method to take or to attempt to take fish, whether alive or dead or to injure, poison or kill fish
Fish	In relation to angling, means those species of water fauna commonly known as fish
Fisheries	All waters and the fish therein
Fishing tackle	Any fishing gear, apparatus or other device or any part thereof normally used for catching fish
Keep	To keep live, to exercise control over
Live fish	In relation to natural bait, means live aquatic fauna commonly known as fish
Natural bait	Any animal or vegetable substance, whether alive or dead but excluding live fish, used in angling to allure fish by virtue of the edibility, smell or taste thereof
Non-spinning artificial fly	A fish-hook with one point and one barb to which anything inedible by fish is attached and which cannot rotate when fastened to a line and drawn through water and to which no device which can rotate is attached
Occupier	In relation to land or land on which waters are situated, the person who actually occupies the land and is in control thereof
Owner	(a) The person registered as the owner thereof in a deeds registry;

	(b) The bona fide purchaser thereof prior to the registration of the deed of transfer in his name, but after the contract of sale has been concluded, to the exclusion of the person contemplated in paragraph (a); (c) The lawful heir of the person contemplated in paragraph (a) or the purchaser contemplated in paragraph (b), at the death of such person or purchaser or, where the land is subject to a usufruct, the usufructuary; (d) The lessee of the land who has entered into a lease for a period of 10 years or more or for the natural life of the lessee or any other person referred to in the lease, or the person to whom the land has been allotted in terms of the laws on land settlement subject to the right to purchase the land
Relative	The parent, spouse, child, step-child, grandchild, son-in-law or daughter-in-law of the owner or occupier of land
Waters	The waters in rivers, streams, creeks, lakes, pans, vleis, dams, reservoirs, furrows, canals and ponds

3.1.1.1. To whom does the legislation apply?

The Transvaal Ordinance and Regulations are, in terms of Section 67 of the Transvaal Ordinance, applicable to all anglers, except to - with regard to waters surrounded by the land of an owner or occupier –

- (a) The owner or occupier of land who catches fish;
- (b) A relative of the owner or occupier of land who catches fish with the permission of such owner or occupier; or
- (c) A full-time employee of the owner or occupier who, on the instructions of such owner or occupier, catches fish otherwise than by angling (Transvaal, 1983(a)).

It seems that the purpose of this Section was to give effect to:

- and not to interfere with, a property owner's right to use his property as he deemed fit; and
- to be in line with the stipulations of the Water Act 54 of 1956 ("Water Act") which differentiated between "public water" and "private water".

Although individuals were not actually granted ownership of the riparian water, their use thereof was virtually unrestricted (Vlok, 2004:35). In terms of Section 6(1) of the Water Act, the owner of land where private water had its source or flowed over had the exclusive rights thereto (Pienaar and Van der Schyff, 2005: 265).

However, the Water Act was replaced by the NWA on 1 October 1998, from which date the distinction between "public water" and "private water" fell away. The preamble of the NWA specifically states that "*water is a natural resource that belongs to all people*" (South Africa, 1998(a)). Water in its natural state can, therefore, not be owned.

The exclusion of owners and occupiers from Gauteng freshwater angling legislation is quite disconcerting. While it is understood why the law was written the way it was, circumstances and legislation have changed. The exclusion may lead to untold (and if verbal evidence may be believed, has already done so in certain circumstances) damage to fish populations if the catching of fish is not properly regulated.

In this regard one can refer to the current land redistribution programme being implemented by the current South African government: Mr. John Clarke, whose property was subject to the land redistribution process, indicated to the author that, upon finalisation of the land claim, huge numbers of people moved onto the property. The farm in question is situated at the upper reaches of the Komati River, Mpumalanga, a prime breeding ground for various fish species. Because of the fact that the government only provided the new owners with the land and not with any livestock, equipment or financial assistance, together with the lack of farming skills, the new occupiers of the

property started to catch huge numbers of spawning indigenous Smallscale Yellowfish (*Labeobarbus polylepis*) with nets. These fish can be seen thrashing about in the shallows of the upper reaches of rivers when spawning and are extremely easy to catch with nets. Not only was the spawning fish caught, but the ova and spawn of the fish, as well as the spawning beds, were damaged. In one season an entire local population was basically annihilated (Clarke, 2004).

It is important to note, however, that the above-mentioned exclusion applies only to dams completely within the boundaries of the owner or occupier's property. Therefore, it is not applicable to all rivers, or dams which merely form a part of a person's property. It is submitted that Section 67 is not applicable to rivers at all, as the property cannot physically surround a river and the water in the river cannot be owned.

Nevertheless, it is recommended that this exclusion from legislation governing freshwater angling in Gauteng should be amended so as to apply to owners and occupiers as well, not only to be in line with national legislation, but also to protect the province's fish resources adequately.

3.1.1.2. Is an angling licence required?

Angling licences are dealt with in Section 74 of the Transvaal Ordinance and Regulation 37 and Schedules 8 and 9 of the Transvaal Regulations (Transvaal, 1983(a) and (b)).

In terms of Section 74(1), angling licences are required in Gauteng (Transvaal: 1983(a)). However, Section 74(2) of the Transvaal Ordinance states that the following persons may angle without a licence (Transvaal: 1983(a)):

- Persons younger than 16 years;
- The owner or occupier of land may angle in waters situated on land of which he is the owner or occupier;

- A relative of the owner or occupier of land may, with the permission of such owner or occupier, angle in waters situated on the land of such owner or occupier; and
- An employee in the full-time service of the owner or occupier of land who has obtained the written permission of such owner or occupier beforehand and carries the permission with him may angle in waters surrounded by the land of such owner or occupier.

Section 74(3) stipulates that contravention of the above is an offence punishable with a fine not exceeding R750 or with imprisonment for a period not exceeding 9 months or both such fine and imprisonment (Transvaal: 1983(a)).

In the case of *S V Thom*, the court made the only reported decision regarding angling licences. Although this decision was not made in terms of the Transvaal Ordinance, but in terms of the much older Administrator's Notice 700 of 20 September 1950 (Administrator's Notice), the principle remains the same. In this regard a comparison of the legislation is required (Table 3.3).

Table 3.3: Comparison of Administrator's Notice 700 of 20 September 1950 and the Transvaal Ordinance

Administrator's Notice	Transvaal Ordinance (Current)
<i>"No person ... shall angle for a fish, unless he is in possession of current licence"</i>	<i>"... no person ... shall angle, unless he is the holder of a licence which authorises him to do so ..."</i>
<i>"'Angle' or 'angling' means ... catching of fish by means of not more than two lines to each of which not more than two single hooks ..."</i>	<i>"'Angle' means the catching of fish by the use of a line and fish-hook, whether or not a rod is used..."</i>
<i>"'Catch' means any manner to take fish, whether alive or dead"</i>	<i>"'Catch' means using any means or method to take or to attempt to take fish, whether alive or dead or to injure, poison or kill fish"</i>

In the above-mentioned case, Ms. Thom was accused that she did “*wrongfully and unlawfully angle for fish ... without being in possession of a valid prescribed licence*”. Her defence was that “*she did cast the said hook and line into the Loskop Dam*”, but that no evidence was given that she actually “caught” (pulled out) a fish. Ms Thom was convicted in the Court *a quo*, but appealed against the sentence of £10 or imprisonment of 20 days. On appeal, the Supreme Court found that the fact that she “*did cast the said hook and line into the Loskop Dam*” was sufficient to satisfy the requirement of “*any manner to take fish*”. The Supreme Court subsequently confirmed the decision of the Court *a quo*, but increased the prison term to 30 days, with or without hard labour.

The definition of “catch” in the Transvaal Ordinance was subsequently drafted in such a way that it gives effect to the court’s decision, as it states that “catch” includes an “attempt to take fish”. It is, therefore, clear that it is not necessary to actually pull a fish out of the water to be angling. The mere attempt to take a fish with a hook and line qualifies as angling. It is, therefore, submitted that the definition of angling should be amended, in order to avoid any uncertainty, to read as follows:

“Angling” means to take or attempt to take fish by the use of a line and fish-hook.”

A major problem that does arise regarding angling licences is the fact that it is not readily available in Gauteng. In the past (quite some time ago) an angling licence could be obtained from angling shops, police stations and the Department of Revenue Services. At the moment anecdotal evidence from anglers indicates that licences are only obtainable from the offices of the Gauteng Department of Agriculture and Rural Development (“GDARD”). An owner of an angling shop¹ indicated to the author that in order for him to be able to sell angling licences, GDARD requires him to pay for a book of 200 licences up front. He is then expected to recoup the money as he sells the

¹ He requested author not to be named

licences. At R20 a licence, he is required to pay R4000,00 up front for something he will not receive an income on. The end result is that he refuses to sell angling licences.

The author has been advised that, in order to address the availability problem, members of GDARD sometimes visit angling venues where they sell angling licences to anglers (Boshoff, 2010). The views of anglers regarding the issuing, the need for and the availability of angling licences will be discussed in Chapter 4.

In addition to an angling licence, the prospective angler must, in terms of Section 75(1) of the Transvaal Ordinance, obtain the permission of the owner or occupier of the land on which the waters are situated (Transvaal: 1983(a)).

3.1.1.3. Permissible angling methods

Permissible number of hooks and lines

The permissible number of hooks and lines are prescribed in the Transvaal Ordinance, which differentiates between trout and non-trout waters.

Trout Waters

In terms of Section 72(1)(a), an angler may only angle in trout waters with one line with one or more non-spinning artificial flies attached to it. Therefore, trout may not be angled for with natural bait or artificial lure or spoon, only artificial flies are allowed (Transvaal: 1983(a)).

Trout waters are listed in Schedule 9 of the Transvaal Ordinance (Transvaal: 1983(a)) as indicated in Table 3.4.

Table 3.4: Declared trout waters in terms of Gauteng angling legislation

Where the term “river” or “spruit” appears it includes the whole course of the river or spruit with all its tributaries from its source up to the point specified in each separate case.	
1.	The Elands River to its confluence with the Swartkops River.
2.	The Klip River to the common boundary of the farms Draaikraal 48 JT and Chieftainsplain 46 JT.
3.	The Klein-Komati River to its confluence with the Komati River.
4.	The Seekoei Spruit to the common boundary of the farms Zilverkop 25 IT and Boshhoek 442 JT.
5.	The Helpmekaar River to its entrance to the Stanford Lake.
6.	The Ramadiepa River to its entrance to the Merensky Dam.
7.	The Weltevrede Spruit to the waterfall on the farm Waterval 269 JT.
8.	The Ohrigstad River to its entrance to the Ohrigstad Dam.
9.	The Crocodile River to its confluence with the Santa River.
10.	The Santa River to its confluence with the Crocodile River.
11.	The Auxloop River to the common boundary of the farms Langdraai 85 JT and Kaffervoetpad 87 JT.
12.	The Dorps River (also known as the Spekboom River) to the bridge over it on the Lydenburg-Burgersfort tarmac road (Road P 33/2).
13.	The Sterk Spruit to its confluence with the Dorps River in the town of Lydenburg.
14.	The Pot Spruit to the common boundary of the farms Modderspruit 13 JT and Naauwpoort 11 JT.
15.	The Great Dwars River to its confluence with the Kafferkraal Spruit.
16.	The Kafferkraal Spruit to its confluence with the Great Dwars River.
17.	The Konterdanskloof River to the common boundary of the farms Witpoort 216 JS and Swartkoppies 217 JS.
18.	The Lakensvlei Spruit to its confluence with the Steelpoort River excluding the municipal dam of Belfast.
19.	The Houtbosloop River to the common boundary of the farms Elandsdrift 265 JT and Blyfstaanbosch Spruit 258 JT.

20.	The Blyde River to the common boundary of the farms Ledovine 507 KT and Hermansburg 495 KT.
21.	The Mac-Mac Spruit to the waterfall on the farm Geelhoutboom 565 KT.
22.	The Sabie River to the waterfall in the town of Sabie.
23.	The Nels River to the common boundary of the farms Doornhoek 236 JT and Tweefontein 242 JT.
24.	The Mathlapitsi River to the common boundary of the farms Acre 2 KT and Aden 1 KT.
25.	The Great Letaba River (also known as the Broederstroom) to its entrance to the Ebenezer Dam.
26.	The Klein-Spekboom River to the railway bridge on the farm Potlood Spruit 30 JT.
27.	The Waterval Spruit to its confluence with the Blyde River.
28.	The Gladde Spruit to the common boundary of the farms Slaaihoek 540 JT and Uitkomst 541 JT.
29.	The tributary of the Komati River on the farms Waaikraal 385 JT, Leeukloof 403 JT and Drenthe 402 JT to its confluence with the Komati River.
30.	The tributary of the Komati River on the farms Zevenfontein 388 JT and Welgelegen 400 JT to its confluence with the Komati River

It is clear from the table above that the Transvaal Ordinance is in dire need of updating. Most of the rivers indicated are either in Mpumalanga (e.g. the Elands, Klein-Komati, Blyde and Sabie Rivers) or in Limpopo (e.g. the Ramadiepa and Great Letaba Rivers).

Non-trout waters

In terms of Section 72(1) anglers may, in non-trout waters, employ:

- A maximum of two lines with a maximum of two single hooks with natural bait; or
- A maximum of two lines with a maximum of one artificial lure or spoon attached to each line (Transvaal: 1983(a)).

This limitation is, to a large degree, ignored by anglers as they quite often angle with more than two lines. It is argued that the limitation on the number of angling lines is nonsensical. The purpose of the limitation is to protect fish numbers, as it is supposed to limit the number of fish caught. However, if bag and size limits are properly enforced and anglers return all the fish caught when their bag limits have been reached, anglers should be allowed to angle with any number rods they wish. However, this should only be allowed if fish are not kept in a keep net prior to releasing, as fish tend to suffer injuries therein.

In addition, if and when the AIS Regulations come into force, anglers will be forced to keep certain alien and invasive fish species, i.e. those fish may not be returned into the water by an angler. The reason is that, in such a manner, anglers can assist in reducing the number of unwanted fish species. In such a case, anglers should be encouraged to use as many rods, with as many hooks as possible, in order to give effect to the purpose of the AIS Regulations. The view of anglers regarding this topic will be discussed in Chapter 4.

Live bait

A question which often arises amongst freshwater anglers is whether live bait may be used when angling. In terms of Section 72(1) of the Transvaal Ordinance, anglers may use “natural bait”, which is defined as:

“any animal or vegetable substance, whether alive or dead but excluding live fish, used in angling to allure fish by virtue of the edibility, smell or taste thereof”
(Transvaal, 1983(a)).

“Live fish”, in turn, is defined as:

“... in relation to natural bait, live aquatic fauna commonly known as fish”
(Transvaal, 1983(a)).

It follows, therefore, that live bait such as insects, worms and frogs may indeed be used, as long as it is not live fish (and provided that a species used as bait is not protected by law). The views of anglers on fishing with live bait will be discussed in Chapter 4.

Feeding places

In terms of Regulation 40 of the Transvaal Regulations:

“no person shall make a feeding area in waters by placing any animal, vegetable or other substance therein to allure fish by virtue of the edibility, smell or taste thereof” (Transvaal: 1983(b)).

In terms of Section 78(1)(b) of the Transvaal Ordinance, an angler may not, without a permit, use a floating object as a marker which indicates where the feeding area is (Transvaal: 1983(a)).

Anglers have for ages circumvented the prohibition on the making of feeding places by casting feeding place material into the water with their fishing rods (the feeding place material usually being attached or moulded onto a sinker, hook or other device designed to hold the feeding place material), the argument being that “casting” cannot be regarded as “placing” the material into the water. Although the author does have his doubts regarding the legal correctness of the argument, it seems to be allowed by the authorities. Certainly the author has not come across any evidence, anecdotal or otherwise, of anglers being prosecuted because of making a feeding place in this way.

Stocking waters with fish

Sections 79 to 81 deal with an extremely important matter, namely the placing of fish into Gauteng's waters (Transvaal, 1983(a)). Anglers are often not satisfied with the angling species present in their angling waters and often introduce so-called "sport fish" into angling waters. It is common knowledge that the Vaal River is populated with Largemouth Black Bass (*Micropterus salmoides*), which is listed as an alien and invasive fish species in terms of the Draft AIS Regulations because of the fact that it is a ferocious apex predator competing with other indigenous fish.

Although Section 79(2) allows for the release of a fish back into waters in which it has been caught, Section 79(1)(1) prohibits the placing or releasing of live fish in waters, unless a permit has been issued for it (Transvaal: 1983(a)). Therefore, "catch-and-release", a practice by anglers where a fish is returned back into the water it has been caught in, is allowed. However, the stocking of waters with alien fish species or foreign genetic material is not allowed.

Section 80 prohibits the sale of live freshwater fish and Section 81 the importing of live fish without a permit having been issued for such use (Transvaal: 1983(a)). The purpose of the prohibitions in Section 79 to 81 is, *inter alia*, to prevent the spread of diseases from one water body to another and to prevent the infestation of waters with alien and invasive fish species. It is submitted that Sections 79 to 81 should be strictly enforced as a measure to protect Gauteng's fish biodiversity.

3.1.1.4. What are the bag and size limits for angling species?

The number and size of fish which may be caught and kept (referred to as "bag and size limits" in popular angling parlance) are dealt with in terms of Regulation 38(1) which states that an angler must comply with the bag and size limits indicated in Schedule 10, unless he has a permit to the contrary (Transvaal: 1983(b)). The bag and size limits for

Gauteng are indicated in Table 3.5. Please note that naming of the species in this and subsequent tables follows the naming used in the legislation. This is done to illustrate the archaic nature of the legislation.

Table 3.5: Bag and size limits of fish that may be caught and retained in Gauteng

Column A	Species of fish		
Column B	Number of fish which may be caught and retained in one day		
Column C	The minimum length of fish which may be caught and retained		
Column D	Waters in the Province in which the fish may be caught and retained		
<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Trout (<i>Salmo</i> species)	6	200mm	Any waters
Yellow fish (<i>Barbus</i> species, including silver fish and kalwerkop fish)	10	300mm	Any waters
American Bass (<i>Micropterus</i> species)	6	200mm	Any waters
Tiger fish (<i>Hydrocynus</i> species)	6	300mm	Any waters
Blue Kurper (<i>Oreochromis mossambicus</i>) Lowveld Largemouth Kurper (<i>Serranochromis meridianus</i>) Red breasted kurper (<i>Tilapia rendallii</i>)	20	150mm	The Komati, Crocodile, Letaba, Limpopo, Olifants, Pongola and Sabie Rivers with all their tributaries and dams therein

It is argued that the Transvaal Ordinance and Regulations are in dire need of updating, because of, *inter alia*, the following reasons:

- The scientific name “*Barbus*” is not used for the yellowfish species anymore. The correct wording is “*Labeobarbus*” (Skelton, 2007: 6).

- Three Yellowfish species occur in Gauteng, namely the Largemouth Yellowfish (*Labeobarbus kimberleyensis*), Smallmouth Yellowfish (*Labeobarbus aeneus*) and the Smallscale Yellowfish (*Labeobarbus polylepis*). Of these, the Largemouth and Smallscale Yellowfishes are scarce. In addition, the Largemouth Yellowfish is listed as “Vulnerable” in the TOPS Regulations. Despite these facts, an angler is still allowed to keep 10 Yellowfishes, irrespective of the species.
- The reference to “silver fish” and “kalwerkop fish” is outdated and archaic and not used by anglers any more.
- Trout is referred to as “*Salmo* species”. Two types of trout occur in South Africa, namely the Brown Trout (*Salmo trutta*) and the Rainbow Trout (*Oncorhynchus mykiss*). Skelton (1993: 261) states the following with regard to trout:

“Tot onlangs het die genus Salmo sowel die bruinforel as die reënboogforel ingesluit, maar daar is toe besef dat die reënboogforel nader verwant is aan die sogenaamde “westelike forelle” en die salm-genus Oncorhynchus van die Stille Oseaan. Die primitiewer genus Salmo word dus nou beperk tot die Europese en Asiatiese forelspesies en die Atlantiese Salm”.

In the light hereof, the Transvaal Regulations, in its current format, regulates only the Brown Trout and not the Rainbow Trout, as the Rainbow Trout is not a “*Salmo* species”.

- Schedule 9 still refers to Tigerfish (*Hydrocynus vittatus*), for example, which is not found in Gauteng waters.
- The kurper species, especially the Blue Kurper (*Oreochromis mossambicus*) was extremely abundant when the Transvaal Ordinance and Regulations were promulgated. Author knows from personal experience that it was not uncommon to

catch 40 to 60 fish per person per angling session. This situation has changed, however, and the populations have dwindled dramatically in certain areas and one rarely hears of good catches these days. Anecdotal evidence suggest that the causes hereof include gill netting, water pollution, habitat destruction, anglers exceeding their bag limits, as well as the effect of alien and invasive fish species. It is therefore recommended that the bag limits of all fish in Gauteng waters should be revisited.

- The Transvaal Regulations makes provision for bag limits for known alien and invasive fish such as Trout and Black Bass, in effect protecting these species. It is suggested that the regulations be changed in such a way that all alien and invasive freshwater fish caught may:
 - Not be returned to the water by an angler; or
 - Only be released if they are caught in a manmade impoundment that is not connected with a natural water source (e.g. it is not fed by or does not feed into a river system). This will ensure that natural aquatic systems will not be infested further with alien and invasive fish. This submission is applicable to all provinces;
- Quite a few fish species, such as Moggel (*Labeo umbratus*) and the Orange River Mudfish (*Labeo capensis*) are not mentioned in the bag and size limits. While these species may be quite abundant and appear not to be threatened, author is of the opinion that prescribed bag and size limits should be promulgated for all fish species as a species should not be protected only when it's listed as threatened.
- The size limits does not make sense to author. As the law currently stands, anglers are encouraged to keep breeding stock. It is suggested that size limits should be scientifically researched in order to ensure that breeding stock is returned by anglers.

- It is submitted that all fish species can be regarded as angling species and that bag and size limits should be enacted for all fish species found in the province's waters. In this regard it must be pointed out that certain sections of the angling community (e.g. artlure) specifically try to catch as many fish species as possible. The number and size of the fish is not important to them, but the number of species caught. In this regard Button (2005:18) states that:

“A true artlure angler ... is therefore one who catches or attempts to catch each and every species whilst angling on specific body of water”.

The reason that is often given regarding why provincial legislation has not yet been amended is that the provincial governments are waiting for the enactment of the NEMBA and its regulations (Kidd, 2008:93). However, a large number of the sections in the provincial legislation will not be affected by the NEMBA and its regulations at all. The changes in scientific names of Trout, for example, and the impacts of human factors on fish species have been long known (Skelton, 1993:261). Still, the legislation has not yet been amended.

Upon a question to an ex-Gauteng provincial official² as to why this is the situation, the response was that it is because of the lack of political will. Apparently new nature conservation legislation (including angling provisions) for Gauteng was drafted and ready to be promulgated when, for no apparent reason, the order was given not go ahead therewith. While one may take the drafting of the NEMBA and TOPS Regulations into account as a possible factor (i.e. the province does not want to enact legislation which will be contradictory to national legislation), the NEMBA and TOPS Regulations did not impact on the drafted legislation as a whole. The lack of political will to establish good, effective environmental management legislation seems to be the reason for Gauteng having to deal with outdated, ineffective freshwater angling legislation at the moment.

² Author was implored not to mention the official's name for fear of victimisation

3.1.1.5. What is the purpose of the Gauteng freshwater angling legislation?

Neither the Transvaal Ordinance nor the Regulations have a section which specifies the purpose of the legislation. The preamble of the Transvaal Ordinance merely states:

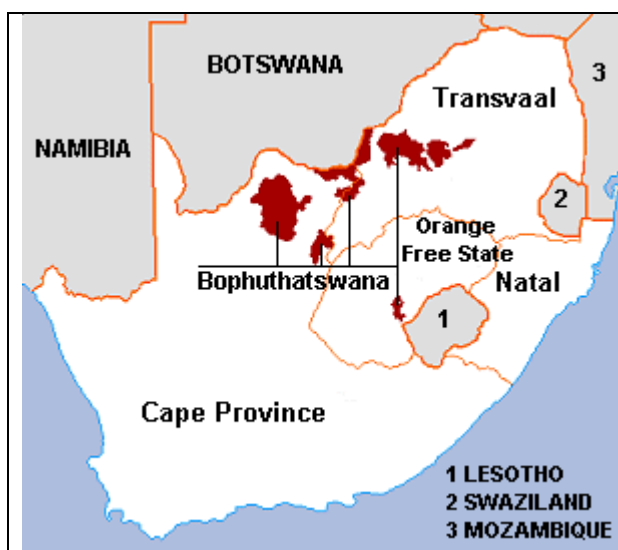
“To consolidate and amend the laws relating to nature conservation and to provide for matters incidental thereto” (Transvaal, 1983(a)).

Having regard to the title and contents of the Ordinance and Regulations it is submitted that, with regard to angling, the purpose is to ensure the conservation of angling species and the regulation of angling in Gauteng. It is submitted that, having regard to the analysis of the Transvaal Ordinance and Regulations, the purpose is not achieved.

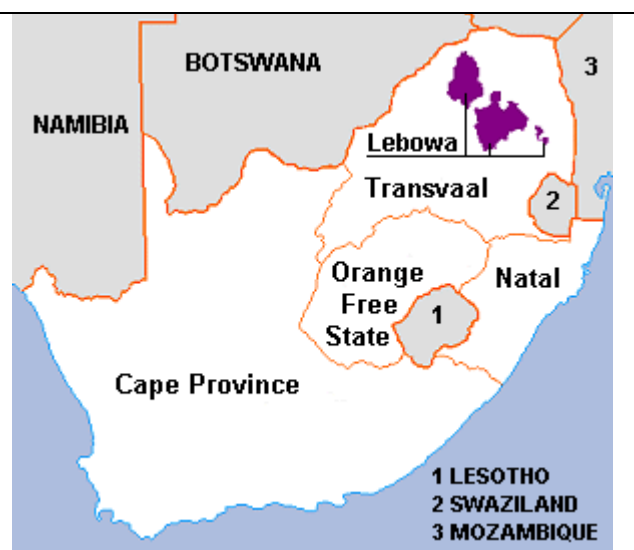
3.1.2. Limpopo

The area which is now the Limpopo Province contains parts of the pre-1993 Transvaal, Bophuthatswana, Lebowa and Gazankulu (Maps 3.3, 3.4, 3.5 and 3.6).

Map 3.3: Bophuthatswana



Map 3.4: Lebowa



Map 3.5: Gazankulu



Map 3.6: Limpopo



Angling in the Transvaal was governed by the Transvaal Ordinance and Regulations. Angling in Bophuthatswana, Lebowa and Gazankulu was regulated by their own legislation (Table 3.6).

Table 3.6: Angling legislation of former provinces, Bantustans and homelands which now form part of Limpopo

Transvaal	Transvaal Nature Conservation Ordinance and Regulations
Bophuthatswana	Bophuthatswana Nature Conservation Act
Lebowa	Lebowa Nature Conservation Act
Gazankulu	Gazankulu Nature Conservation Act

The above-mentioned legislation was repealed by Section 126 of the Limpopo Environmental Management Act 7 of 2003 (“LEMA”) which is now the only legislation governing angling in Limpopo (Limpopo, 2003).

Table 3.7: Provincial legislation applicable to freshwater angling in Limpopo

Limpopo	Limpopo Environmental Management Act (Sections 54 – 60)
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The definitions in Table 3.8, as listed in Section 1 of LEMA, are relevant to freshwater angling in Limpopo (Limpopo: 2003)

Table 3.8: Limpopo freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angle	To catch fish by using a line and fish-hook, whether or not a rod is used but excludes the use of a set-line, and "angling" has a corresponding meaning
Aquatic biota	Any organism that depends on an aquatic environment for its survival including the carcass, spawn, flesh (fresh or cured), tooth, bone, scale, fin, tail or any other part or derivative of such organism
Aquatic system	Any area associated with rivers, streams, vleis, sponges, creeks, lakes, pans or any other natural or man-made water impoundment
Artificial lure or spoon	A device which, by the simulation of life or by the colour or appearance thereof, may delude or lure fish into seizing such device
Catch	Catch or take, or attempt to catch or take, a fish alive, irrespective of the means or method used and includes – • the search for, pursue, drive, lie in wait for, lure or poison a fish with the intent to catch or take it; or • injuring or killing of a fish when attempting to catch or take it
Family member	In relation to an owner of land, means the parent, spouse, child, step-child, foster-child, grandchild, adopted child, son-in-law or daughter-in-law of the owner of land
Fishing tackle	Any fishing gear, apparatus or other device or any part thereof normally used to catch fish
Natural bait	Any living or dead animal or vegetable substance (excluding live fish) which on account of the edibility, smell or taste thereof is used in angling to lure fish

Owner	The person in whose name the land is registered in terms of the Deeds Registries Act 47 of 1937, or the Mining Titles Registration Act 16 of 1967, provided that the persons mentioned below must be regarded as the owner in the following cases: (a) The trustee, in the case of land held in trust; (b) The executor or administrator, in the case of land in a deceased estate; (c) The trustee or liquidator, in the case of land in an insolvent estate or in liquidation; (d) The judicial manager, in the case of land under judicial management; (e) The curator, in the case of land under curatorship; (f) The usufructuary <i>or fiduciary</i>, in the case of a land that is subject to a usufruct or a <i>fideicommissum</i>, (g) The lessee, in the case of land that is subject to – (i) a lease registered in terms of applicable legislation; (ii) a lease for a period of not less than ten years or for the natural life of either the lessee or another person mentioned in the lease; or (iii) a lease that is renewable from time to time by the lessee indefinitely or for periods which together with the first period amount to not less than ten years; (h) the nominee of an association, in the case of land owned by an association of persons, whether corporate or not, or if no such nomination was made, the chairperson or the last known chairperson of such association or the person to whom the control of the land has been entrusted; or (i) the relevant authority, in the case of a public area or the road reserve of any public road
Permit	Any licence, document or certificate issued in terms of, or

	referred to in the Act;
Set-line	A line and fish-hook which, when used for catching fish, is not under the direct charge of any person but is fastened to anything, excluding a line and fish-hook fixed to a reel or rod lying loose on the ground or resting on a fork or a stand

3.1.2.1. To whom does the legislation apply?

In terms of Section 54(2) of the LEMA, the provisions thereof are applicable to all anglers, except to the following persons and only in respect of aquatic systems that have been artificially created and are totally surrounded by the land of the owner:

- (a) The owner of such land;
- (b) A family member acting with the written permission of the owner;
- (c) An employee in the full time service of the owner acting on the written instruction or with the written permission of the owner; and
- (d) Any other person acting with the written permission of the owner (Limpopo, 2003).

Prima facie it seems that the exclusions are the same as in Gauteng, which are discussed in paragraph 3.1.1.1 above. However, the LEMA does address many of the concerns raised with regard to the exclusions in Gauteng:

- The LEMA specifically refers to:

“... aquatic systems that have been artificially created and are totally surrounded by the land of the owner”.

The exclusions are, therefore, clearly not applicable to rivers.

- The risk of owners causing damage to natural fish populations is lower because of the fact that the exemption is limited to artificial aquatic systems (i.e. secluded from natural water systems) and because the owners, or the persons given permission to, are not excluded from the prohibition in Section 54(1)(e) of the LEMA to:

“wilfully damage, disturb or destroy the ova or spawn of fish or the spawning bed, bank or shallow where the spawn of fish is deposited” (Limpopo, 2003) .

3.1.2.2. Is an angling licence required?

Section 54(1) states that:

“no person may without a permit catch fish ... otherwise than by means of angling (Limpopo, 2003).

This section is difficult to interpret. Upon reading it for the first time, it seems that angling licences are required in Limpopo. However, upon closer analysis, it becomes clear that a licence is only necessary should one want to catch fish using other methods than angling (e.g. spearfishing, netting, electrofishing etc.).

The above is only applicable to waters that are situated outside provincial nature reserves as it is stated in Section 54(1)(l) of the LEMA:

“No person may without a permit ... angle in a Provincial Nature Reserve, a Site of Ecological Importance, a Protected Environment or a Private Nature Reserve”.

Angling licences are, therefore, required in nature reserves but not in waters outside of nature reserves.

Mr Faan Coetzee, an employee of the Limpopo Department of Economic Development, Environment and Tourism (“LEDET”) who was involved in the drafting of the LEMA, indicated that the intention of requiring angling licences in nature reserves was to generate income for such reserves. Such income was to be used specifically for the development of angling waters (“... *om damme meer hengelbaar te maak* ...”) in such reserves. He indicated that this initiative failed, as anglers realised that their money was not used for the intended purpose and subsequently are staying away from waters in nature reserves (Coetzee, 2007).

Mr Stan Rogers, Chief Nature Conservator: Biodiversity Management of LEDET, indicated to author that the other reasons why angling licences are not required in Limpopo were twofold:

- A large number of the Limpopo’s inhabitants are subsistence fishermen and do not have money to pay for licences. Requiring angling licences would have, by the stroke of a pen, created a large number of criminals. An angling licence requirement would, therefore, be unenforceable.
- The second reason was that the income generated from angling licences would go to the public treasury and not to nature conservation, environmental management or the protection of fish species. As it was thought to be counter productive to spend time and manpower to generate income that will not go into the “correct coffers”, it was decided not to require angling licences in Limpopo (Pers comm Rogers, 2010). The views of anglers regarding this issue are discussed in paragraph 4.3 of this dissertation.

Rogers also indicated that anglers do not create a real threat to fish populations, but catching fish with gill nets does. His department is, therefore, focussing on policing gill netting, which is much more effective than enforcing angling licenses (Pers comm Rogers, 2010).

3.1.2.3. Permissible angling methods

Permissible number of hooks and lines

The LEMA does not differentiate between trout and non-trout waters. In terms of Section 54(1)(f) of the LEMA, an angler may only use:

- two lines;
- two single hooks with natural bait per line; or
- one artificial lure or spoon per line (Limpopo, 2003).

As the LEMA is silent on fly-fishing, it is submitted that any number of flies may be used.

Live bait

An angler may use natural bait, which is defined as

“any living or dead animal or vegetable substance (excluding live fish) which on account of the edibility, smell or taste thereof is used in angling to lure fish”
(Limpopo, 2003).

It follows that the situation is the same as in Gauteng, namely that live bait may indeed be used, as long as it is not live fish. Live insects, worms and frogs may well be used as bait when angling (provided that a protected species may not be used as bait).

Feeding places

It is, in terms of Section 54(1)(k) of the LEMA not allowable to make a feeding area in waters by placing any animal matter, vegetable matter or other substance therein to lure fish (Limpopo, 2003). Section 57(1)(e)(ii) of the LEMA provides that an angler may not place a floating object in the water which serves as a marker for a feeding place (Limpopo, 2003).

Stocking waters with fish

The LEMA is strict regarding the release of fish into aquatic systems. Section 57(1)(b) of the LEMA states that, except for catch and release, or upon authorisation of a permit, one may not place or release live aquatic biota in any aquatic system (Limpopo, 2003). Section 57(1)(c) of LEMA prohibits the importing into, conveying in Limpopo, buying, selling, donating, or receiving as a gift, of live aquatic biota except upon the authorisation of a permit, or if a species has been excluded by the MEC (Limpopo, 2003).

3.1.2.4. What are the bag and size limits for angling species?

Limpopo does not have any bag and size limits. Anglers may therefore kill as many fish, of any size of whatever species as they wish. Rogers (2010) is of the opinion that Limpopo does not have any fish species that are threatened by angling and that bag limits are, therefore, not required. He also indicated that, in certain circumstances, his department enforces the bag and size limits prescribed in the Transvaal Regulations, as indicated in Table 3.9.

Table 3.9: Bag and size limits of fish that are sometimes enforced in Limpopo

Column A	Species of fish		
Column B	Number of fish which may be caught and retained in one day		
Column C	The minimum length of fish which may be caught and retained		
Column D	Waters in the Province in which the fish may be caught and retained		
<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Trout (<i>Salmo</i> species)	6	200mm	Any waters
Yellow fish (<i>Barbus</i> species, including silver fish and kalwerkop fish)	10	300mm	Any waters

American Bass (<i>Micropterus</i> species)	6	200mm	Any waters
Tiger fish (<i>Hydrocynus</i> species)	6	300mm	Any waters
Blue Kurper (<i>Oreochromis mossambicus</i>) Lowveld Largemouth Kurper (<i>Serranochromis meridianus</i>) Red breasted kurper (<i>Tilapia rendalli</i>)	20	150mm	The Komati, Crocodile, Letaba, Limpopo, Olifants, Pongola and Sabie Rivers with all their tributaries and dams therein

Clearly this state of affairs is intolerable as the Transvaal Ordinance has been repealed by the LEMA and is, therefore, of no force and effect (Limpopo, 2003). LEDET is enforcing legislation that does not exist. It is the author's recommendation that bag and size limits be drafted for Limpopo.

3.1.2.5. What is the purpose of the Limpopo freshwater angling legislation?

LEMA's objectives are stipulated in Section 2(1):

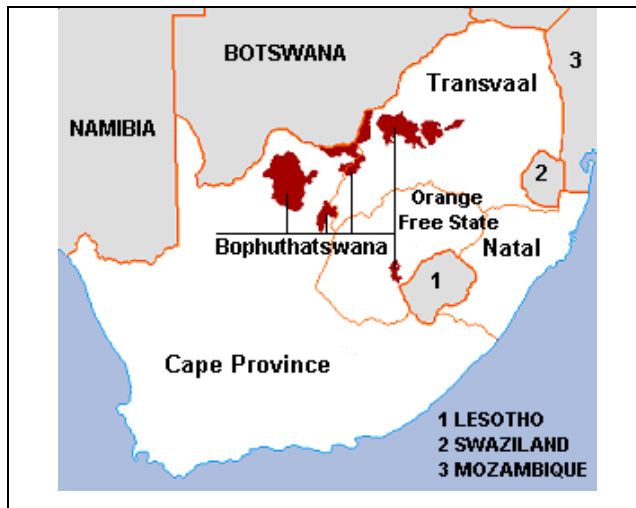
- To manage and protect the environment in Limpopo;
- To secure ecologically sustainable development and responsible use of natural resources in Limpopo; and
- To contribute to the progressive realisation of the fundamental rights contained in Section 24 of the Constitution (Limpopo, 2003).

Section 2(2) of LEMA confirms that the Limpopo Act must be interpreted and applied in accordance with the national environmental management principles set out in Section 2 of the NEMA. The relevant sections of the Constitution and NEMA referred to in LEMA are analysed in paragraphs 3.2.1 and 3.2.2 of this dissertation.

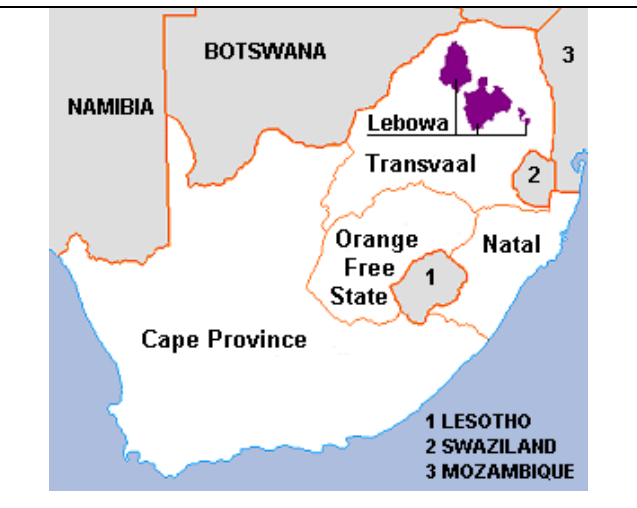
3.1.3. Mpumalanga

Mpumalanga consists of portions of the former Transvaal, Bophuthatswana, Lebowa and KaNgwane (see maps 3.7, 3.8, 3.9 and 3.10).

Map 3.7: Bophuthatswana



Map 3.8: Lebowa



Map 3.9: KaNgwane



Map 3.10: Mpumalanga



Angling in these areas were regulated by their own legislation as indicated in Table 3.10.

Table 3.10: Angling legislation of former provinces, Bantustans and homelands which now form part of Mpumalanga

Transvaal	Transvaal Nature Conservation Ordinance and Regulations
Bophuthatswana	Bophuthatswana Nature Conservation Act
Lebowa	Lebowa Nature Conservation Act
KaNgwane	KaNgwane Nature Conservation Act

In terms of Section 104 of the Mpumalanga Nature Conservation Act 10 of 1998 (“Mpumalanga Act”), the above-mentioned legislation is not applicable to Mpumalanga (Mpumalanga, 1998). The Mpumalanga Nature Conservation Regulations 2 of 1999 (“Mpumalanga Regulations”) was promulgated in 1999. Angling in Mpumalanga is, therefore, governed by both the Mpumalanga Act and Regulations (Table 3.11).

Table 3.11: Provincial legislation applicable to freshwater angling in Mpumalanga

Mpumalanga	• Mpumalanga Nature Conservation Act (Sections 51 – 67) • Mpumalanga Nature Conservation Regulations (Regulations 22 – 26)
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The definitions in Table 3.12, set out in Section 1 of the Mpumalanga Act, are relevant to angling in Mpumalanga (Mpumalanga: 1998).

Table 3.12: Mpumalanga freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angle	The catching of fish by the use of a line and fish-hook, whether or not a rod is used
Artificial lure or spoon	A device which by the simulation of life or by the colour or appearance thereof may delude or lure fish into seizing such device
Catch	The use of any means or method to take or to attempt to take fish, whether alive or dead, to injure, to poison or to kill
Fish	In relation to angling, means only those species of water fauna

	commonly known as fish
Fisheries	All waters and the fish therein
Fishing tackle	Any fishing gear, apparatus or other device or any part thereof normally used for catching fish
Live fish	In relation to natural bait, means live aquatic fauna commonly known as fish
Natural bait	Any animal or vegetable substance, whether alive or dead but excluding live fish, used in angling to allure fish by virtue of the edibility, smell or taste thereof
Non-spinning artificial fly	A fish-hook with one point and one barb to which anything inedible by fish is attached and which cannot rotate when fastened to a line and drawn through water and to which no device which can rotate is attached
Occupier	In relation to land or land on which waters are situated: the person who actually occupies the land and is in control thereof
Owner	In relation to land or land on which waters are situated, the (a) person registered as the owner thereof in a deeds registry; (b) bona fide purchaser thereof prior to the registration of the deed of transfer in his, her or its name, but after the contract of sale has been concluded, to the exclusion of the person contemplated in paragraph (a); (c) lawful heir of the person contemplated in paragraph (a) or (b), at the death of such person or, where the land is subject to a usufruct, the usufructuary; (d) lessee of the land who has entered into a lease for a period of at least 10 years or for the natural life of the lessee or any other person referred to in the lease, or the person to whom the land has been allotted in terms of the laws on land settlement subject to the right to purchase that land; (e) trustee, curator, liquidator or judicial manager, of the owner, as contemplated in paragraph (a), (b), (c) or (d)

Relative	The parent, brother, sister, spouse, child, step-child, grandchild, son-in-law or daughter-in-law of the owner or occupier of land
Waters	The waters in rivers, streams, creeks, lakes, pans, vleis, dams, reservoirs, furrows, canals and ponds

3.1.3.1. To whom does the legislation apply?

In terms of Section 51 of the Mpumalanga Act, all anglers are subject to the Mpumalanga Act and Regulations, but it is not applicable to the following people:

- (a) the owner or occupier of land who catches fish;
- (b) a relative of the owner or occupier of land who catches fish with the permission of such owner or occupier; or
- (c) an employee in the full-time service of the owner or occupier of land who, on the instructions of such owner or occupier, catches fish otherwise than by angling, in waters surrounded by the land of such owner or occupier (Mpumalanga, 1998).

The wording of Section 51 of the Mpumalanga Act is identical to the wording of Section 67 of the Transvaal Ordinance and the same comments made and concerns raised in paragraph 3.1.1.1 are applicable to Mpumalanga.

3.1.3.2. Is an angling licence required?

Angling licences in Mpumalanga are dealt with in terms of Section 56 of the Mpumalanga Act and Regulation 22 of the Mpumalanga Regulations (Mpumalanga, 1998 and 1999). In terms of Section 56(1) an angler may only angle if he is in possession of an angling licence (Mpumalanga, 1998). However, Section 56(1) also states that the following people need not possess an angling licence (Mpumalanga, 1998):

- Persons younger than 16 years (Section 56(1));

- The owner or occupier of land angling in waters situated on land of which he or she is the owner or occupier (Section 56(1)(a));
- A relative of the owner or occupier of land, angling with the owner or occupier's permission in waters situated on owner's or occupier's lands (Section 56(1)(b)); and
- Full-time employees of the owner or occupier of land who have obtained the prior written permission of such owner or occupier, may angle in waters surrounded by the land of the owner or occupier (Section 56(1)(c)).

In terms of Section 56(2) of the Mpumalanga Act, angling without a licence is a criminal offence and punishable with an unspecified fine or imprisonment for a period not exceeding 2 years or to both a fine and imprisonment (Mpumalanga, 1998). In addition to an angling licence, in terms of Section 58(1), the permission of the owner or occupier of the land on which the waters are situated must be obtained prior to angling.

3.1.3.3. Permissible angling methods

Permissible number of hooks and lines

Fly-fishing Waters

In contrast to the Gauteng legislation, the Mpumalanga Act refers to “fly-fishing” waters and not to “trout waters”. The defined Mpumalanga fly-fishing waters cover basically the same area declared as trout waters in the Transvaal legislation. In this regard, please refer to Table 3.12.

Table 3.13: Mpumalanga Fly-fishing waters (Section 65 and Schedule 9 of the Mpumalanga Act)

Where the term "river" or "spruit" appears it includes the whole course of the river or spruit with all its tributaries from it's source up to the point specified in each separate case.	
1.	The Elands River to it's confluence with the Swartkops River.
2.	The Klip River to the common boundary of the farms Draaikraal 48JT and Chieftainsplain 46 JT.
3.	The Klein-Komati River to it's confluence with the Komati River.
4.	The Seekoei Spruit to the common boundary of the farms Zilverkop 25 IT and Boshoeck 442 JT.
5.	The Weltevrede Spruit to the waterfall on the farm Waterval 269 JT.
6.	The Ohrigstad River to it's confluence with the Ohrigstad Dam.
7.	The Crocodile River to it's confluence with the Santa River.
8.	The Santa River to it's confluence with the Crocodile River.
9.	The Auxloop River to the common boundary of the farms Langdraai 85 JT and Kaffervoetpad 87 JT.
10.	The Dorps River (also known as the Spekboom River) to the bridge over it on the Lydenburg-Burgersfort tarmac road (Road P 33/2).
11.	The Sterk Spruit to it's confluence with the Dorps River in the town of Lydenburg.
12.	The Pot Spruit to the common Boundary of the farms Modderspruit 13 JT and Naauwpoort 11 JT.
13.	The great Dwars River to it's confluence with the Kafferskraal Spruit.
14.	The Kafferkraal Spruit to it's confluence with the Great Dwars River.
15.	The Konterdanskloof River to the common boundary of the farms Witpoort 216 JS and Swartkoppies 217 JS.
16.	The Lakensvlei Spruit to it's confluence with the Steelpoort River excluding the municipal dam of Belfast.
17.	The Houtbosloop River to the common boundary of the Elandsdrift 265 JT and Blyfstaanbosch Spruit 258 JT.

- | | |
|-----|---|
| 18. | The Blyde River to the common boundary of the farms Ledovine 507 KT and Hermansburg 495 KT. |
| 19. | The Mac-Mac Spruit to the waterfall on the farm Geelhoutboom 565 KT. |
| 20. | The Sabie River to the waterfall in the town of Sabie. |
| 21. | The Nels River to the common boundary of the farms Doornhoek 236 JT and Tweefontein 242 JT. |
| 22. | The Klein-Spekboom River to the railway bridge on the farm Potlood Spruit 30 JT. |
| 23. | The Waterval Spruit to it's confluence with the Blyde River. |
| 24. | The Gladde Spruit to the common boundary of the farms Slaaihoek 540 JT and Uitkomst 541 JT. |
| 25. | The tributary of the Komati River on the farms Waaikraal 385 JT, Leeukloof 403 JT and Drenthe 402 JT to it's confluence with the Komati River |
| 26. | The tributary of the Komati River on the farms Zevenfontein 388 JT, Welgelegen 400 JT to it's confluence with the Komati River. |

In terms of Section 54(1)(c) of the Mpumalanga Act one may only fish in fly-fishing waters with one line with one non-spinning artificial fly attached to it (Mpumalanga, 1998). This stipulation is often disregarded by anglers who employ the Czech Nymphing-style of fly-fishing during which up to three flies are used at a time. It very seldom, if ever, occurs that more than one fish will be caught per cast. However, because the flies are at different depths in the water, an angler's catching ratio may be increased. Upon first glance, it would seem appropriate to limit the number of flies that may be used to only one, but one has to take into account that fly-fishermen usually release their catch and, therefore, the risk of damaging fish populations are minimal. The proper enforcement of bag and size limits will also prevent damage to fish populations. It is, therefore, suggested that this Section of the Mpumalanga Act is amended so as to allow for the use of more than one non-spinning artificial fly per line.

Non Fly-fishing Waters

In terms of Section 54(1)(a) of the Mpumalanga Act, the following angling methods are allowed (Mpumalanga Act, 1998):

Natural bait angling: an angler may angle with a maximum of two lines with a maximum of two single hooks per line.

Artificial lure angling: an angler may angle with a maximum of two lines with a maximum one artificial lure or spoon attached per line.

The same comments with regard to the limitation on the number of lines discussed in the Gauteng analysis (paragraph 3.1.1.3) are applicable to Mpumalanga and are not repeated in this paragraph.

Live bait

The definitions of “natural bait” and “live fish” are exactly the same as in Gauteng. It follows, therefore, that live bait may indeed be used in Mpumalanga, as long as it is not live fish. Live insects, worms and frogs may well be used as bait when angling (provided that a protected species may not be used).

Feeding places

Section 60(1)(b) of the Mpumalanga Act prohibits an angler from placing an object which floats on water which serves as a marker indicating a feeding place (Mpumalanga, 1998). Regulation 24 of the Mpumalanga Regulations prohibits the making of a feeding area by placing any animal, vegetable or other substance therein to lure fish by virtue of the edibility, smell or taste thereof (Mpumalanga, 1999). The same comments regarding feeding places in paragraph 3.1.1.3 are applicable to Mpumalanga as well.

Stocking waters with fish

This subject is dealt with in Sections 62, 63 and 64 of the Mpumalanga Act, the contents of which are exactly the same as Sections 79, 80 and 81 of the Transvaal Ordinance, which are discussed in paragraph 3.1.1.3 and therefore not repeated in this paragraph.

3.1.3.4. What are the bag and size limits for angling species?

This subject is dealt with in Regulation 23 and Schedule 3 of the Mpumalanga Regulations (Mpumalanga, 1999). Regulation 23 states that an angler may not, without a permit, catch and retain more fish in smaller sizes defined in Schedule 3 (Mpumalanga, 1999). The bag and size limits are indicated in Table 3.14.

Table 3.14: Bag and size limits for Mpumalanga.

Column A. Species of fish; Column B. Number of fish which may be caught and retained in one day; Column C. The minimum length of fish which may be caught and retained; Column D. Waters in the Province in which the fish may be caught and retained.			
<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Yellowfish (<i>Barbus</i> species including Papermouth, Silver fish and Kalwerkop fish)	6	300mm	Any waters
Tiger fish (<i>Hydrocynus</i> species)	6	200mm	Any waters
Eels (All <i>Anguilla</i> species)	2	500mm	Any waters
Blue kurper (<i>Oreochromis mossambicus</i>) Largemouth kurper (<i>Serranochromis meridianus</i>) Red breasted kurper (<i>Tilapia rendallii</i>)	20	150mm	The Komati, Crocodile, Olifants, Pongola and Sabie rivers with all their tributaries and dams therein

Brown Trout (<i>Salmo trutta</i>) Rainbow Trout (<i>Oncorhynchus mykiss</i>)	6	200mm	Fly-fishing waters
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The author is of the opinion that the Mpumalanga Regulations are in need of updating because:

- The bag and size limits in Mpumalanga are exactly the same as in the Transvaal legislation and the same concerns expressed in paragraph 3.1.1.4 are applicable to Mpumalanga.
- Quite a few fish species, such as Rednose Mudfish (*Labeo rosae*) are not mentioned in the bag and size limits. It is submitted that prescribed bag and size limits are promulgated for all fish species found in Mpumalanga.
- It is encouraging to note that no limit exists regarding the amount of Black Bass or Carp (*Cyprinus carpio*) that may be caught and kept. However, because of the fact that the Mpumalanga legislation does not deal with these species at all, it gives anglers the opportunity to practice catch-and-release with these species, while none of the caught fish should, it is suggested, be returned to the water. The Mpumalanga legislation should be amended accordingly.

3.1.3.5. What is the purpose of the Mpumalanga freshwater angling legislation?

The Mpumalanga Act and Regulations do not specifically specify the purpose of the legislation, but the preamble to the Mpumalanga Act does state that the purpose is

“To consolidate and amend the laws relating to nature conservation and to provide for matters incidental thereto” (Mpumalanga, 1998).

Having regard to the name and the contents of the Act and Regulations it is submitted that, with regard to freshwater angling, the purpose is to ensure the conservation of angling species and the regulation of angling within Mpumalanga. It is submitted that, giving the concerns raised by author, the purpose is not achieved.

3.1.4. Free State

The Free State Province consists of portions of the pre-1993 Orange Free State, Qwaqwa and Bophuthatswana (Table 3.11, 3.12 and 3.13).

Map 3.11: Bophuthatswana



Map 3.12: Qwaqwa



Map 3.13: Free State



Angling in each province, homeland and Bantustan was governed by its own legislation governing angling (Table 3.15).

Table 3.15: Angling legislation of former provinces, Bantustans and homelands which now form part of the Free State

Free State	Free State Nature Conservation Ordinance (Sections 22 – 29) Free State Nature Conservation Regulations (Regulations 10 – 14)
Bophuthatswana	Bophuthatswana Nature Conservation Act
Qwaqwa	Qwaqwa Nature Conservation Act

Both the Bophuthatswana and Qwaqwa acts were repealed by the Free State General Law Amendment Act 6 of 2005 (Free State, 2005). While the Draft Free State Nature Conservation Bill, 2007, was published for public comment on 7 April 2008, it has not yet been enacted (Free State, 2008). In the light of the above, freshwater angling in the Free State is still governed by the pre-1993 legislation as indicated in Table 3.16.

Table 3.16: Provincial legislation applicable to freshwater angling in the Free State

Free State	Free State Nature Conservation Ordinance (Sections 22 – 29) Free State Nature Conservation Regulations (Regulations 10 – 14)
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The definitions in Table 3.17, set out in Section 1 of the Free State Ordinance, are relevant to angling in the Free State (Orange Free State: 1969).

Table 3.17: Free State freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angle	To catch fish by the use of a line and fish-hook, whether or not a rod is used
Catch	The use of any means or method of taking (whether alive or dead), injuring, immobilising or killing fish

Fishing gear	Any fishing gear, apparatus or other device or any part thereof usually used for catching fish
Natural bait	Any animal or vegetable matter (whether alive or dead, except live aquatic fauna generally known as fish) used in angling
Owner	(a) The lessee of property, if not prohibited by the landowner from exercising the rights of an owner in terms of this Ordinance; (b) The owner's successor in title before the registration of the transfer of the land; (c) in the case of land subject to a usufruct, the usufructuary thereof; (d) the person whose name is recorded as the owner in the in the Deeds Registry; (e) in all other cases, the registered owner, and also, in the case of land which is not occupied by the owner thereof, the person who is in actual occupation, and exercises general control over such land, provided he has been authorised in writing by the owner to act on his behalf: Provided that- (i) when two or more persons are joint owners of land only that one of them who has been designated by the majority of such persons in writing for the purpose shall be deemed to be the owner of such land; (ii) when a juristic person or an association of persons is the owner of land, the person designated in writing by such juristic person or association for the purpose shall be deemed to be the owner of such land; (iii) no person shall be deemed to be the owner of land merely by reason of his holding the angling rights in respect thereof
Relative	The spouse or a parent, child, brother, sister or grandchild, whether by consanguinity or affinity or by law

Waters	The water in a river, stream, creek, lake, pan, vlei, dam, reservoir, furrow or pond
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3.1.4.1. To whom does the legislation apply?

Section 22 of the Free State Ordinance (Orange Free State: 1969) provides that the sections of the Ordinance pertaining to freshwater angling are applicable to all anglers, except to:

- the owner of land or a relative of such owner; or
- an employee of such owner acting on the instructions of such owner.

These exceptions are only applicable to dams which are not constructed in public streams. As in the case of Transvaal Ordinance (see paragraph 3.1.1.1 above), the Free State Ordinance is archaic in that it still refers to public water. It is submitted that the Free State Ordinance be overhauled in order to be aligned with the relevant modern South African legislation.

3.1.4.2. Is an angling licence required?

All prospective anglers, except the owner of riparian land, or his relatives, must, in terms of Section 23(1) the Free State Ordinance be in possession of an angling licence (Orange Free State, 1969). In addition to an angling licence, a prospective angler must also have, according to Section 24 of the Free State Ordinance, the prior permission of the relevant land owner before he may angle (Orange Free State, 1969). It is, however, a major problem to obtain angling licences in the Free State³.

³ An official from the Free State Department of Environmental Affairs indicated to author – on the grounds that he remains anonymous – that angling licences are not printed in the Free State anymore. He claimed to have one of the last remaining “licence books” in his possession and regard same as a “historic document”.

3.1.4.3. Permissible angling methods

Permissible number of hooks and lines

The Free State freshwater angling legislation does not make mention of trout or fly-fishing waters. Section 26(2)(a) of the Free State ordinance allows the following angling methods (Orange Free State, 1969):

Natural bait angling: an angler may angle with a maximum of two lines with a maximum of two single hooks per line.

Artificial lure angling: an angler may angle with a maximum of two lines with a maximum of one artificial lure or spoon attached per line.

Fly-fishing: one or more non-spinning artificial flies per line are allowed.

Live bait

The Free State Ordinance allows angling with natural bait which is defined as:

“Any animal or vegetable matter (whether alive or dead, except live aquatic fauna generally known as fish) used in angling” (Orange Free State, 1969).

In terms of Regulation 11(2), live fish may not be used as bait (Orange Free State, 1983). The position is, therefore, the same as in Gauteng, Limpopo and Mpumalanga: Live insects, worms and frogs may be used as bait when angling (provided that a protected species may not be used), but live fish may not be used as bait.

Feeding places

Section 26(2)(d) of the Free State Ordinance states that an angler may not:

“place a marker, buoy or float on or in any waters to indicate an angling place or a feeding place for fish” (Orange Free State, 1969).

The Free State Ordinance does not, however, contain a section that specifically prohibits the making of a feeding place. In the light hereof, it is submitted that anglers may make feeding places in the Free State, but they may not mark such a feeding place.

Stocking waters with fish

Section 28 of the Free State Ordinance prohibits the importation of live fish, the sale of live freshwater fish and the releasing of fish in Free State waters (Orange Free State, 1969). This prohibition, according to Section 28(c) of the Free State Ordinance is not applicable if a permit has been issued for such use, or when an angler practises catch and release (Orange Free State, 1969).

3.1.4.4. What are the bag and size limits for angling species?

The bag and size limits in the Free State are governed by Regulation 11 of the Free State Regulations and are indicated in Table 3.18 (Orange Free State, 1983).

Table 3.18: Bag and size limits of fish that may be caught and retained in the Free State

Column A. Species of fish;		
Column B. Number of fish which may be caught and retained in one day;		
Column C. The minimum length of fish which may be caught and retained;		
<u>A</u>	<u>B</u>	<u>C</u>
Smallmouth Yellowfish (<i>Labeobarbus aeneus</i>)	10	450mm

Largemouth Yellowfish (<i>Labeobarbus kimberleyensis</i>)	10	450mm
Trout	6	300mm

It is submitted that the Free State bag and size limits are redrafted for the following reasons:

- The Largemouth Yellowfish (*Labeobarbus kimberleyensis*) is listed as “Vulnerable” in the TOPS Regulations. However, the Free State Regulations allows for 10 fish to be kept per angler per day.
- The Free State Regulations states that Largemouth Yellowfish must be at least 450mm before it may be kept. According to Skelton (1993:168) males become fertile only at the age of 6 years, the females only at the age of 8 years. Taking into account that it only reaches a length of 300mm at the age of five years, the current size limits allow for the keeping of breeding stock. As stated in paragraph 3.1.1.4, it is submitted that thorough scientific research should be done regarding size limits in order to ensure that breeding stock is returned by anglers.
- The bag limits for a known alien and invasive fish such as trout should be rectified. While it is acknowledged that a trout’s invasive properties may be limited due to the fact that it needs cold water to survive (Skelton, 1993:263) it is suggested that no limit is placed on the number that may be kept.
- Quite a few fish species, such as Moggel (*Labeo umbratus*) and the Orange River Mudfish (*Labeo capensis*) are not mentioned in the bag and size limits. While these species may be quite abundant and appear not to be threatened at present, it is submitted that prescribed bag and size limits are promulgated for all fish species. One should not wait until a species is threatened and only then start protecting it.

The Draft Free State Nature Conservation Bill does indeed include references to the TOPS regulations, but until it is enacted, the above-mentioned concerns remain.

3.1.4.5. What is the purpose of the Free State freshwater angling legislation?

The preamble to the Free State Ordinance states that the purpose is to:

“provide for the conservation of fauna ... and for matters incidental thereto”
(Orange Free State, 1969).

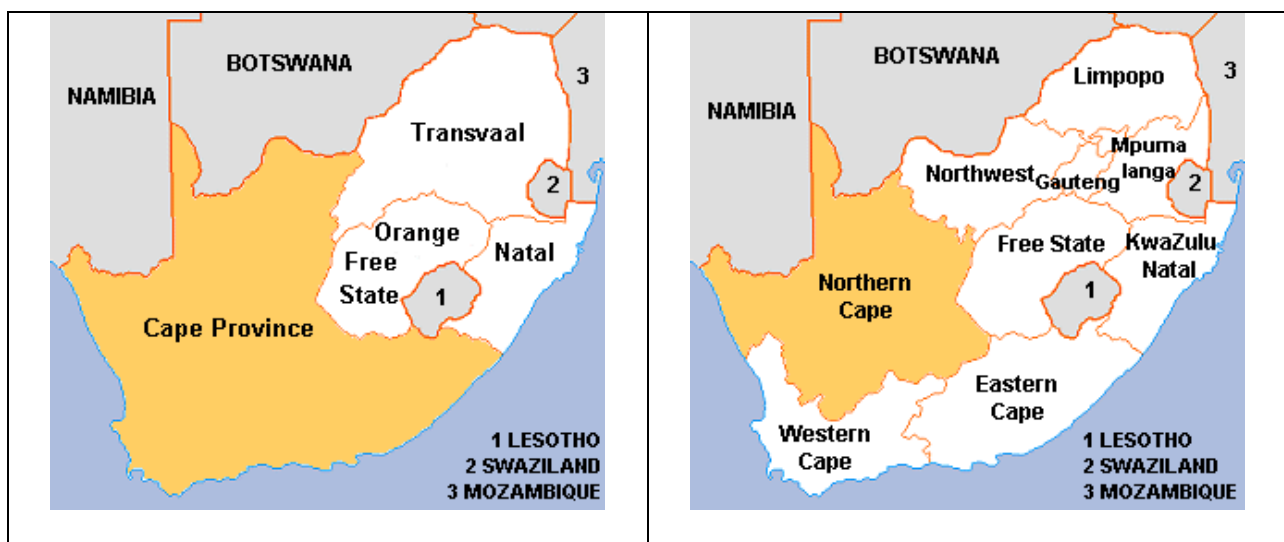
It is submitted that, the purpose of the Free State legislation is not achieved.

3.1.5. Northern Cape

The Northern Cape consists of a part of the pre-1993 Cape of Good Hope Province as indicated in Maps 3.14 and 3.15. The Bophuthatswana-areas which were surrounded by the pre-1993 Cape of Good Hope Province were incorporated into the current North-West Province as indicated in Map 3.11.

Map 3.14: Cape of Good Hope Province

Map 3.15: Northern Cape Province



While the Northern Cape provincial government published the Northern Cape Nature Conservation Act 9 of 2009 (Northern Cape, 2009) on 21 January 2010 and the Draft Northern Cape Nature Conservation Regulations on 24 February 2010 (Northern Cape, 2010), they are not yet in force. As pointed out in paragraph 3.1.5.3 below, the new Northern Cape legislation will afford freshwater fish much better protection than the current legislation and one hopes, therefore, that the new Northern Cape legislation comes into effect sooner rather than later. However, the legislation set out in Table 3.19 is still the legislation currently governing angling in the Northern Cape.

Table 3.19: Provincial legislation governing freshwater angling in the Northern Cape.

Northern Cape	Cape of Good Hope Nature & Environmental Conservation Ordinance (Sections 48 – 61A) Cape of Good Hope Nature & Environmental Conservation Regulations (Regulations 43 – 47)
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Before the Cape of Good Hope Ordinance and Regulations can be discussed, terminology relevant to freshwater angling must first be addressed. The definitions set out in Table 3.20 are described in Section 2 of the Cape Ordinance (Cape of Good Hope, 1974).

Table 3.20: Northern Cape freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angling	The catching of fish in inland waters by means of a line and hook, whether or not any rod, bait or lure is used, or by means of a set line, and “angle” has a corresponding meaning
Artificial lure or spoon	A device which by its simulation of life or by its appearance or colour is designed or likely to delude, entice or attract a fish into seizing such device

Black bass	Any fish of the genus <i>Micropterus</i>
Bluegill sun-fish	Any fish of the species <i>Lepomis macrochirus</i>
Carp	Any fish of the carp family not indigenous to the Republic and includes carp (<i>Cyprinus carpio</i>), the atavistic or wild form of the gold-fish (<i>Carassius auratus</i>) and the crucian carp (<i>Carassius carassius</i>) but does not include domestic gold-fish
Catch	Any means or method of taking (whether alive or dead), injuring, immobilizing or killing or attempting to do so, or to pursue or wilfully disturb fish
Daily bag limit	The number of any species of fish determined by proclamation issued in terms of Section 79(a) of the Cape of Good Hope Ordinance
Inland waters	All waters which do not permanently or at any time during the year form part of the sea and include any tidal river other than a tidal river in respect of which a notice issued under Section 23(1)(b) of the Sea Fisheries Act 58 of 1973 is in force
Licence	A licence issued in terms of the Cape of Good Hope Ordinance
Non-spinning artificial fly	A hook with one point and one barb to which matter not edible by fish is attached and which is constructed so as not to rotate or spin round when attached to a line and drawn through the water and to which no appliance is affixed which is capable of rotating or spinning round
Owner	(a) in relation to land: (i) the person in whom the legal title vests; (ii) where the legal title vests in an association of persons, the person designated in writing as the owner; (iii) the local authority who controls or manages the land; (iv) in the case of State land not under the control or

	management of a local authority, the Minister of the Department of State or the MEC having control or management thereof or any officer designated by such Minister or MEC for the purpose; (v) in the case of land not occupied by the owner as contemplated by subparagraph (i), the person who is in actual occupation of the land, who exercises general control over such land <u>and</u> who has been authorised in writing by the owner as contemplated above to exercise the rights conferred on an owner by the Cape of Good Hope Ordinance; (vi) where the owner is dead, insolvent, has assigned his estate for the benefit of his creditors, has been placed under curatorship or is a company being wound up or under judicial management: the person in whom the administration of such land is vested as executor, administrator, trustee, assignee, curator, liquidator or judicial manager, as the case may be; (b) in relation to inland waters, the owner as contemplated by paragraph (a) of the land on which the waters concerned are situated or which abuts on such waters
Permit	A permit issued under the Cape of Good Hope Ordinance
Privately owned inland waters	Any dam, reservoir, vlei or other inland waters completely surrounded by land owned by one owner
Relative	The spouse, parent, step-parent, adoptive parent, son-in-law, child, step-child, adopted child, brother, sister or grandchild of such owner provided that: in relation to an owner of land which is an unincorporated association of persons, "relative" means the relative of every member of such association
Waters	Includes any river, stream, creek, lake, vlei, pan, lagoon, dam,

	reservoir, furrow or pond, whether the water therein is fresh or saline, and includes the foreshore and bank thereof and any part of such waters
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3.1.5.1. To whom does the legislation apply?

In terms of Section 61 of the Cape Ordinance, the sections of the Ordinance indicated in Table 3.21 are not applicable to the owner of privately owned inland waters, his relatives or his full-time employees acting with his permission (Cape of Good Hope, 1974).

Table 3.21: Sections of the Cape Ordinance which are not applicable to owners of privately owned inland waters

<u>Section</u>	<u>Subject</u>
Section 52	Prohibition on catching of certain species of fish and catching of fish outside angling season
Section 53	Angling licences
Section 55	Prohibition on catching of more fish than number determined as bag limit and of undersized fish
Section 56	Prohibited ways of catching fish

Although the concerns raised in paragraph 3.1.1.1 regarding owners being exempted from angling legislation are also applicable in the Northern Cape, the concerns are mitigated to an extent in that they are applicable to only “*inland waters completely surrounded by land owned by one owner*” and occupiers who have been “*authorised in writing by the owner*” (Cape of Good Hope, 1974).

3.1.5.2. Is an angling licence required?

Section 53 of the Cape Ordinance states that:

“Subject to the provisions of Sections 52 and 61, no person shall angle in any inland waters without a licence ...”

This means that all anglers must have angling licences, except the owner of privately owned inland waters, his relatives or his full-time employees acting with his permission. In addition, Section 52(a) of the Cape Ordinance states that, in addition to an angling licence, an angler must have an additional permit to catch endangered fish (Cape of Good Hope, 1974). Should an angler wish to fish outside the angling season (if one is declared), he will need a permit in terms of Section 52(b) of the Cape Ordinance in addition to his angling licence (Cape of Good Hope, 1974).

3.1.5.3. Permissible angling methods

Permissible number of hooks and lines

In terms of Section 56(e)(i) and (ii), an angler may use a maximum of two lines with a maximum of two single hooks per line (Cape of Good Hope, 1974). This Section is not applicable to owner of privately owned inland waters, his relatives or his full-time employees acting with his permission. The Cape Ordinance does not distinguish between fly-fishing, bait angling or angling with artificial lures. It is submitted, therefore, that an angler in the Northern Cape may use as many artificial flies and lures as he wants to.

Live bait

The Ordinance is silent regarding the use of live bait. Therefore, in contrast to the

provincial legislation analysed previously, one may use live fish as bait in the Northern Cape. However, the angler should comply with Section 51 of the Cape Ordinance which states that one may not kill or injure a fish unless it has been killed or injured while being caught in and taken from such waters in accordance with the provisions of the Ordinance (Cape of Good Hope, 1974). Section 51 is, however, not applicable to an owner of privately owned inland waters, his relatives or his full-time employees acting with his permission. The usual proviso, e.g. that endangered or protected species may not be used as bait is reiterated.

Feeding places

The Ordinance is silent regarding the making of feeding places. It is submitted that, as it is not expressly prohibited, the making of feeding places is allowable in the Northern Cape.

Stocking waters with fish

In terms of Section 50 of the Cape Ordinance catch and release is allowed (Cape of Good Hope, 1974). One may only stock waters with fish on authorisation of a permit in terms of Section 50 of the Cape Ordinance (Cape of Good Hope, 1974).

Section 57 of the Cape Ordinance prohibits the:

- Selling or buying of endangered fish; and the
- Selling, buying or transporting of live Carp, Bluegill Sunfish, Trout, Black Bass or Banded Tilapia (*Tilapia sparrmanii*)

if not authorised by a permit to do so (Cape of Good Hope, 1974).

It is encouraging to see provincial legislation dealing decisively with alien fish species. In addition, landowners are not exempted from this prohibition. However, trout is not included in Section 57. In terms of Section 58 nobody (including landowners) may, without a permit:

- Import any live fish or the spawn thereof into the Northern Cape;
- Import into or export from or transport in or through the Northern Cape endangered fish; or
- Import into or export fish which is a protected wild animal and is specified in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973 from the Northern Cape (Cape of Good Hope, 1974).

3.1.5.4. What are the bag and size limits for angling species?

Section 55(1) of the Cape Ordinance states that nobody (except the owner of privately owned inland waters, his relatives or his full-time employees acting with his permission) may not, without a permit, catch:

- A greater number of fish than the prescribed daily bag limit; or
- Fish smaller than the prescribed size (Cape of Good Hope, 1974).

In terms of Regulations 44(2) and (5) of the Cape Regulations, the size and bag limits indicated in table 3.22 are applicable to fish in the Northern Cape (Cape of Good Hope, 1975).

Table 3.22: Bag and size limits for freshwater fish in the Northern Cape

<u>Common names</u>	<u>Scientific name</u>	<u>Minimum length</u>	<u>Daily bag limit</u>
Yellow fish	<i>Barbus capensis</i>	400mm	No limit
Yellowfish	<i>Barbus kimberleyensis</i>	300mm	No limit
Black Bass	Genus <i>Micropterus</i>	250mm	10

Trout	Genus <i>Salmo</i> and Genus <i>Salvelinus</i>	230mm	10
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The author is of the opinion that the current bag and size limits are in dire need of updating because of the following:

- Only 4 freshwater fish are afforded protection in terms of bag and size limits, namely two Yellowfish species, Trout and Black Bass. The waters of the Northern Cape are populated with many more valuable fish species which should be protected as well.
- There is no restriction on the number of Largemouth Yellowfish that may be taken, while it is a protected species in terms of NEMA.
- The alien and invasive Trout and Black Bass are, to an extent, protected by the bag and size limits.

It is, therefore, heartening to note that the new Northern Cape Nature Conservation Act makes much better provision for the protection of freshwater fish. Sections 32 and 33 of the Northern Cape Nature Conservation Act state that “Specially Protected Fish” and “Protected Fish” may not be caught without a permit (Northern Cape, 2009). The fish species stipulated in Schedule 1 of the Northern Cape Nature Conservation Act, as indicated in Table 3.23, are regarded as specially protected (Northern Cape, 2009).

Table 3.23: Specially Protected fish in terms of the Northern Cape Nature Conservation Act (Not commenced yet)

<u>Scientific name</u>	<u>Common name</u>
<i>Barbus andrewi</i>	Cape Whitefish
<i>Barbus calidus</i>	Clanwilliam Redfin
<i>Barbus erubescens</i>	Twee River Redfin
<i>Barbus hospes</i>	Namaqua Barb / Namaqua Minnow

<i>Barbus pallidus</i>	Gold Barb / Speckled Minnow
<i>Barbus paludinosus</i>	Straightfin Barb / Slender Serrate Minnow
<i>Barbus serra</i>	Sawfin
<i>Barbus trevelyani</i>	Border Barb
<i>Barbus trimaculatus</i>	Threespot Barb / Threespot Minnow
<i>Labeo seeberi</i>	Clanwilliam Sandfish
<i>Labeo umbratus</i>	Moggel / Mud Millet
<i>Labeobarbus aeneus</i>	Vaal-Orange Smallmouth Yellowfish
<i>Labeobarbus capensis</i>	Clanwilliam Yellow Fish
<i>Labeobarbus kimberleyensis</i>	Vaal-Orange Largemouth Yellowfish
<i>Pseudobarbus afer</i>	Eastern Cape Redfin
<i>Pseudobarbus asper</i>	Smallscale Redfin / Plumb red-fin minnow
<i>Pseudobarbus burchelli</i>	Burchell's Redfin
<i>Pseudobarbus burgi</i>	Berg River Redfin
<i>Pseudobarbus phlegethon</i>	Fiery Redfin
<i>Pseudobarbus tentuis</i>	Slender Redfin
<i>Austroglanis barnardii</i>	Barnard's Rock Catfish
<i>Austroglanis gilli</i>	Clanwilliam Rock Catfish
<i>Austroglanis sclateri</i>	Rock-Catfish
<i>Calaxias zebratus</i>	Cape Galaxia
<i>Sandelia bainsii</i>	Eastern Province Rocky
<i>Sandelia capensis</i>	Cape Kurper

The fish species stipulated in Schedule 2 of the Northern Cape Nature Conservation Act, as indicated in Table 3.24, are regarded as Protected (Northern Cape, 2009).

Table 3.24: Protected fish in terms of the Northern Cape Nature Conservation Act (Not commenced yet)

<u>Scientific name</u>	<u>Common name</u>
<i>Barbus anoplus</i>	Chubbyhead barb
<i>Labeo capensis</i>	Orange River mudfish
<i>Mesobola brevianalis</i>	River sardine
<i>Varicorhinus nelspruitensis</i>	Incomati Chiselmouth, Stumpnose
<i>Hydrocynus vittatus</i>	Tigerfish
<i>Oreochromis placidus</i>	Black Tilapia
<i>Pseudocrenilabrus philander</i>	Southern mouthbrooder
<i>Serranochromis meridianus</i>	Lowveld Largemouth
<i>Tilapia sparrmanii</i>	Banded tilapia, banded bream
<i>Clarias gariepinus</i>	Sharp tooth catfish
<i>Nothonranchius orthonotus</i>	Spotted Killifish
<i>Nothobranchius rachovii</i>	Rainbow Killifish
<i>Anguilla mossambica</i>	Longfinned eel

While the new fish lists should be commended, it should also be pointed out that quite a number of the listed fish such as the Tigerfish (Skelton, 1993:206), the Incomati Chiselmouth (Skelton, 1993:174), the Black Tilapia (Skelton, 1993:328), the Longfinned Eel (Skelton, 1993:105), the Lowveld Largemouth, the Spotted Killifish and the Rainbow Killifish, to name but a few, are not found in the Northern Cape. Author cannot but wonder how the list was compiled, as these species should be regarded as alien in the Northern Cape and should, therefore, not be protected. It is recommended that the lists must be amended to only cater for fish indigenous to the Northern Cape prior to the commencement thereof.

The fish species stipulated in Schedule 5 of the Northern Cape Nature Conservation Act, as indicated in Table 3.25, are regarded as Invasive (Northern Cape, 2009).

Table 3.25: Invasive fish in terms of the Northern Cape Nature Conservation Act (Not commenced yet)

<u>Scientific name</u>	<u>Common name</u>
<i>Clarias batrachus</i>	Walking catfish
<i>Ctenopharyngodon idella</i>	Grass carp / Chinese carp
<i>Cyprinus carpio</i>	Common Carp
<i>Gambusia affinis</i>	Western mosquito fish
<i>Hypophthalmichthys molitrix</i>	Silver carp
<i>Lates niloticus</i>	Nile perch
<i>Lepomis macrochirus</i>	Bluegill sunfish
<i>Micropterus dolomieu</i>	Smallmouth bass
<i>Micropterus salmoides</i>	Largemouth Bass
<i>Oncorhynchus mykiss</i>	Rainbow trout
<i>Oreochromis aureus</i>	Blue tilapia
<i>Oreochromis mossambicus</i>	Mozambique tilapia
<i>Perca fluviatilis</i>	European perch
<i>Salmo trutta</i>	Brown trout
<i>Salvelinus fontinalis</i>	Brook trout
<i>Tinca tinca</i>	Tench

3.1.5.5. What is the purpose of the Northern Cape freshwater angling legislation?

The preamble to the Cape Ordinance states:

“To consolidate and amend the laws relating to nature and environmental conservation and to provide for matter incidental thereto.”

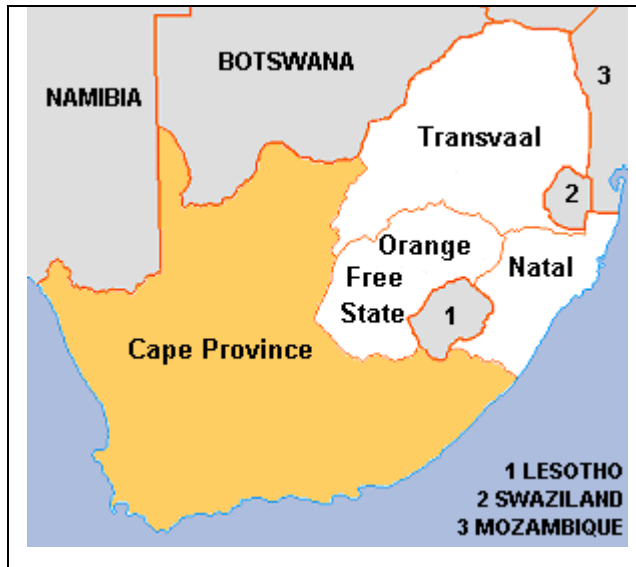
It is submitted that, in its current format, the Cape Ordinance and Regulations do not serve the purpose. The new Northern Cape Nature Conservation Act and Regulations

may rectify many concerns, but as was pointed out, do not address them all. As stated previously, because the Northern Cape Nature Conservation Act and Regulations have not commenced yet, an in depth analysis thereof was not done.

3.1.6. Western Cape

The Western Cape consists of a portion of the pre-1993 Cape of Good Hope Province as indicated in Maps 3.16 and 3.17.

Map3.16: Cape of Good Hope



Map 3.17: Western Cape



The Cape Ordinance and Regulations were assigned to the Western Cape in terms of Proclamation 108 of 17 June 1993 (Western Cape, 1994). The provincial legislation in Table 3.26 is applicable to freshwater angling in the Western Cape.

Table 3.26: Provincial legislation governing freshwater angling in the Western Cape.

Western Cape	Cape of Good Hope Nature & Environmental Conservation Ordinance (Sections 48 – 61A) Cape of Good Hope Nature & Environmental Conservation
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	Regulations (Regulations 43 – 47)
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The analysis, comments and concerns in paragraph 3.1.5, with the exception of the references to the Northern Cape Nature Conservation Act and Regulations, are applicable to the Western Cape and therefore not repeated.

3.1.6.1. To whom does the legislation apply?

The analysis, comments and concerns in paragraph 3.1.5.1, are applicable to the Western Cape and not repeated.

3.1.6.2. Is an angling licence required?

The analysis, comments and concerns in paragraph 3.1.5.2 regarding angling licence requirements, are applicable to the Western Cape and not repeated.

3.1.6.3. Permissible angling methods

The analysis, comments and concerns in paragraph 3.1.5.3 regarding permissible angling methods, the use of live bait, feeding places and stocking of waters, are applicable to the Western Cape and not repeated.

3.1.6.4. What are the bag and size limits for angling species?

The analysis, comments and concerns in paragraph 3.1.5.4 regarding bag and size limits, with the exception to the references to the Northern Cape Nature Conservation Act and Regulations, are applicable to the Western Cape and, therefore, not repeated.

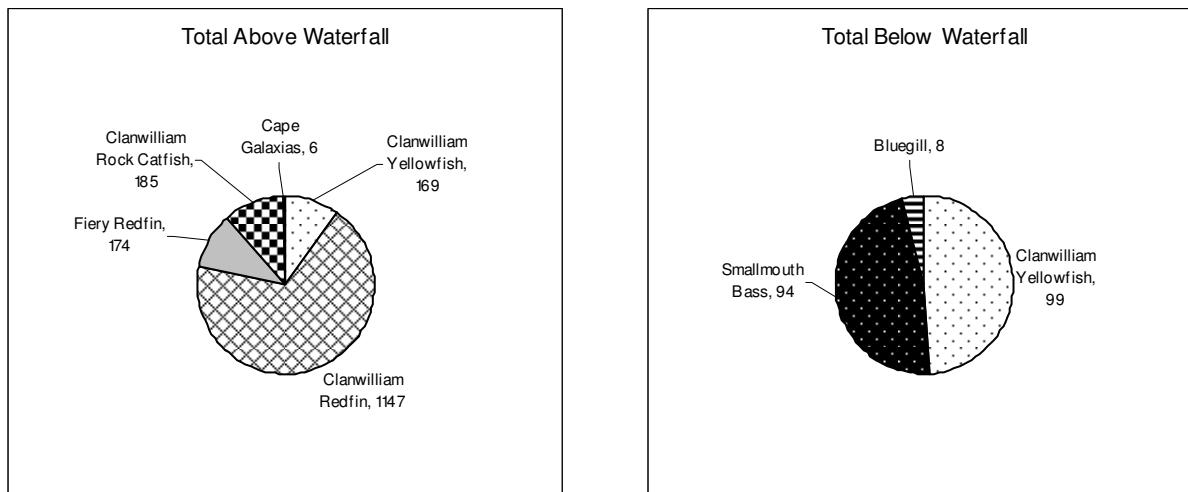
The protection of alien and invasive fish such as Black Bass and Trout (refer to paragraph 3.1.3.5) and the absence of protection for indigenous species such as the

Clanwilliam Yellowfish (*Labeobarbus capensis*) (listed as “vulnerable” in the TOPS Regulations), the Clanwilliam redbfin (*Barbus calidus*), the Fiery Redfin (*Psuedobarbus phlegethon*), the Clanwilliam Rock catfish (*Austroglanis gilli*) and the Cape Galaxias (*Galaxias zebratus*) are cause of great concern.

The following can serve as an example of the invasive quality of some alien species. Woodford *et al.*, (2004) studied the impact of Smallmouth Bass (*Micropterus dolomieu*) and Bluegill Sunfish (*Lepomis macrochirus*) which invaded the Rondegat River, a tributary of the Olifants River in the Western Cape. The study area was divided by a small waterfall. The Bass and Bluegill only invaded the river below the waterfall as it was too high for them to negotiate. The study showed:

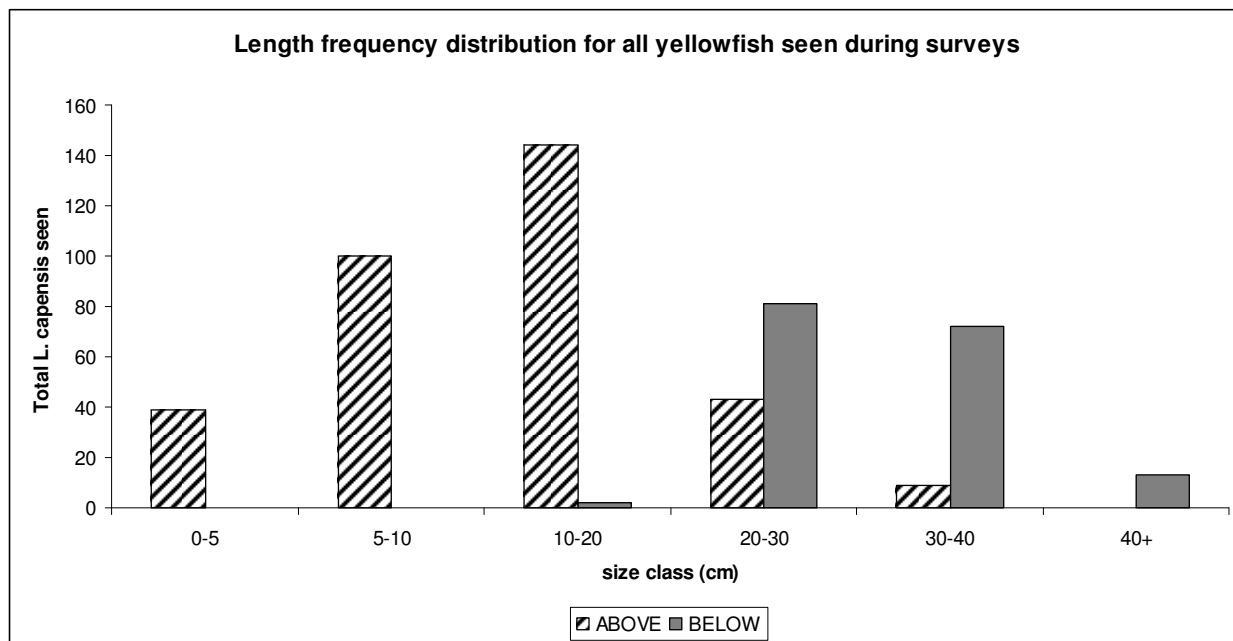
“... significant differences in the fish communities at invaded compared to non-invaded sites, with the former showing a dramatic loss of indigenous fish abundance and diversity (Figure 1)” (Woodford et al., 2004:68).

Figure 3.1: Comparison of fish species and abundances recorded at invaded and non-invaded sites during seasonal surveys of the Rondegat River in 2003 (Woodford *et al.*, 2004:68)



Above the waterfall, 5 indigenous freshwater fish species and no Smallmouth Bass or Bluegill Sunfish existed. Below the waterfall, which was populated by Smallmouth Bass and Bluegill Sunfish, only one indigenous freshwater fish species remained, which means that four indigenous freshwater fish species were annihilated by the Smallmouth Bass and Bluegill Sunfish. While the whole range of sizes, from 5cm juveniles to 50cm adults of Clanwilliam Yellowfish were present above the waterfall, only larger fish (too big to be swallowed by the Bass) were present below the waterfall as indicated in Figure 2.

Figure 3.2: Length frequency distributions for all yellowfish recorded at study sites during seasonal surveys in 2003 (Woodford *et al.*, 2004:69)



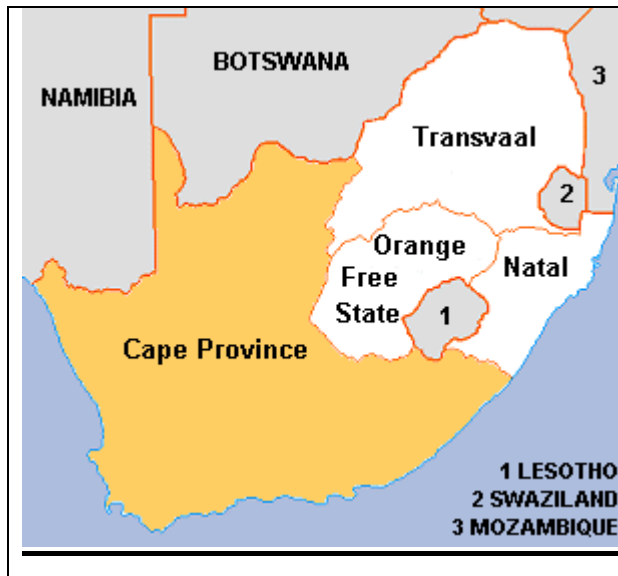
3.1.6.5. What is the purpose of the Western Cape freshwater angling legislation?

The analysis, comments and concerns in paragraph 3.1.5.5 regarding the purpose of the Cape Ordinance and Regulations, are applicable to the Western Cape and not repeated.

3.1.7. Eastern Cape

The Eastern Cape consists of portions of the former Cape of Good Hope, Ciskei and Transkei as indicated in Maps 3.18 to 3.21.

Map 3.18: Cape of Good Hope Province



Map 3.19: Ciskei



Map 3.20: Transkei



Map 3.21: Eastern Cape



Prior to 1993, freshwater angling was regulated:

- In the Cape of Good Hope Province by the Cape Ordinance and Regulations;
- In the Ciskei by the Ciskei Nature Conservation Act 10 of 1987 (“Ciskei Act”); and
- In the Transkei by Decree No. 9 (Environmental Conservation) of 1992 (Transkei Decree) (Transkei, 1992).

The Eastern Cape Environmental Management Bill (“Eastern Cape Bill”) was published in 2003 in terms of which the above-mentioned provincial and homelands legislation is to be repealed (Eastern Cape, 2003). The Bill was, however, never enacted and the author could find no proof that the afore-mentioned legislation was repealed. Professor Louis Kotzé who teaches Environmental Law at the North-West University confirmed that the afore-mentioned pre-1993 legislation is still in force (Kotzé, 2010). It follows that freshwater angling in the Eastern Cape is governed by the legislation of the Cape of Good Hope, Ciskei and Transkei as indicated in Table 3.27.

Table 3.27: Provincial and homeland legislation currently governing freshwater angling in the Eastern Cape

<u>Area</u>	<u>Applicable legislation</u>
Former Cape of Good Hope	Cape of Good Hope Nature & Environmental Conservation Ordinance (Sections 48 – 61A) Cape of Good Hope Nature & Environmental Conservation Regulations (Regulations 43 – 47)
Former Ciskei	Ciskei Nature Conservation Act (Sections 47 – 76)
Former Transkei	Decree No. 9 (Environmental Conservation) (Sections 42 -50)

The analysis of the freshwater angling legislation in the Eastern Cape proved to be a cumbersome and difficult process. As the province currently consists of the former Cape of Good Hope province, as well as the former Republics of Ciskei and Transkei and the legislation of these areas is still in force, each former province and republic will be dealt with separately. An angler faces the difficult position that, when he is angling in the Eastern Cape, he must ensure that he knows in which area he finds himself, in order

to be able to ascertain which legislation is applicable to him. Clearly, the situation is untenable in the post-1993 South Africa.

As the Cape Ordinance and Regulations have been dealt with in paragraph 3.1.5, it will not be repeated in this analysis again. Before the rest of the Eastern Cape Legislation is analysed, terminology relevant to freshwater angling in the areas formerly known as the Ciskei and Transkei must be addressed. The definitions relevant to freshwater angling in the Ciskei are set out in Section 1 of the Ciskei Act and are indicated in Table 3.28 (Ciskei, 1987).

Table 3.28: Ciskei freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angling	The catching of fish by means of a line and hook, whether or not any rod, bait or lure is used, but does not include the jigging or snatching of fish
Angling season	The period in the year, other than the closed season, when fish may be lawfully caught
Bait	Any organic substance, live or dead, used to be used for attracting fish whether or not it is, or is to be, used in conjunction with any other lure or any other substance
Black bass	Any fish of the genus <i>Micropterus</i>
Bluegill sun-fish	Any fish of the species <i>Lepomis macrochirus</i>
Carp	Any fish of the carp family not indigenous to Ciskei and includes carp (<i>Cyprinus carpio</i>), the atavistic or wild form of the gold-fish (<i>Carassius auratus</i>) and the crucian carp (<i>Carassius carassius</i>) but does not include domestic gold-fish
Catch	The taking of fish out of any waters or the bringing of fish onto land, in any manner whatsoever, or the possessing of fish in a net, whether or not the net is in the water, or the

	possessing of fish in or on any boat; • The injuring, immobilizing or killing (or an attempt to do so), or to pursue or wilfully disturb fish
Closed Season	A season during which no fishing may take place, as prescribed in Schedule 12
Daily bag limit	The daily bag limit prescribe in Schedule 11
Fish	Any species of aquatic animal, whether vertebrate or invertebrate, and includes the spawn or larvae of such animal.
Inland waters	Any waters in the Ciskei other than the waters of the sea or tidal rivers or tidal lagoons
Jigging	The catching of fish by the jerking in water of an implement consisting of or fitted with a hook with the intention of impaling fish thereon, but does not include a spoon or other artificial lure used for angling
Owner	(a) in relation to land: (i) the person whom the legal title thereto is vested; (ii) where the legal title vests in an association of persons, the person designated in writing as the owner; (iii) the local authority who controls or manages the land; (iv) in the case of State land not under the control or management of a local authority, the Minister of the Department of State or the MEC having control or management thereof or any officer designated by such Minister or MEC for the purpose; (v) in the case of land not occupied by the owner as contemplated by subparagraph (i), the person who is in actual occupation of the land, who exercises general

	control over such land <u>and</u> who has been authorised in writing by the owner as contemplated above to exercise the rights conferred on an owner by the Ciskei Act; (vi) where the owner is dead, insolvent, has assigned his estate for the benefit of his creditors, has been placed under curatorship or is a company being wound up or under judicial management: the person in whom the administration of such land is vested as executor, administrator, trustee, assignee, curator, liquidator or judicial manager, as the case may be; (b) in relation to inland waters, the owner as contemplated by paragraph (a) of the land on which the waters concerned are situated or which abuts on such waters
Private land	Land other than land owned or controlled by the State
Relative	The spouse, parent, step-parent, adoptive parent, son-in-law, child, step-child, adopted child, brother, sister or grandchild of such owner provided that: in relation to an owner of land which is an unincorporated association of persons, "relative" means the relative of every member of such association
Sea	The water and bed of the sea, including tidal rivers and lagoons
Snatching	See definition of "jigging" above
Tidal lagoon	A lagoon, the waters of which (whether or not impounded) become saline at any time, owing to the influence of the sea or the level of which rises at any time as a result of the influence of the sea
Tidal river	That part of any river which, owing to the influence of the sea, becomes saline or the level rises and falls as a result of the tides
Trout	Any fish of the genus <i>Salmo</i> or <i>Salvelinus</i>
Trout fly	A hook with one point and one barb to which feathers or other

	matter not edible to fish are attached so as to simulate an insect or other natural fish and which is so constructed that neither the hook, nor anything attached thereto, rotates or spins when drawn through the water.
Trout waters	Any waters declared as such in terms of Section 52(1)
Waters	The sea or inland waters, including any body of water or water courses of any kind, whether occurring naturally or artificially created, and includes the bed of any such waters

The definitions relevant to freshwater angling in the Transkei are set out Section 1 of the Transkei Decree, as indicated in Table 3.29 (Transkei, 1992).

Table 3.29: Transkei freshwater angling definitions

<u>Concept</u>	<u>Definition</u>
Angling	The catching of fish by means of a line and hook, whether or not any rod, bait or lure is used, but does not include the jigging or snatching of fish
Angling season	The period in the year, other than the closed season, when fish may be lawfully caught
Bag limit	The greatest number or mass of fish that shall be possessed of at any particular time
Bait	Any organic substance, live or dead, used to be used for attracting fish whether or not it is, or is to be, used in conjunction with any other lure or any other substance
Catch	• The taking fish out of any waters or the bringing of fish onto land, in any manner whatsoever, or the possessing of fish in a net, whether or not the net is in the water, or the possessing of fish in or on any boat; • The injuring, immobilizing or killing or attempting to take, injure, immobilize or kill, or to pursue or wilfully disturb fish

Fish	Any aquatic animal (other than an amphibian, reptile, bird or mammal) whether vertebrate or invertebrate, and includes the spawn or larvae thereof
Inland waters	Any waters in the Transkei other than the waters of the sea or tidal rivers or tidal lagoons
Jigging	The catching of fish by the jerking in water of an implement consisting of or fitted with a hook with the intention of impaling fish thereon, but does not include a spoon or other artificial lure used for angling
Owner	(a) in relation to land: (i) the person whom the legal title thereto is vested or, if such person is absent from the Transkei or his whereabouts are unknown, his authorised representative in the Transkei; (ii) where the legal title vests in an association of persons, the person designated in writing as the owner; (iii) the local authority who controls or manages the land; (iv) in the case of State land not under the control or management of a local authority, the Minister of the Department of State or the MEC having control or management thereof or any officer designated by such Minister or MEC for the purpose; (v) in the case of land not occupied by the owner as contemplated by subparagraph (i), the person who is in actual occupation of the land, who exercises general control over such land <u>and</u> who has been authorised in writing by the owner as contemplated above to exercise the rights conferred on an owner by the Transkei

	Decree; (vi) where the owner is dead, insolvent, has been placed under curatorship or is a company being wound up or under judicial management: the person in whom the administration of such land is vested as executor, administrator, trustee, assignee, curator, liquidator or judicial manager, as the case may be; (b) in relation to inland waters, the owner as contemplated by paragraph (a) of the land on which the waters concerned are situated or which abuts on such waters
Private land	Land other than land owned or controlled by the State
Relative	The spouse, parent, step-parent, adoptive parent, son-in-law, child, step-child, adopted child, brother, sister or grandchild of such owner provided that: in relation to an owner of land which is an unincorporated association of persons, “relative” means the relative of every member of such association
Sea	The water and bed of the sea, including tidal rivers and lagoons
Snatching	See definition of “jigging” above
Tidal lagoon	A lagoon, the waters of which (whether or not impounded) become saline at any time, owing to the influence of the sea or the level of which rises at any time as a result of the influence of the sea
Tidal river	That part of any river which, owing to the influence of the sea, becomes saline or the level rises and falls as a result of the tides
Waters	The sea or inland waters, including any body of water or water courses of any kind, whether occurring naturally or artificially created, and includes the bed of any such waters

3.1.7.1. To whom does the legislation apply?

3.1.7.1.1. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.1 regarding the application of the Cape Ordinance and Regulations are applicable to the Eastern Cape and, therefore, not repeated.

3.1.7.1.2. Former Ciskei

In order to establish to which waters the Ciskei Act is applicable with regard to freshwater angling, one has to read the definitions of “inland waters”, “sea”, “tidal rivers” and “tidal lagoons” together (Ciskei, 1987). When doing so, it becomes apparent that freshwater angling refers to angling in waters other than the waters of the sea or tidal rivers or tidal lagoons.

In terms of Section 58 of the Ciskei Act, the provisions of, *inter alia*, Sections 52(2)(a) (i.e. trout angling licences) and 54(1)(a) (i.e. bag limits) are, with regard to freshwater fish in inland waters on or abutting on private land, not applicable to the:

- Owner of the waters or the abutting land;
- A relative of the owner; or
- A full-time employee of the owner, acting with the owner’s permission (Ciskei, 1987).

The same concerns raised in paragraph 3.1.1.1 regarding owners being excluded from angling legislation, are applicable in this instance.

3.1.7.1.3. Former Transkei

Similar to the Ciskei, freshwater angling refers to angling waters other than the waters of the sea or tidal rivers or tidal lagoons (Transkei, 1992). The Transkei decree does not contain the same stipulations regarding the exclusion of landowners as was seen in the

provincial legislation dealt with previously. It merely states in Section 50 that exemption from the chapter dealing with freshwater angling (Chapter 9) may be given to persons engaged in scientific work in connection with inland fisheries (Transkei Decree, 1992).

3.1.7.2. Is an angling licence required?

3.1.7.2.1. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.2 regarding angling licence requirements are applicable to the Eastern Cape and, therefore, not repeated.

3.1.7.2.2. Former Ciskei

The Ciskei Act differentiates between trout waters and waters that are non-trout waters. According to Section 52(2)(a) of the Ciskei Act, an angler must be in possession of either a trout licence or a permit when angling in the trout waters which are listed in Schedule 13 of the Ciskei Act and reflected in Table 3.30 (Ciskei, 1987).

Table 3.30: Ciskei trout waters

Upper Tyume River	From above the Binfield Park Dam to the headwaters
Amatole River	From Amatole village to the headwaters in Zincuka forest
Wolf River	From above Sandile Dam to headwaters of Amatole mountains
Mnyameni River	From Mnyameni Dam to headwaters in Malan Forest
Cata River	From Mnyameni Dam to headwaters in Cata Forest including all headwater streams
Rabula River	From the confluence with Keiskamma River to the headwaters
Buffalo River	The upper portion only of Rooikrantz to the headwaters in Pirile Forest including Maden Dam
Diep River	All stretches of the Diep River within or bounding Ciskei
Krom River	All stretches of the Krom River within or bounding Ciskei

Readsdale River	From Pleasant View to the headwaters in Readsdale State Forest
-----------------	--

Outside of trout waters, in terms of Section 56(1)(a) of the Ciskei Act an “inland waters angling licence” is required (Ciskei, 1987). It is submitted that an absurd situation exists in the Eastern Cape:

- The Ciskei Act created trout waters. The Cape Ordinance and Regulations and the Transkei Decree did not. Depending in which area the angler finds himself, he may require a trout licence on the one side of the river, but not on the other. In trout waters, only certain methods (see paragraph 3.1.7.3.2) of angling are allowed. However, on the other side of the bank, outside of the old Ciskei but still in the same waters, other methods (e.g. fishing for trout with bait) are allowed. A question which arises (and to which there is no definite answer) is which legislation is applicable to an angler in a boat who crosses from one area into another? Is it the legislation of the area from which he has entered onto the water, or the legislation of the area he is finding himself in? How is he supposed to know whether he has indeed crossed the boundary?
- According to Section 56(2), “*any citizen of the Ciskei who is below the age of sixteen years*” does not require an angling licence. The question that arises is: who can be regarded as a citizen of the Ciskei: only people living, or born, in the area of the Eastern Cape which was formerly known as the Ciskei? Should anglers under the age of 16 years, living or born outside the former Ciskei, have to obtain an angling licence?

Clearly, the situation is untenable and the freshwater angling laws in the Eastern Cape should be amended to achieve uniformity throughout the province.

3.1.7.2.3. Former Transkei

An angling licence is, in terms of Section 47(1) required to catch fish in inland waters (Transkei Decree, 1992).

3.1.7.3. Permissible angling methods

3.1.7.3.1. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.3 regarding permissible angling methods, the use of live bait, feeding places and stocking of waters are applicable to the Eastern Cape and are, therefore, not repeated.

3.1.7.3.2. Former Ciskei

Permissible number of hooks and lines

As stated in paragraph 3.1.7.2.2 above, the Ciskei Act differentiates between trout and non-trout waters.

Trout waters

According to Section 52(2)(c) of the Ciskei Act, an angler may not angle for trout with a fixed spool reel (*the spool of a fly-fishing reels can rotate – author*) or a set-line or by means of any hook, bait or lure other than a trout fly (Ciskei, 1987). The reason for this is that fixed spool reels (or “coffee grinders”, as they are affectionately referred to by anglers) are used for bait and artificial lure angling, which is, with regard to trout, not permissible.

Non-trout waters

In terms of Section 56(1)(c) of the Ciskei Act an angler may only use a maximum of two lines simultaneously with a maximum of two single hooks attached to each line (Ciskei, 1987). The act does not make mention of artificial lures or spoons, as is done on the provincial legislation already discussed. Because of the fact that it is not specifically prohibited by law, it is the author's submission that artificial lures or spoons (defined in the Transvaal legislation as "a device which by the simulation of life or by the colour or appearance thereof may delude or lure fish into seizing such device" (Transvaal, 1983(a)) may indeed be used by anglers.

Live bait

The Ciskei Act does not prohibit the use of live bait and, having regard to the definition of "bait", it is submitted that it may indeed be used by anglers who find themselves in the area previously known as the Ciskei, provided that the bait organism is not protected.

Feeding places

The Ciskei Act does not prohibit the making or use of feeding places and it is submitted that feeding places may indeed be made by anglers who find themselves in the area previously known as the Ciskei.

Stocking waters with fish

This subject is governed by Section 57(1)(c) of the Ciskei Act which states that nobody may:

"... unless authorised thereto by a permit, place in or in any manner introduce into any waters any live fish other than live fish replaced in the waters in question immediately after having been caught in those waters" (Ciskei, 1987).

It follows that one may only place fish into waters if in possession of a permit or when practising catch-and-release.

3.1.7.3.3. Former Transkei

Permissible number of hooks and lines

The Transkei Decree does not differentiate between trout and non-trout waters. Section 48(a) merely states that an angler may not:

“use any fishing tackle for the purposes of catching fish other than prescribed for that particular fish” (Transkei Decree, 1992).

However, the author could not find any reference to fishing tackle prescribed for a specific fish species and it is argued that anglers may use as many rods, lines and hooks as they want to.

Live bait

The Ciskei Decree is silent on this issue. Bait is defined in Section 1 as:

“Any organic substance, live or dead ... used for attracting fish ... ” (Transkei Decree, 1992).

It is, therefore, submitted that live bait may indeed be used, provided that the bait organism is not protected.

Feeding places

The Transkei Act does not prohibit the making or use of feeding places and it is

submitted that feeding places may indeed be made by anglers who find themselves in the area previously known as the Transkei.

Stocking waters with fish

Stocking of waters with fish is, in terms of Section 43(1) prohibited, unless prior approval has been obtained in terms of the Transkei Decree (Transkei Decree, 1992).

3.1.7.4. What are the bag and size limits for angling species?

3.1.7.4.1. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.4 regarding bag and size limits, with the exception to the references to the Northern Cape Nature Conservation Act and Regulations, are applicable to the Eastern Cape and, therefore, not repeated.

3.1.7.4.2. Former Ciskei

Bag and size limits for freshwater fish in the former Ciskei are governed by Section 54 and Schedules 10 and 11 of the Ciskei Act (Ciskei, 1987). Section 54(1)(a) of the Ciskei Act states that no person may, unless he is the holder of a permit to do so catch or be in possession of any fish which is of a size smaller than prescribed in Part 2 of Schedule 10 (Ciskei, 1987). In addition, according to Section 54(1)(c) of the Ciskei Act, an angler may only catch or attempt to catch the maximum number of fish prescribed in Part 3(b) of Schedule 11 (Ciskei, 1987). The bag and size limits for freshwater fish are indicated in Table 3.31.

Anglers who are official participants in an internationally recognised fishing competition may in terms of Section 54(3), on application, be exempted from the prescribed bag and size limits (Ciskei, 1987).

Table 3.31: Bag and size limits in the area formerly known as Ciskei

<u>Species</u>	<u>Minimum length (mm)</u>	<u>Daily bag limit</u>
Black Bass (all species)	250mm	10 in all
Freshwater Springer	150mm	
Trout (all species)	300mm	10 in all
Yellowfish (all species)	300mm	10 in all

It is submitted that the Ciskei Act as such and the size and bag limits contained therein are absolutely inadequate to protect freshwater fish species and it is recommended that it be updated in uniform legislation that is applicable to the Eastern Cape as a whole.

With regard to the bag and size limits, the author submits that they are inadequate, because of, *inter alia*, the following:

- Not all fish species are protected in terms of the Ciskei Act. The absence of protection for the Longfin Eel (*Anguilla mossambica*), the Shortfin Eel (*Anguilla bicolor bicolor*) and the Madagascar mottled eel (*Anguilla marmorata*) is an example hereof. The numbers of these species are, according to anecdotal evidence, diminishing. One of the reasons is that these fish are migratory and swim inland from the sea, through the river mouths and estuaries as far upstream as necessary. Upon reaching maturity, they migrate to the sea to breed (Skelton, 1993:104-108). It is a well known fact that the building of dams and weirs without fishways hinders the migration of fish:

“... a fishway (is) essentially a water passage around or through an obstruction, designed to dissipate the energy in the water in such a manner as to enable fish to ascend without undue stress ... There are large numbers of in-stream barriers

(such as weirs, dams, and causeways) in South African rivers that obstruct the natural migrations of aquatic biota. Although over 35 fishways have been built on instream barriers in South Africa, many of these are based on designs developed in the northern hemisphere and only a few appear to be reasonably effective in passing indigenous species” (Fouche, 2005:42).

Because of the fact that no bag or size limits for eels have been set, anglers may keep as many as they like, which may put additional pressure on already dwindling numbers.

- Trout, recognised for their invasive properties are being protected in terms of the Ciskei Act. In terms of Schedule 12 of the Ciskei Act, one may not even catch them during 1 June to 31 August.
- The scientific names for the different trout species are wrong. It is clear that, having regard for the definition of trout, as well as the time period when the Ciskei Act was drafted, the intention of the legislation was to include the three trout species, namely Rainbow Trout, Brown Trout and Brook Charr. As stated in paragraph 3.1.1.4 above, the Rainbow Trout was initially included in the *Salmo* genus, while it is now part of the genus *Oncorhynchus* (Skelton 1993:261). The Ciskei legislation does not make reference to this distinction, and accordingly, only the Brown Trout (*Salmo trutta*) and Brook Charr (*Salvelinus fontinalis*), but not the Rainbow Trout (*Oncorhynchus mykiss*) are legislated.

On a positive note, in contrast to the provincial legislation already analysed, certain fish species are, in terms of Sections 8 and Schedule 1 of the Ciskei Act listed as specially protected (Ciskei, 1987). These fish may not be caught at all. Unfortunately, only the Border Barb (*Barbus trevelyani*) is listed as a specially protected wild animal (Ciskei, 1987). It is interesting that presence of trout is listed as a reason why the Border Barb is threatened (Skelton, 1993:158), but that trout is protected in terms of the Ciskei Act.

The absurd situation exists, therefore that both the threatening and the threatened species are being protected!

3.1.7.4.3. Former Transkei

In terms of Section 49(e) of the Transkei Decree, the contravention of prescribed bag and size limits is an offence (Transkei Decree, 1992). However, the author could not find any prescribed bag or size limits for the Transkei. In terms of Section 13 and Schedule 1 of the Transkei Decree, the fish indicated in Table 3.32 are defined as “protected wild animals” and may not be caught at all.

Table 3.32: Protected fish in the Transkei

<u>Common name</u>	<u>Scientific name</u>
Barbs, all species except yellowfish	<i>Barbus</i> , all species except <i>Barbus aeneus</i>
Rock Catfish	<i>Austroglanis sclateri</i>
Burrowing Goby	<i>Croila mossambica</i>
Checked Goby	<i>Redigobius dewaali</i>

Although the intention of Section 13 is good, no angling species are listed. Smallmouth Yellowfish (*Labeobarbus aeneus*), a prime angling species, is specifically excluded. In the light hereof, it is submitted, except for the fish species listed as “protected wild animals” that any number of fish of any size may be caught and kept by anglers.

3.1.7.5. What is the purpose of the Eastern Cape freshwater angling legislation?

3.1.7.5.1. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.4 regarding the purpose of angling legislation are applicable to the Eastern Cape and, therefore, not repeated.

3.1.7.5.2. Former Ciskei

The preamble of the Ciskei Act states the following:

“To consolidate and amend the laws relating to the conservation, management and protection of fauna, flora and fish and their habitats generally...” (Ciskei, 1987).

The Sections of the Ciskei Act dealing with fish are found in Chapter 7 (Ciskei, 1987). Section 47 of the Ciskei Act, which form part of Chapter 7, state under the heading “Objective”:

“In the administration of the provisions of this Chapter it shall be the principal objective of the Department to ensure that the living resources of the waters to which such provisions apply are not endangered or overexploited” (Ciskei, 1987).

While the intention of the Ciskei Act is noble, the fragmented nature of angling legislation in the Eastern Cape, as well as the concerns raised above, indicate that the objective of the legislation cannot be reached, as long as the current Eastern Cape legislative framework exists. The enactment of provincial legislation, applicable to the Eastern Cape as a whole will serve to address these problems.

3.1.7.5.3. Former Transkei

The Transkei Decree does not have a specific section dealing with purpose of the act or the chapter dealing with freshwater angling. The preamble to the Transkei Decree states:

“To consolidate and amend the laws relating to conservation, management, protection and commercial utilisation of indigenous fauna ... in freshwater ... ” (Transkei Decree, 1992).

In the light of the sparse and superficial sections dealing with freshwater angling, it is submitted that “*conservation, management, protection ... of indigenous fauna ... in freshwater*” in the Transkei is but a mere pipe dream.

3.1.7.6. Conclusions regarding the legislation governing freshwater angling in the Eastern Cape

Mr. Mcebisi Jonas, the Eastern Cape MEC of Department of Economic Development and Environmental Affairs, indicated in his budget vote speech on 23 March 2010 that his department intends to, in the 2010/2011 financial year:

“Submit the white paper and bill for the anticipated Eastern Cape Environmental Management Act. The new act will replace the Transkei Environmental Conservation Decree No. 9 of 1992 and the Ciskei Nature Conservation Act No 10 of 1987, and align provincial and national legislation.”
(Eastern Cape, 2010).

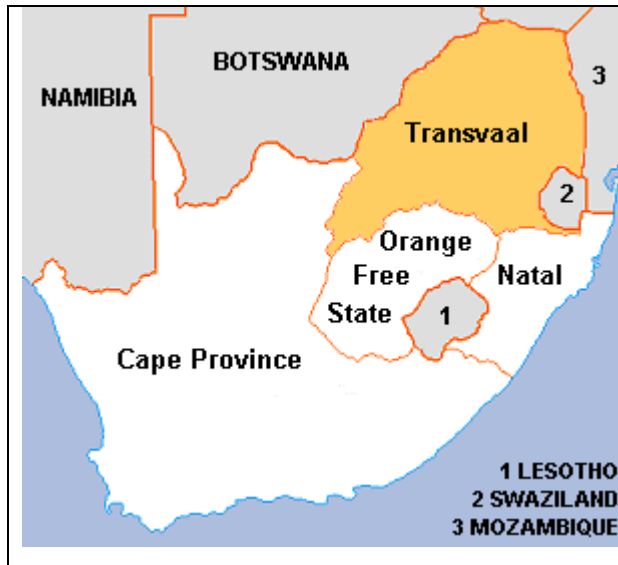
It is submitted that this should happen sooner rather than later. The current legislation governing freshwater angling in the Eastern Cape is fragmented, outdated and superficial. Some alien invasive species are protected and some indigenous species not. Until such time as a single act, dealing with the Eastern Cape as a whole, is enacted, freshwater fish will not be afforded effective protection.

3.1.8. North-West Province

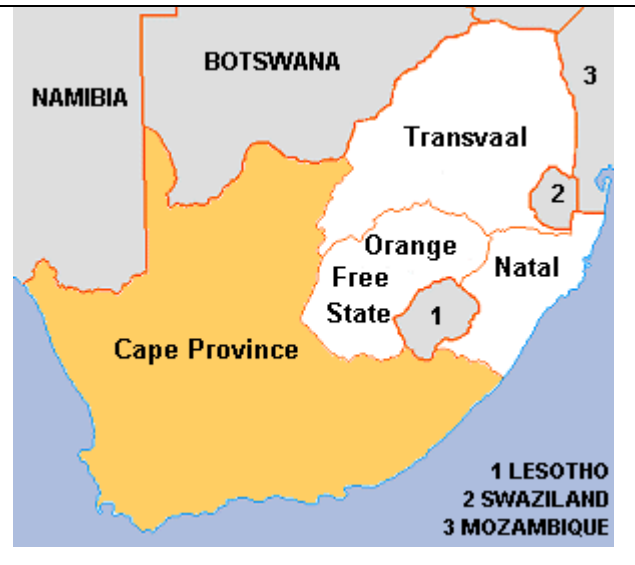
The legislation pertaining to angling in the North-West Province (“North-West”) is extremely fragmented and complex. In some instances even the state prosecutors in

the province do not know which legislation to apply⁴. This is due to the fact that North-West consists of certain areas formerly known as the Transvaal, Cape Province, as well as Bophuthatswana as indicated in Maps 3.22 – 3.25.

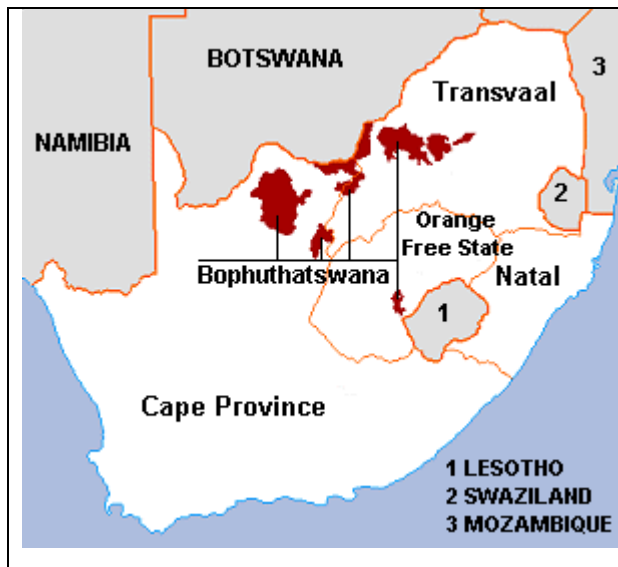
Map 3.22: Transvaal



Map3.23: Cape of Good Hope



Map 3.24: Bophuthatswana



Map 3.25: North-West



⁴ Author was approached on 23 March 2010 to advise a state prosecutor which legislation is applicable to the Klipdrift Dam.

The North-West has not yet promulgated its own legislation to govern environmental management or nature conservation matters and therefore the legislation of the above-mentioned three areas is still applicable as indicated in Table 3.33.

Table 3.33: Provincial and homeland freshwater angling legislation applicable to freshwater angling in the North-West Province

<u>Area</u>	<u>Applicable legislation</u>
Former Transvaal	Transvaal Nature Conservation Ordinance (Sections 67 – 85) Transvaal Nature Conservation Regulations (Regulations 37 – 40)
Former Cape Province	Cape of Good Hope Nature & Environmental Conservation Ordinance (Sections 48 – 61A) Cape of Good Hope Nature & Environmental Conservation Regulations (Regulations 43 – 47)
Former Bophuthatswana	Bophuthatswana Nature Conservation Act Sections 11 -13)

It is quite interesting to note that the North-West, in its State of the Environment Report:

- Only refers to national legislation (NEMA specifically) when it discusses “governance” (North-West, 2008:23);
- Listed issues such as “land use and transformation”, “air quality” and “natural and cultural heritage” as issues to be dealt with urgently. “Biodiversity and ecosystem health” is also listed as an issue to be dealt with, but only the “Implementation of Biodiversity Monitoring Programmes” is listed as a “High Priority”. “Enforcement and Compliance Monitoring” is also listed as “High Priority”. The questions that immediately comes to mind are:
 - Which laws must be enforced and monitored; and
 - How will the enforcement official know which legislation to enforce?

- The drafting of uniform provincial nature conservation and environmental management legislation is not listed as an issue or priority.

The drafting of uniform provincial nature conservation and environmental management legislation was also not listed as an action item in the North West Province Environmental Implementation Plan (North-West, 2008(b)).

In the light of the fragmented nature of the legislation governing freshwater angling in the North-West, each area which formed part of a pre-1993 province or homeland, will be dealt with separately. As the Transvaal and Cape Legislation have already been dealt with in detail in paragraphs 3.1.1 and 3.1.5 respectively, it will not be repeated.

Before the North-West freshwater angling legislation is analysed, some terminology relevant to freshwater angling in each area must be addressed. The definitions relevant to the pre-1993 Cape Province are set out in Table 3.20. The definitions relevant to freshwater angling in the pre-1993 Transvaal are set out in Table 3.2. The definitions relevant to freshwater angling in Bophuthatswana are listed in Section 1 of the Bophuthatswana Act and indicated in Table 3.34.

Table 3.34: Bophuthatswana angling definitions

<u>Concept</u>	<u>Definition</u>
Angling	Catching fish by the use of a line and fish-hook, whether or not any rod is used
Catch	The use of any means or method of taking (whether alive or dead), injuring, killing or wilfully disturbing fish
Fish	Aquatic fauna generally (except mammals and birds whether indigenous or exotic) and includes the eggs or spawn thereof
Owner	In relation to any private land, means: • the person or body in whose name such land is registered;

	• in the case of land lawfully occupied by any person other than the owner as defined above, such person
Permit	A permit granted or issued under the Bophuthatswana Act
Private land	Any land other than Government land
Waters	The waters in rivers, streams, creeks, lakes, pans, vleis, dams, reservoirs, furrows and ponds

3.1.8.1. To whom does the legislation apply?

3.1.8.1.1. Former Transvaal

The analysis, comments and concerns in paragraph 3.1.1.1 regarding the application of the Transvaal Ordinance and Regulations, are applicable to the North-West and, therefore, not repeated.

3.1.8.1.2. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.1 regarding the application of the Cape Ordinance and Regulations are applicable to the North-West and not repeated.

3.1.8.1.3. Former Bophuthatswana

As the Bophuthatswana Act does not have a Section dealing with persons exempted from the angling chapter (e.g. landowners or persons younger than 16 years), it follows that the Bophuthatswana Act is applicable to all anglers.

3.1.8.2. Is an angling licence required?

3.1.8.2.1. Former Transvaal

The analysis, comments and concerns in paragraph 3.1.1.2 regarding angling licence requirements, are applicable to the North-West and, therefore, not repeated.

3.1.8.2.2. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.2 regarding angling licence requirements are applicable to the North-West and, therefore, not repeated.

3.1.8.2.3. Former Bophuthatswana

An angling permit is required in the areas formerly known as Bophuthatswana in terms of Section 11(a) of the Bophuthatswana Act (Bophuthatswana, 1973).

3.1.8.3. Permissible angling methods

3.1.8.3.1. Former Transvaal

The analysis, comments and concerns in paragraph 3.1.1.3 regarding permissible angling methods, the use of live bait, feeding places and stocking of waters are applicable to the North-West and, therefore, not repeated.

3.1.8.3.2. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.3 regarding permissible angling methods, the use of live bait, feeding places and stocking of waters are applicable to the North-West and, therefore, not repeated.

3.1.8.3.3. Former Bophuthatswana

Permissible number of hooks and lines

The Bophuthatswana Act does not differentiate between trout or fly-fishing waters and other waters. In terms of Section 11(c) an angler may employ in the areas formerly known as Bophuthatswana:

- (i) A maximum of two lines; and
- (ii) A maximum of two single hooks per line ((Bophuthatswana, 1973).

Live bait

The Bophuthatswana Act is silent on the use of live bait. Bait is also not defined in the Bophuthatswana Act. It is, therefore, suggested that live bait may indeed be used in the areas formerly known as Bophuthatswana, as long as the bait is not a protected species.

Feeding places

The Bophuthatswana Act is silent on the making or use of feeding places. It is submitted, therefore, that feeding places may be made and used by anglers in the areas formerly known as Bophuthatswana.

Stocking waters with fish

In terms of Section 12(1)(a) of the Bophuthatswana Act no person may in the areas formerly known as Bophuthatswana, place or release freshwater fish in any waters (Bophuthatswana, 1973). This prohibition is, according to Section 12(1)(a), not applicable if:

- A permit has been issued to do so;

- The fish was obtained from a hatchery controlled by the Bophuthatswana or South African Government; or
- An angler is practising catch-and release (Bophuthatswana, 1973).

3.1.8.4. What are the bag and size limits for angling species?

This is the one area which is uniformly governed throughout the province. On 4 February 2009, the North-West Department of Agriculture, Conservation and Environment (“NWDACE”) issued new bag and size limits in terms of the North-West Nature Conservation Regulations (North-West, 2009). In the process the Transvaal, Cape and the Bophuthatswana legislation pertaining to bag limits was replaced and the bag limits as set out in Regulation 6 of the North-West Nature Conservation Regulations and indicated in Table 3.35 are now applicable to North-West (North-West, 2009).

Table 3.35: Bag and size limits in the North-West Province

Species	Common name	Bag limit	Minimum size
<i>Labeobarbus kimberleyensis</i>	Largemouth Yellowfish	0 Catch and release only	Not applicable
<i>Labeobarbus aureus</i> (sic – see analysis below))	Smallmouth Yellowfish	2	300mm
<i>Labeobarbus marequensis</i>	Largescale Yellowfish	4	300mm
<i>Labeobarbus polylepis</i>	Smallscale Yellowfish	2	300mm
<i>Oreochromis mossambicus</i>	Mozambique Tilapia	20	150mm

The above-mentioned amendments to the bag and size limits are indeed steps in the right direction as we now have, in the North-West:

- The same bag and size limits for the whole province; and

- A total prohibition of the taking of Largemouth Yellowfish (listed as “Vulnerable in terms of the TOPS Lists).

However, the author does have two concerns about the above-mentioned bag and size limits:

- It is known that the legislator, in view of the enormous number of statutes and other regulatory provisions being published, does not appear to be very tidy in the preparation and redacting of all statutes promulgated. The bag and size limits are a case in point: The scientific name for Smallmouth Yellowfish is given as *Labeobarbus aureus* instead of *Labeobarbus aeneus*.
- The authors concern regarding the bag limits for Mozambique Tilapia (or Blue Kurper, as it is affectionately called by most anglers) in paragraph 3.1.1.4 is reiterated. It is submitted that scientific studies be done in order to assess the health of the populations of this species (preferably on a catchment basis) and to draft bag and size limits according to that scientific data.

3.1.8.5. What is the purpose of the North-West freshwater angling legislation?

3.1.8.5.1. Former Transvaal

The analysis, comments and concerns in paragraph 3.1.1.5 regarding the purpose of the legislation, are applicable to the North-West and, therefore, not repeated.

3.1.8.5.2. Former Cape Province

The analysis, comments and concerns in paragraph 3.1.5.5 regarding the purpose of the legislation are applicable to the North-West and, therefore, not repeated.

3.1.8.5.3. Former Bophuthatswana

The preamble of the Bophuthatswana Act states that its purpose is:

“To provide for the protection of ... fish ... in Bophuthatswana” (Bophuthatswana, 1973).

As a result of the fragmented state of the North-West freshwater angling legislative framework, it is suggested that the purpose of the Bophuthatswana Act cannot be achieved.

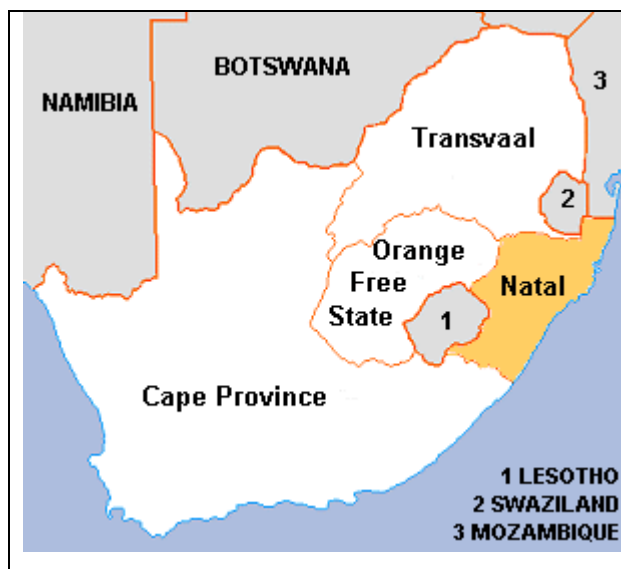
3.1.8.5.4. Conclusion regarding the legislation governing freshwater angling in the North-West

The standardisation of bag and size limits in the North-West has been a step in the right direction. It is submitted, however, that unless uniformity is achieved throughout the whole North-West Province, indigenous freshwater fish will not receive the necessary protection as intended by the respective legislation.

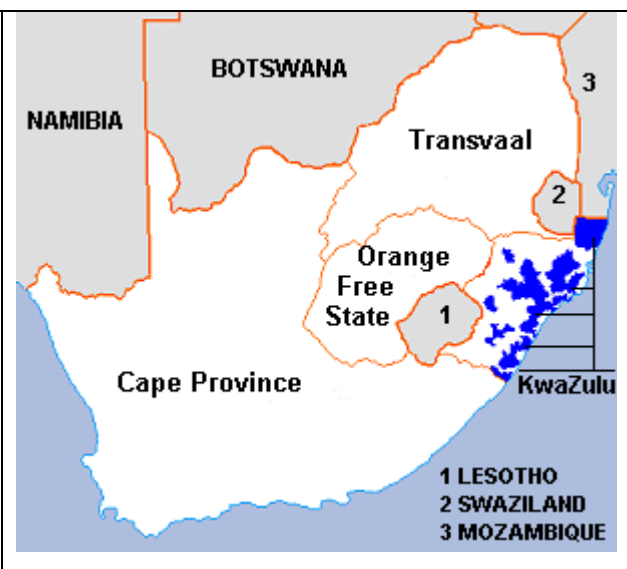
3.1.9. KwaZulu-Natal

KwaZulu-Natal consists of the pre-1993 Natal Province, the Transkei and KwaZulu as indicated in Maps 3.26 – 3.29.

Map 3.26: Natal



Map 3.27: KwaZulu



Map 3.28: Transkei



Map 3.29: KwaZulu-Natal



Freshwater angling in Natal was governed by the Natal Nature Conservation Ordinance and the Natal Freshwater Fish Regulations published in terms thereof. In the Transkei freshwater angling was regulated by the Transkei Decree and in KwaZulu by the KwaZulu Nature Conservation Ordinance ("KwaZulu Ordinance"). In terms of Proclamation 107 of 17 June 1994, the administration of the Natal Ordinance was assigned to KwaZulu-Natal (KwaZulu-Natal, 1994). KwaZulu-Natal has not yet enacted modern legislation applicable to freshwater angling, which is, therefore governed by the

Natal Ordinance, the Natal Freshwater Fish Regulations, the Kwazulu Ordinance and the Transkei Decree (Table 3.36).

Table 3.36: Provincial legislation governing freshwater angling in KwaZulu-Natal

KwaZulu-Natal	Natal Nature Conservation Ordinance (Sections 135 – 157) Natal Freshwater Fish Regulations
Former Transkei	Decree No. 9 (Environmental Conservation) (Sections 42 -50)
Former KwaZulu	KwaZulu Ordinance

The author could not, unfortunately, obtain a copy of the KwaZulu Ordinance and it is, therefore, not analysed in this dissertation. However, the mere fact that current legislation is unavailable is indicative of the sorry state of affairs of South Africa's provincial freshwater angling legislation.

In addition to the above, author has been advised by Mr R Karssing, an employee of Ezemvelo KZN Wildlife, the department tasked to enforce nature conservation legislation in KwaZulu-Natal, that only the Natal Ordinance and Natal Freshwater Fish Regulations are applied by his department at the moment (Pers comm Karssing, 2010). This is in contrast with what Kidd (2008:92) was advised by members of the KwaZulu-Natal Nature Conservation Services i.e. that the legislation operate in parallel and that they may enforce either at their discretion. Clearly, such a situation is untenable in the post-1993 South Africa.

Before the KwaZulu-Natal freshwater angling legislation is analysed, the terminology relevant to freshwater angling must be addressed. The terminology relevant to freshwater angling in KwaZulu-Natal is defined in Section 1 of the Natal Ordinance and Regulation 1 of the Natal regulations and is summarised in Table 3.37 (Natal, 1974).

Table 3.37: KwaZulu-Natal angling definitions

<u>Concept</u>	<u>Definition</u>
Angling	The capture of fish by means of a line to which a hook or hooks

	are attached, whether or not a rod is used, and irrespective of the type of bait or artificial lure which may be used
Bass	The North America species, namely Largemouth Bass (<i>Micropterus salmoides</i>), Smallmouth Bass (<i>Micropterus dolomieu</i>) and Spotted Bass (<i>Micropterus punctulatus</i>)
Capture	To kill by any means whatsoever
Catch	To kill by any means whatsoever
Fish	Any freshwater indigenous or exotic fish including the spawn thereof
Fixed spool reel	A reel so constructed that line may be drawn off a stationary drum and may be wound onto the drum by means of a revolving arm
Implement	Any rod, fishing tackle, hook or other apparatus or device used or capable of being used in the capture of fish, or any part of any such implement
Implement of fishing	Any rod, fishing tackle, hook or other apparatus or device used or capable of being used in the capture of fish, or any part of any such implement
Owner	In relation to land means – (a) the person in whose name the title thereto is registered; (b) in the case of land which is let or lawfully occupied by a person other than the owner, the lessee or occupier thereof, who is not precluded by the terms of his tenancy from exercising any rights which an owner of land may exercise in terms of the Natal Ordinance; or (c) in the case of land subject to a usufruct or a fideicommissum, the usufructuary or fiduciary, as the case may be;

	(d) in the case of land owned by an association of persons, whether corporate or not, a person nominated by such association; or (e) in the case of a public place or the road reserve of any public road, the authority in whom the control and management thereof vests
Scaly or Scalies	<i>Barbus natalensis</i> and <i>Barbus marequensis</i>
Riparian Owner	The owner of land which actually abuts on any water or on which any waters are situated
Trout	Any fish of the genus <i>Salmo</i> or allied genera, including the following: European Brown Trout (<i>Salmo trutta</i>), North American Rainbow Trout (<i>Salmo gairdneri</i>) and North American Brook Trout (<i>Salvelinus fontinalis</i>)
Trout waters	Waters listed in Schedules A & B
Waters	- Any river, stream, estuary or creek which is not subject or liable to tidal influence; or - That portion of any river, stream, estuary or creek which, being subject or liable to tidal influence, lies upstream or inland of a point of demarcation fixed in terms of regulations made in that behalf; and - Any freshwater lake, pan, pond, furrow or other collection of water, whether natural or artificial, in which fish may be found, including the foreshores or banks of any such waters

3.1.9.1. To whom does the legislation apply?

3.1.9.1.1. The former Natal

In contrast to, e.g. the Transvaal Ordinance, the Natal Ordinance does not contain a section exempting a landowner from the sections of the Ordinance dealing with

freshwater angling, except with regard to angling licences, which will be discussed in paragraph 3.1.9.2. Section 139 of the Natal Ordinance states that Chapter IX, which deals with freshwater fish:

“... shall apply to all waters of the Province and all fish therein ...” (Natal, 1974(a)).

3.1.9.1.2. The former Transkei

The analysis, comments and concerns in paragraph 3.1.7.1.3 regarding the application of the Transkei Decree, are applicable to KwaZulu-Natal and, therefore, not repeated.

3.1.9.2. Is an angling licence required?

3.1.9.2.1. The former Natal

Section 145(1) of the Natal Ordinance states that:

“No person shall catch any fish for the catching of which a licence is required ... unless he is in possession of a licence as prescribed authorising him to do so” (Natal, 1974(a)).

Prima facie it seems that an angling licence is required in KwaZulu-Natal. However, upon proper reading, the Natal Ordinance in fact states that an angling licence is only required for freshwater fish species which have been listed as requiring angling licences. It is submitted that the legislation was poorly drafted and leads to uncertainty. The average angler can surely not be expected to be confronted with such ambiguous legislation. To make things even more complex, Regulation 2(2) of the Natal Regulations, states that:

“No person shall catch fish of any species in any waters not mentioned in Schedule B, unless he is in possession of the required licence set out in Schedule A (Natal, 1974(b)).

This regulation is extremely difficult to understand. It was author's initial interpretation that, for waters mention in Schedule B, no angling licence is required. This is (five regulations later), confirmed by Regulation 7 of the Natal Regulations which states that:

“The catching of any fish species, by angling, without a licence is permitted in any waters which may be mentioned in Schedule B” (Natal, 1974(b))

For other waters, an angling licence is indeed required.

Regulation 2(1) makes provision for general fishing licences, Bass, Bluegill Sunfish and indigenous fishing licences and temporary fishing licences, for persons between the ages of 16 to 65 (Natal, 1974(b)). However, the author was informed by Karssing (2010), that angling licences are not enforced in KwaZulu-Natal. He could not provide the author of a reason and the author could also not find any legislation doing away with angling licences. It is recommended that the KwaZulu-Natal freshwater angling legislation be redrafted as a matter of urgency, even if the only purpose is to make it more understandable.

In terms of Section 145(4) of the Natal Ordinance, a riparian owner of land, his spouse and children may catch fish in any waters abutting or situated on such land without licences (Natal, 1974(a)). The riparian owner and his family are, however, subject to all other sections of the Natal Ordinance dealing with freshwater angling (Natal, 1974(a)).

In terms of Section 148 an angler, in addition to an angling licence (where applicable), must obtain the consent of the landowner of privately-owned land before he may angle thereon (Natal, 1974(a)).

3.1.9.2.2. The former Transkei

The analysis, comments and concerns in paragraph 3.1.7.2.3 regarding angling licence requirements are applicable to KwaZulu-Natal and, therefore, not repeated.

3.1.9.3. Permissible angling methods

3.1.9.3.1. The former Natal

Permissible number of hooks and lines

The Natal Regulations creates a distinction between “Trout Waters” and waters that are not trout waters. In terms of Regulations 3(1), (3), (4) and (5) of the Natal Regulations, the following angling methods are allowed in the different types of waters in KwaZulu-Natal (Natal, 1974(b)):

Trout waters

- Fish may only be caught with a rod, line and hooks.
- Only artificial non-spinning flies are allowed.
- The size of hooks used may not exceed 2/0 (i.e. measuring 40mm in total length).
- Fixed spool reels are not allowed.
- A maximum of three hooks may be used.
- A maximum of two lines at a time may be used.

Non-trout waters

- Fish may only be caught with a line and hooks (using a rod is not a requirement).
- Bait and lures may be used.
- A maximum of three hooks per line may be used.

- A maximum of two lines at a time may be used.

The author knows from personal experience that trout are easily caught with bait and artificial lures. This is confirmed by Joubert and Louw (1946:207) who wrote:

“In die omgewing van die dorp is die visvang swak, omdat die stroom deur baie van die plaaslike hengelaars met wurms, sprinkane, krappe, paddas en as’t ware met alles behalwe die enigste aas soos kragtens die Wet bepaal, nl. kunsmatige vlieë, leeg gevang word. Baie van Transvaal se beste forelwaters is geheel-en-al van visse ontroof deur onwettige vernietiging.”

The author understands that the protection of the species is why angling for trout is limited to fly-fishing. However, trout is in the modern era regarded as an alien invasive species that should not be afforded protection. It is, therefore, recommended that the legislation be updated.

Live bait

In terms of Regulation 3(2) of the Natal Regulations, live fish may not be used in trout waters. Live fish may indeed be used in other waters, but only if such a fish “*emanates and is taken from the waters actually being fished*” (Natal, 1974(b)).

Feeding places

Regulation 7 of the Natal Regulations stipulates that:

“no person shall ... create a feeding area ... by placing any substance, other than bait on a hook, in the normal course of fishing, in such waters, with the object of attracting fish by the edibility, smell or taste of such substance” (Natal, 1974(b)).

The making of deliberate feeding places is, therefore, prohibited.

Stocking waters with fish

In terms of Section 139(2) of the Natal Ordinance, no one may introduce fish into KwaZulu-Natal's waters without prior approval (Natal, 1974(a)). It is, in terms of Section 151(1)(b) of the Natal Ordinance an offence to export or import live fish unless authorised to do so by a permit (Natal, 1974(a)). In terms of Regulation 9 of the Natal Regulations, freshwater fish may not be imported into KwaZulu-Natal unless it is authorised in terms of a permit (Natal, 1974(b)).

3.1.9.3.2. The former Transkei

The analysis, comments and concerns in paragraph 3.1.7.3.3 regarding permissible angling methods, the use of live bait, feeding places and stocking of waters, are applicable to KwaZulu-Natal and, therefore, not repeated.

3.1.9.4. What are the bag and size limits for angling species?

3.1.9.4.1. The former Natal

Bag or size limits are dealt with in Regulation 4 of the Natal Ordinance as is summarised in Table 3.38 (Natal, 1974(b)).

Table 3.38: Bag and size limits in KwaZulu-Natal

<u>Species</u>	<u>Name of Water</u>	<u>Daily limit</u>	<u>Minimum length</u>
Trout	Any waters	10	200mm
Trout	Belfast Dam	6	300mm
Trout	Himeville Nature Reserve Dam	6	300mm
Trout	Grootgewacht Dam	6	300mm
Trout	Mooi River, above Inchbrakle Falls	None	Less than 200mm

Trout	Registered Fish farms	None	None
Scalies	Non-trout waters	10	None

Three immediate concerns can be raised upon analysis of the bag limits:

- The protection of an alien invasive species namely, trout. As Karssing (2010) aptly puts it: “*I sense a bit of protectionism for trout in the wording*”. He also states that, with reference to the Natal regulations: “*There are still some references to trout which would definitely not be enforced nowadays*”. It is clear that what the nature conservation officials in KwaZulu-Natal do and what their enabling legislation tells them to do are two totally different things. The Regulations prescribes the protection of trout, but the nature conservation officials do not agree therewith. Clearly the situation is, from a legal perspective, untenable.
- The absence of protection for indigenous species such as the Scalies (*Labeobarbus natalensis*). Scalies are subjected to threats such as water pollution, gill netting and habitat degradation. A bag limit of 10 (when caught in non-trout waters) just adds to the threats. No bag limit applies to Scalies caught in trout waters. Anglers may, in trout waters, kill as many Scalies as they like. The fact that Scalies of any size may be kept (i.e. there is no size limit) is also cause for concern. It is also of concern that *Barbus natalensis* (currently named *Labeobarbus natalensis*) and *Barbus marequensis* (currently named *Labeobarbus marequensis*) are both called Scalies, while they are clearly two different species (Skelton, 1993:169, 172).
- The third concern is the fact that no protection is afforded to any other fish species found in KwaZulu-Natal’s waters, such as the Eel species and the Black Tilapia (*Oreochromis placidus*) which is listed as “Vulnerable” in the TOPS regulations.

The Natal Ordinance also lists certain fish species in Schedule 12A thereof (Natal, 1974). In terms of Section 213C(1), fish listed in Schedule 12A may not be exported

from or imported into KwaZulu-Natal, except if permit has been granted therefore. No indigenous South African freshwater fish are listed in Schedule 12A (Table 3.39).

Table 3.39: Fish that may not be exported from or imported into KwaZulu-Natal, except if permit has been granted therefore.

<u>Scientific name</u>	<u>Common name</u>
<i>Neoceratodus forsteri</i>	Australian or Queensland lungfish or Ceratodus
<i>Acipenser brevirostrum</i>	Shortnose Sturgeon
<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon
<i>Acipenser sturio</i>	Common or Baltic Sturgeon
<i>Arapaima gigas</i>	Arapaima or Pirarucu
<i>Scleropages formosus</i>	Asiatic or Asian bony-tongue or Kelesa or Golden Dragonfish or Golden Arowana
<i>Caecobarbus gertsii</i>	African blind barb fish or Congo blind barb fish
<i>Probarbus jullieni</i>	Ikan Temoleh or Pla Eesok (Thai) or Ikaa Temelian (Malay)
<i>Chamistes cujus</i>	Cui-ui
<i>Ptychocheilus lucius</i>	Colorado River Squawfish or Colorado Squawfish
<i>Pangasianodon gigas</i>	Giant Catfish
<i>Cynolebias constanciae</i>	Killifish or Pearlfish
<i>Cynolebias marmoratus</i>	Ginger Killifish
<i>Cynolebias minimus</i>	Minute Killifish
<i>Cynolebias opalescent</i>	Opalescent Killifish
<i>Cynolebias splendens</i>	Splendid Killifish
<i>Cynoscion macdonaldi</i>	Totoaba or MacDonald weakfish

3.1.9.4.2. The former Transkei

The analysis, comments and concerns in paragraph 3.1.7.4.3 regarding the bag and size limits are applicable to KwaZulu-Natal and, therefore, not repeated.

3.1.9.5. What is the purpose of the KwaZulu-Natal freshwater angling legislation?

3.1.9.5.1. The former Natal

The Natal Ordinance does not contain a section which specifies the purpose of the Ordinance. The preamble merely states:

“To consolidate the laws relating to nature conservation and to provide for matters incidental thereto” (Natal, 1974).

It is submitted that, having regard to the wording of the preamble, as well as to the relevant sections, one of the purposes of the Natal Ordinance is to protect freshwater fish within its boundaries.

3.1.9.5.2. The former Transkei

The analysis, comments and concerns in paragraph 3.1.7.5.3 regarding the purpose of the legislation are applicable to KwaZulu-Natal and, therefore, not repeated.

3.1.10. Conclusion regarding provincial freshwater angling legislation

In order to make sense of all the different provincial acts, ordinances, decrees and regulations, a summary of the salient points crystallised in the analysis thereof is listed in Table 3.40. The bag limits for both Largemouth and Smallmouth Yellowfish are used as a bag and size limit example as they are widely distributed throughout South Africa.

Table 3.40: Comparison of provincial angling legislation

	<u>Licence Required?</u>	<u>Permissible angling methods</u>				<u>Bag limits</u>			
		<u>Feeding spots</u>	<u>Maximum lines</u>	<u>Maximum hooks</u>	<u>Live bait allowed?</u>	<u>Largemouth Yellowfish Bag limits</u>		<u>Smallmouth Yellowfish Bag limits</u>	
						Number	Size	Number	Size
Gauteng	Yes	No	2	Bait angling 2 hooks per line Artificial lure angling One lure per line Fly-fishing Any number of flies per line Declared trout waters Only fly-fishing	Yes Not live fish	10	300mm	10	300mm
Limpopo	No	No	2	Bait angling 2 hooks per line Artificial lure angling One lure per line	Yes Not live fish	No bag or size limits for any species			
						Does not occur in Limpopo		Does not occur in Limpopo	

				Fly-fishing Any number of flies per line Declared fly-fishing waters Not Applicable					
Mpumalanga	Yes	No	2	Bait angling 2 hooks per line Artificial lure angling One lure per line Fly-fishing Any number of flies per line Declared fly-fishing waters Only fly-fishing	Yes Not live fish	Number	Size	Number	Size
						6	300mm	6	300mm
Free State	Yes	Yes	2	Bait angling 2 hooks per line Artificial lure angling One lure per line Fly-fishing	Yes Not live fish	Number	Size	Number	Size
						10	450mm	10	450mm

				One or more fly per line					
Northern Cape	Yes	Yes	2	Bait angling 2 hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters Not applicable	Yes	Number	Size	Number	Size
						No limit	300mm	No limit	400mm
Western Cape	Yes	Yes	2	Bait angling 2 hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line	Yes	Does not occur in Western Cape		Alien in Western Cape – no limits on size or number of fish that may be kept	

				Declared trout waters Not applicable					
Eastern Cape (Former Cape Province)	Yes	Yes	2	Bait angling 2 hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Not applicable	Yes	Number	Size	Number	Size
						No limit	300mm	No limit	400mm
Eastern Cape (Former Ciskei)	Yes	Yes	2	Bait angling 2 hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters	Yes	Number	Size	Number	Size
						10	300mm	10	300mm

				Only fly-fishing					
Eastern Cape (Former Transkei)	Yes	Yes	Any number	Bait angling Any number of hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters Not applicable	Yes	Number	Size	Number	Size
						Any	Any	Any	Any
Northwest (Former	Yes	No	2	Bait angling	Yes	Number	Size	Number	Size

Transvaal)				2 hooks per line Artificial lure angling One lure per line Fly-fishing Any number of flies per line Declared trout waters Only fly-fishing	Not live fish	0	N/A (catch- and – release only)	2	300mm
Northwest (Former Cape)	Yes	Yes	2	Bait angling 2 hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters Not applicable	Yes	Number	Size	Number	Size
						0	N/A (catch- and – release only)	2	300mm
Northwest (Former	Yes	Yes	2	Bait angling	Yes	Number	Size	Number	Size

Bophuthatswana)				2 hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters Not applicable		0	N/A (catch-and – release only)	2	300mm
KwaZulu-Natal (Former Natal)	No	No	2	Bait angling Any number of hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters Only fly-fishing	Trout Waters No live bait may be used in trout waters Non-trout waters Live bait may be used if baitfish comes from water being fished	Does not occur in KZN		Does not occur in KZN	
KwaZulu-Natal	No info	No info	No info	No info	No info	No info	No info	No info	No info

(Former KwaZulu)									
KwaZulu-Natal (Former Transkei)	Yes	Yes	Any number	Bait angling Any number of hooks per line Artificial lure angling Any number of lures per line Fly-fishing Any number of flies per line Declared trout waters Not applicable	Yes	Number	Size	Number	Size
						Any	Any	Any	Any

The analysis of the South African provincial, homeland and Bantustan legislation has lead the author to draw the following conclusions:

- The provincial freshwater angling legislative framework is terribly fragmented.
- As a result of the above-mentioned fragmentation, South Africa's 9 constitutionally created provinces have been divided into 15 "angling provinces". This makes knowing the "rules of the game" extremely difficult for both anglers and enforcement officials alike.
- Numerous conflicts between these laws exists, e.g.:
 - The angling legislation regarding the same fish in the same province differs from place to place e.g.:
 - The different bag and size limits of yellowfishes in different areas of the Eastern Cape; and
 - The fact that live fish may be used as bait in the areas of North-West which formed part of the pre-1993 Cape of Good Hope and Bophuthatswana, but not in the area which formed part of pre-1993 Transvaal. It must be borne in mind that the angling for the same fish species, in the same province, in the same river (e.g. the Vaal River in the North-West) is subject to this confusing state of affairs.
 - The definition of "angling" is not consistent throughout South Africa, e.g.:
 - In those areas which formed part of the pre-1993 Natal, "angling" is defined as *the capture of a fish by means of a line to which a hook or hooks are attached*. "Capture" means "*to kill*". Therefore, in the pre-1993 Natal-areas of KwaZulu-Natal, angling is the killing of fish, using a hook and line. Should an angler practice catch-and-release, it seems, the Natal Ordinance will not be applicable to him, as he is not killing fish. Nor does the act prohibit the attempt to catch a fish.
 - The Transvaal Ordinance defines "angling" the catching of fish by the use of a line and fish-hook. "Catch" is defined as the use of any means or

method to take or to attempt to take fish, whether alive or dead. Catch-and-release and the attempt to catch a fish, therefore, falls within the ambit of angling in Gauteng and certain parts of the North-West.

- It is difficult to ascertain whether angling licences are required or not. The situation in Limpopo and KwaZulu-Natal are cases in point.
- Bag and size limits:
 - Are not drafted for all fish species. Some fish are, therefore, not protected.
 - Differs from area to area - even within the same province, or regarding fish found in the same river.
 - Protect, in certain circumstances, alien and invasive fish such as Black Bass.
- Some of the legislation lists fish that do not even occur within that province. Tigerfish listed in the Northern Cape and Gauteng is a case in point.
- The protection of trout in a number of our provinces is a remnant of our colonial past. These fish were introduced by ignorant colonialists such as the infamous lord Milner (Joubert and Louw, 1947:206) who were not aware of the angling potential of indigenous freshwater fish species and wanted to angle for the same fish they had “back home”. In the process an additional predator, which became invasive, was introduced into some ecosystems. The protection of trout (and other alien and invasive freshwater fish species) should be stopped and the focus of protective legislative measures should fall on indigenous species.
- The purpose of provincial freshwater angling legislation is, generally, to protect freshwater fish and to regulate angling in order to ensure that freshwater fish are protected. However, the legislation was drafted in an era when the State introduced foreign fish such as Black Bass, Bluegill Sunfish (as fodder for the Bass), Carp and Trout into South African waters. It is submitted that it has been shown that while the purpose of the legislation may have been noble (giving the State officials who introduced the above-mentioned alien and invasive fish into our waters the benefit of

the doubt that they could not foresee the impact of their actions), the analysis indicates that the wording of the legislation does not create sufficient, or the correct tools to be used to fulfil the purpose thereof.

- The bulk of the provincial legislation was drafted in the 1970s and 1980s. The impacts of water pollution, gill-netting, habitat destruction etc were not as great as they are now. Large bag limits may have made sense then. However, circumstances have changed and bag limits must be adjusted accordingly.

In summary, the author is of the opinion that the South African provincial freshwater angling legislation is poorly drafted, ambiguous, conflicting, archaic, outdated, fragmented, confusing and too voluminous. Kidd (2008:92) is correct when he states that: “... *the state of nature conservation legislation in the provinces is ... at worst, confused (some would say chaotic) ...*”

Provincial angling legislation is in dire need of, at least:

- Updating as far as current threats to freshwater fish species and bag and size limits are concerned; and
- Standardisation as far as terminology, methods of angling and bag and size limits are concerned.

The author, therefore, submits that De Villiers (2007(a)) is correct when he stated that:

“Anglers are faced with different legislation pertaining to the same fish species in different provinces. Each province views angling and angling permits differently. Several provinces no longer implement angling permits. Each province is addressing the conservation and management of its freshwater resources in a different manner. There is a critical need to develop a consistent means to manage our freshwater heritage. A national monitoring, managing and permitting system forms part of an overall conservation initiative aimed at addressing part of the complete problem”.

3.2. National legislation

In this part of the literature review, national legislation applicable to freshwater angling in South Africa is analysed in order to assess the impact thereof on the provincial freshwater angling legislation framework and to establish what the purpose of legislation governing freshwater angling should be.

3.2.1. The Constitution

The Constitution is the highest law in South Africa. All other laws, including the common law, must comply therewith. Section 2 states specifically that:

"This Constitution is the supreme law of the Republic; law or conduct inconsistent with it is invalid, and the obligations imposed by it must be fulfilled (South Africa, 1996)."

In terms of Section 7(1), the Bill of Rights contained in Chapter 2:

"... is a cornerstone of democracy in South Africa. It enshrines the rights of all people in our country and affirms the democratic values of human dignity, equality and freedom (South Africa, 1996)."

It is the state's duty, in terms of Section 7(2) of the Constitution, to:

"... respect, protect, promote and fulfil the rights in the Bill of Rights" (South Africa, 1996).

The protection of the environment and the sustainable use of natural resources are contained as basic human rights in Section 24 and are of particular importance to

freshwater angling in South Africa. Section 24 of the Constitution, the so-called "environmental clause" of the Constitution, states that:

"Everyone has the right -

- (a) to an environment that is not harmful to their health or well-being; and*
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –*
 - (i) prevent pollution and ecological degradation;*
 - (ii) promote conservation; and*
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development"* (South Africa, 1996).

It is important to note that the Constitution takes an anthropocentric approach to environmental protection and the sustainable use of natural resources. These are human rights. Section 24 states that "*Everyone (not everything) has the right...*" The anthropocentricity regarding environmental management is echoed in Section 2(2) of NEMA which states that:

"Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably" (South Africa, 1998(c)).

In view of the above, it is submitted that freshwater fish do not have a constitutional right to be protected. They should, from a purely legal point of view, only be protected as they can be of some benefit to humans.

For the purposes of this dissertation, the concepts of "well-being", "reasonable legislative measures", "promotion of conservation" and "sustainable use of natural resources" as used in Section 24 of the Constitution warrant further analysis.

Well-being

To define “well-being” is extremely difficult. In the case of *HTF Developers (Pty) Ltd v The Minister of Environmental Affairs and Tourism*, Judge Murphy (as quoted in Kidd, 2008:20) stated that “well-being” is:

“... open-ended and manifestly ... incapable of precise definition. Nevertheless it is critically important that it defines for the environmental authorities the constitutional objectives of their task (Kidd, 2008:20)”.

Kidd (2008, 20-21) then goes on stating that Judge Murphy quoted Glazewski:

“In the environmental context, the potential ambit of a right to “well-being” is ... potentially limitless.”

Although the decision of the above-mentioned court case was appealed against in both the Supreme Court of Appeal (Kotzé *et al.*, 2008:188) and the Constitutional Court (Kotzé *et al.*, 2008:220), the Judge Murphy’s analysis of the concept of “well-being” was not attacked nor overturned.

While the author agrees with Judge Murphy and Glazewski, it is submitted that an impact on one’s well-being is an impact on one’s psyche. In order to establish whether a person’s well-being has been harmed, a subjective test, as opposed to the objective test that is used to assess whether someone’s health has been negatively impacted on, is used. For example, a doctor can make an objective diagnosis of an illness – and the harm to a person can be objectively quantified in terms of medical costs etc. In order to measure the impact on one’s psyche, one has to place oneself in the shoes of the person claiming being harmed (thus a subjective test).

In terms of Section 24(a) of the Constitution, it is an angler’s basic human right to have an environment that is not harmful to his well-being (South Africa, 1996). It is the

author's submission that "interaction with nature" (i.e. angling) contributes to an angler's well-being. From an angler's point of view, his Constitutional right to well-being may well be negatively impacted on if he is not allowed to use the natural resources - i.e. not allowed to angle (either because of fish stocks being depleted because of ineffective governmental protection measures, or because of cumbersome permit application processes (refer to paragraph 3.2.3.1 below of this dissertation). In addition, it may well be argued that the voluminous, contradicting and cumbersome legislation governing freshwater angling may well harm an angler's well-being.

Reasonable legislative measures

It is the state's duty, in terms of Section 7(2) of the Constitution, to respect, protect, promote and fulfil the rights in the Bill of Rights (South Africa, 1996). In addition the state must, in terms of Section 24(b), take reasonable legislative measures to promote conservation and to secure ecologically sustainable use of natural resources. It is submitted that, having regard to the analysis set out in paragraph 3.1 of this dissertation, the current provincial legislative framework for freshwater angling cannot be regarded as reasonable.

Promotion of conservation

It is argued, in view of the conclusions listed in paragraph 3.1.10 of this dissertation – specifically with regard to the fact that invasive freshwater fish species are protected and indigenous freshwater fish species are not - the current provincial legislative framework for freshwater angling does not effectively promote conservation

Sustainable use of natural resources

Section 24(b) of the Constitution specifically states that humans have the right to:

“... have the environment protected ... through reasonable legislative and other measures that ... secure ecologically sustainable ... use of natural resources (South Africa, 1996).

It is submitted that this section can be analysed with the focus on two specific points:

- Firstly, the use of the natural resource must be sustainable. In this regard, it must be understood what “sustainable” use means. The answer, from a legal perspective, is to be found in both NEMA and NEMBA. Section 2(4)(a)(vi) of NEMA states that the:

“... use and exploitation of renewable resources (e.g. freshwater fish) ... (should) not exceed the level beyond which their integrity is jeopardised” ((South Africa, 1998(c)).

Section 1 of the NEMBA states that sustainable use of biological resources is:

“... the use of such resource in a way and at a rate that-

(a) would not lead to its long-term decline;

(b) would not disrupt the ecological integrity of the ecosystem in which it occurs; and

(c) would ensure its continued use to meet the needs and aspirations of present and future generations of people” (South Africa, 2004(a)).

- Secondly, people should be allowed to use the natural resource. With regard to angling it is submitted that anglers must be afforded the opportunity to angle (i.e. use the natural resource) as long as it is sustainable. In this regard, it must be borne in mind that the modern view of angling does not presuppose the mere catching and killing of fish. More and more anglers practise catch-and-release as a matter of choice and personal responsibility even though the practice is not prescribed by law, except in the North-West which orders the releasing of all Largemouth Yellowfish (North-West, 2009).

In order to facilitate sustainable freshwater angling, it is suggested that the State must ensure that the status (including the population size, demography (e.g. the number of juveniles, breeding fish etc) and health) of each population of each freshwater angling species, together with the nature and extent of potential threats thereto, are determined. This will ensure that the state will be in a position to draft reasonable legislative measures regarding the conservation of freshwater fish and the management of freshwater angling (such as appropriate bag and size limits, the prohibition of fishing during spawning seasons and the enforcement or encouraging of catch-and-release). The author acknowledges that such an exercise may be lengthy, costly and labour intensive but submits that there is no other option available to ensure that the State fulfils its constitutional obligations.

The author is also of the opinion that the duties regarding the protection of the environment, prevention of ecological degradation, promotion of conservation and ecologically sustainable use of natural resources do not fall on the shoulders of the State only. It is submitted that the clause “... *reasonable ... other measures...*” (South Africa, 1996) is also applicable to anglers. Anglers should comply with their Constitutional duties by, *inter alia*,:

- Complying with freshwater angling legislation,
- Not angling in spawning areas or during the spawning season (even if no closed season is legislated); and
- Practicing catch-and-release, even if the legislated bag and size limit allows for the keeping of the fish species caught (i.e. “self imposed” bag limits).

3.2.2. The National Environmental Management Act

The NEMBA and the regulations made in terms thereof is the national legislation that has a direct impact on freshwater angling in South Africa. However, before it can be analysed, certain stipulations of the NEMA must be taken into account because:

- When reading the preamble of NEMA, it is clear that it was drafted because of the obligation in Section 24(b) of the Constitution that the State must enact reasonable legislative measures to protect the environment, prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable use of natural resources (South Africa, 1998(c)).
- NEMA is, therefore, the national framework environmental legislation which, according to Kidd (2008:31-32) “aims to define overarching and generic principles in terms of which sectoral-specific legislation is embedded, as well as to enhance the co-operative environmental governance amongst fragmented line ministries”. In this regard it is important to take note of Section 2(1)(e) of NEMA which states that NEMA’s environmental management principles (“NEMA principles”) – which are specifically applicable to the actions of all organs of state that may significantly affect the environment - :

“... guide the interpretation, administration and implementation of ... any other law concerned with the protection or management of the environment” (South Africa, 1998(c)).

Therefore, when drafting freshwater angling legislation, the State must always take cognisance of the environmental management principles set out in Section 2 of NEMA.

- NEMBA instructs the compliance with NEMA:
 - In terms of Section 2(a) the objectives of the NEMBA fall:

“... within the framework of the National Environmental Management Act ...” (South Africa, 2004(a)).
 - Section 6(1) specifically states that the NEMBA:

“... must be read with any applicable provisions of the National Environmental Management Act” (South Africa, 2004(a)).
 - Section 7 expresses that the application of the NEMBA:

“... must be guided by the national environmental management principles set out in section 2 of the National Environmental Management Act (South Africa, 2004(a)).

The NEMA principles (which can be found in Section 2 thereof) applicable to freshwater angling are indicated in Table 3.41 (South Africa, 1998(c)). It should be noted that the NEMA principles are not merely repeated, but that they have been adapted to indicate their relevance to freshwater angling.

Table 3.41: NEMA principles relevant to freshwater angling

<u>Section</u>	<u>Principle</u>
2(2)	Environmental management (<i>in casu</i> : the management of freshwater angling) must place people and their needs (<i>in casu</i> : anglers) at the forefront of its concern, and serve their <u>social interests</u> equitably (<i>Author's emphasis</i>)
2(4)(a)(i)	The disturbance of ecosystems and loss of biological diversity must be avoided, or, where it cannot be altogether avoided, minimised and remedied
2(4)(a)(vi)	The use and exploitation of renewable resources must not exceed the level beyond which their integrity is jeopardised
2(4)(a)(vii)	A risk-averse and cautious approach must be applied, taking into account the limits of current knowledge about the consequences of decisions and actions
2(4)(a)(viii)	Negative impacts on the environment and on people's environmental rights must be anticipated and prevented, and it must be minimised and remedied where it cannot be altogether prevented
2(4)(b)	Environmental management must: • Be integrated, as all elements of the environment are linked and interrelated; and • Take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection

	of the best practicable environmental option (i.e. the option that provides the most benefit or causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term)
2(4)(d)	Equitable access to environmental resources to ensure human well-being must be pursued
2(4)(f)	The participation of anglers in environmental governance must be promoted
2(4)(g)	Decisions must take into account the interests, needs and values of all interested and affected parties (including anglers and enforcement officials)
2(4)(i)	The social, economic and environmental impacts of freshwater angling, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment
2(4)(l)	There must be intergovernmental coordination and harmonisation of policies, legislation and actions relating to freshwater angling
2(4)(o)	• The environment is held in public trust for the people; • The beneficial use of environmental resources must serve the public interest; and • The environment must be protected as the people's common heritage

With the above-mentioned principles in mind, the focus will now shift to the analysis of the NEMBA and its subordinate legislation.

3.2.3. The National Environmental Management: Biodiversity Act

The NEMBA came into effect on 1 September 2004 (South Africa, 2004(a)). The purpose of the NEMBA, as stated in Section 2(a)(i) and (ii) is to provide for:

- “(i) the management and conservation of biological diversity within the Republic and of the components of such biological diversity; and
- (ii) the use of indigenous biological resources in a sustainable manner” (South Africa, 2004(a)) (Author’s emphasis).

Willemse (2005:8,11), who was involved in the drafting of the NEMBA and TOPS regulations, states the following regarding the purpose of the NEMBA:

“Species are not only important components of ecosystems and the natural environment, providing important services to the efficient evolution and functioning of complex natural systems, but also to humans providing a resource base for food security and recreation. As integral components of the natural environment, species are impacted on, directly and indirectly, by a variety of activities and processes, both natural and human-induced. As a result and in the context of sustainable development, legislative intervention is required to ensure sustainability of the natural species base.

Regulation of environmental issues is traditionally fragmented amongst several sectors and requires alignment and harmonization in order to avoid incompatibility and achieve efficiency. Environmental legislation in South Africa has taken an integrated approach with the promulgation of the National Environmental Management Act of 1998 (NEMA), setting principles and containing some provisions for the enforcement of specific norms and standards to manage and mitigate impacts. Within the framework of NEMA, specific environmental acts provide more detailed and focused provisions for specific environmental management sectors. Two such specific environmental acts, the National Environmental Management: Protected Areas Act, 2003 (NEMPA) and National Environmental Management: Biodiversity Act, 2004 (NEMBA) have already entered into effect and a third, on coastal zone management, is in preparation. In the context of species management, NEMA and the subsets of

NEMPA and NEMBA form an integrated legislative structure to ensure sustainable management of the national species base.

In conclusion, the still evolving environmental legislation creates a suite of environmental legislative tools that are tailor-made for specific purposes. Of these, NEMBA as specific biodiversity instrument and in the context of species management provides a range of enabling measures with enforcement support. The integrated implementation of the entire suite of environmental legislation allow for:

- (a) effective conservation with responsible resource use and efficient impact management,*
- (b) standardized and nationally valid authorizations, and*
- (c) uniformity in enforcement”.*

It will be shown in Chapter 5 that, although the purpose of NEMBA (both as stated in the act itself and explained by Willemse above) is noble, the reality shows that the legislation is, as far as freshwater angling is concerned, ineffective.

The NEMBA, on its own, does not have a direct impact on freshwater angling in South Africa. However, it does when read together with the TOPS Regulations which were enacted in terms thereof. It is, however, important to become *au fait* with certain definitions and sections of the NEMBA. The definitions listed in table 3.42 found in Sections 1 and 57(1) of the NEMBA ((South Africa, 2004(a)), have been adapted to focus on angling.

Table 3.42: NEMBA definitions relevant to freshwater angling

<u>Concept</u>	<u>Definition</u>
Alien species	• a freshwater fish species that is not an indigenous species; or • an indigenous freshwater fish species translocated or intended to be translocated to a place outside its natural

	distribution range in nature, but not an indigenous freshwater fish species that has extended its natural distribution range by natural means of migration or dispersal without human intervention
Biological diversity or biodiversity	The variability among living organisms from all sources including, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and also includes diversity within species, between species, and of ecosystems
Critically endangered species	Any indigenous freshwater fish species facing an extremely high risk of extinction in the wild in the immediate future
Ecosystem	A dynamic complex of animal, plant and micro-organism communities and their non-living environment interacting as a functional unit
Endangered species	An indigenous freshwater fish species facing a high risk of extinction in the wild in the near future, although not critically endangered
Habitat	A place where a species or ecological community naturally occurs
Import	• To land on, bring into or introduce into the Republic, or attempt thereto; and • Includes to bring into the Republic for re-export to a place outside the Republic
Indigenous species	A freshwater fish species that occurs, or has historically occurred, naturally in a free state in nature within the borders of the Republic excluding a freshwater fish species that has been introduced in the Republic as a result of human activity
Introduction	The introduction by humans, whether deliberately or accidentally, of a species to a place outside the natural range or natural dispersal potential of that freshwater fish species
Invasive species	A freshwater fish species whose establishment and spread

	outside of its natural distribution range- (a) threaten ecosystems, habitats or other species or have demonstrable potential to threaten ecosystems, habitats or other species; and (b) may result in economic or environmental harm or harm to human health
Listed invasive species	An invasive freshwater fish species listed in terms of Section 70(1) of the NEMBA
Listed threatened or protected species	A freshwater fish species listed in terms of Section 56(1) of the NEMBA
Permit	A permit issued in terms of Chapter 7 of the NEMBA
Protected species	A freshwater fish species which is of such high conservation value or national importance that it requires national protection, although it is not critically endangered, endangered or vulnerable
Restricted activity	In relation to a listed threatened or protected freshwater fish species- (i) hunting, catching, capturing or killing of a listed threatened or protected freshwater fish species by any means, method or device whatsoever, including searching, pursuing, driving, lying in wait, luring, alluring, discharging a missile or injuring with intent to hunt, catch, capture or kill it; (ii) gathering or collecting a listed threatened or protected freshwater fish species; (iii) damaging or destroying a listed threatened or protected freshwater fish species; (iv) importing a listed threatened or protected freshwater fish species into South Africa; (v) exporting a listed threatened or protected freshwater fish species from South Africa;

	(vi) having in possession or exercising physical control over a listed threatened or protected freshwater fish species; (vii) breeding or in any other way propagating a listed threatened or protected freshwater fish species, or causing it to multiply; (viii) conveying, moving or otherwise translocating a listed threatened or protected freshwater fish species; (ix) selling or otherwise trading in, buying, receiving, giving, donating or accepting as a gift, or in any way acquiring or disposing of a listed threatened or protected freshwater fish species; or (x) any other prescribed activity which involves a listed threatened or protected freshwater fish species; and In relation to an alien or listed invasive freshwater fish species (i) importing any alien or listed invasive freshwater fish species into the Republic; (ii) having in possession or exercising physical control over an alien or listed invasive freshwater fish species; (iii) breeding or in any other way propagating an alien or listed invasive freshwater fish species, or causing it to multiply; (iv) conveying, moving or otherwise translocating an alien or listed invasive freshwater fish species; (v) selling or otherwise trading in, buying, receiving, giving, donating or accepting as a gift, or in any way acquiring or disposing of an alien or listed invasive freshwater fish species; or (vi) any other prescribed activity which involves an alien or listed invasive freshwater fish species
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Species	A kind of freshwater fish that does not normally interbreed with individuals of another kind, and includes any sub-species, variety, geographic race, strain, hybrid or geographically separate population
Sustainable Use	The use of freshwater fish in such a way and rate that- (a) would not lead to its long-term decline; (b) would not disrupt the ecological integrity of the ecosystem in which it occurs; and (c) would ensure its continued use to meet the needs and aspirations of present and future generations of people
Vulnerable species	An indigenous freshwater fish species facing an extremely high risk of extinction in the wild in the medium-term future, although not critically endangered or endangered

It should be noted that, while the NEMBA regulates both species and ecosystems, the focus of this dissertation falls on species because angling legislation, to a large degree, focuses on species, rather than ecosystems. Author is of the opinion that one of the points of departure of the NEMBA is that, in order to conserve South Africa's biological diversity, indigenous species that are threatened must be protected and alien and invasive species, which have, generally speaking, a negative impact on indigenous species, must be managed.

3.2.3.1. Threatened or Protected Species

In terms of Section 56(1) of the NEMBA, the Minister of Environmental Affairs may publish a list of critically endangered, endangered, vulnerable and protected species (South Africa, 2004(a)). The Minister did so by publishing the TOPS Regulations (South Africa, 2007(a)), which will be discussed in paragraph 3.2.3.4.

Section 57(1) of the NEMBA prohibits the carrying out of a restricted activity (refer to Table 3.40) involving a listed threatened or protected species if such activity has not been authorised by a NEMBA permit (South Africa, 2004(a)). Such permits are referred to in general as “TOPS permits”. With regard to angling, this means that one may not catch a listed threatened or protected fish without a TOPS permit.

The impact of the NEMBA as well as the TOPS Regulations on freshwater angling will be analysed in paragraph 3.2.3.4.

3.2.3.2. Alien and invasive species

In terms of Section 64(1) of the NEMBA, the purpose of managing alien species and invasive species is to:

- “(a) to prevent the unauthorised introduction and spread of alien and invasive species to ecosystems and habitats where they do not naturally occur;*
- (b) to manage and control alien species and invasive species to prevent or minimise harm to the environment and to biodiversity in particular; and*
- (c) to eradicate alien species and invasive species from ecosystems and habitats where they may harm such ecosystems or habitats” (South Africa, 2004(a)).*

3.2.3.2.1. Alien Species

In terms of Section 65(1) of the NEMBA, restricted activities involving alien species may not be undertaken without a permit (South Africa, 2004(a)). Such permit may, in terms of Section 65(2) of the NEMBA only be issued after a risk and impact assessment has been done (South Africa, 2004(a)). Certain alien species may be exempted in terms of Section 66 of the NEMBA, which means that permits for those species will not be required. No exempted species has been listed yet.

Section 67 of the NEMBA authorises the Minister of Environmental Affairs to list alien species with regard to which a permit may not be issued. Restricted activities regarding these species will, as long as such species are listed, not be permitted. No such species has been listed yet.

Section 69 of the NEMBA may be used by enforcement authorities, in addition to provincial freshwater angling legislation, as an additional tool against the stocking of fish into waters by anglers. Section 69(4) of the NEMBA states that should an alien fish establish itself in nature as an invasive species because of the actions of a specific person (i.e. illegal stocking), such person may be held liable for control and eradication costs regarding that that species (South Africa, 2004(a)). This is a much more severe penalty than a mere fine as prescribed in the provincial legislation.

3.2.3.2.2. Invasive Species

In terms of section 70(1) of the NEMBA the Minister must publish a national list of invasive species (South Africa, 2004(a)). Similar to Section 65 of the NEMBA regarding alien species, restricted activities involving listed invasive species may, according to Section 71(1) of the NEMBA, not be undertaken without a permit (South Africa, 2004(a)). Such permit may, according to Section 71(2) of the NEMBA only be issued after a risk and impact assessment has been done (South Africa, 2004(a)). As stated in the introduction, the DEA published the Draft AIS Regulations in April 2009 (South Africa, 2009(a)). It is, however, not in force yet. As it is not current law, it will not be analysed in depth in this dissertation.

Section 73(2)(b) and (c) of the NEMBA may prove to be difficult to implement regarding fish. It states that an owner of land on which a listed invasive species occurs must take steps to:

- Control and eradicate such species;
- Prevent it from spreading; and

- Prevent or minimise harm to biodiversity.

If the landowner does not comply with the above, a directive may be issued against him in terms of Section 73(3) of the NEMBA, forcing him to take such steps (South Africa, 2004(a)). If the directive is not complied with, the competent authority may, in terms of Section 73(4), implement the directive and recover the costs from the landowner (South Africa, 2004(a)).

The question that immediately arises is: how does this impact on invasive fish? For example, the Carp (*Cyprinus carpio*), which is listed as an invasive species in the draft AIS Regulations, is found in the Vaal River. NEMBA requires the landowner to take steps to get rid of this fish. Will it be expected from all the riparian landowners adjacent to the Vaal River, to control and eradicate carp? If so, the legislation can be regarded as grossly unreasonable as:

- The riparian owners do not own the water that flows in the river; and
- As such, the riparian owners cannot be regarded as the owners of the fish therein;
- Carp has been introduced into South Africa as long ago as the 18th century (Skelton, 1993:189); and
- Carp has been regarded as a pest ("*n plaag*" in *Afrikaans*) as far back as 1947 (Joubert and Louw, 1947:149).

If the riparian owners are not the owners of the water or fish, did not stock the river with the carp, have no control over the fish's movements and the authorities, although having regarded it as an invasive for decades, did not do anything to curb the spread thereof or to reduce the carp population, it cannot reasonably be expected from riparian owners to 'control and eradicate' carp in the Vaal River.

One cannot but help to come to the conclusion that this clause of NEMBA was drafted with land based organisms in mind and that, with regard to freshwater fish, it is quite unreasonable.

It is important to note that one of the “Postulates of Justice” is “reasonableness” (the others are “generality”, “equality” and “certainty”) (Hahlo and Kahn, 1973:32). Hahlo and Kahn summarise the impact of unreasonable legislation very eloquently:

“Legal rules, if they are to find ready obedience, must be reasonable. In the words of Voet, they must direct what is honourable and forbid what is base. Arbitrary, senseless or absurd rules, according to our system of values, tend to bring the law – nay, the State itself – into ridicule and disrespect” (Hahlo and Kahn, 1973:32).

Section 33(1) of the Constitution provides that everyone has the right to administrative action that is reasonable (South Africa, 1996). It is submitted that a decision to prosecute the riparian owners in the example, would be tantamount to unreasonable administrative action.

3.2.3.3. Permits

Although the impact of the NEMBA permit system on freshwater angling in South Africa will be analysed in paragraph 3.2.3.4, it is necessary to first take cognisance of the relevant sections of the NEMBA dealing with permits.

While angling licences can merely be bought in terms of the provincial freshwater angling legislation, an application for a NEMBA permit must be made according to Section 88(1) of the NEMBA (South Africa, 2004(a)). Of course, as with any application, it may be turned down (Section 88(2)(d)) (South Africa, 2004(a)). When adjudicating a permit application the issuing authority must, according to Section 88(3), take the following into account:

- The applicable provisions of the NEMBA;
- The NEMA environmental management principles;
- The National Biodiversity Framework (it is interesting to note that it only refers to commercial fishing and not to recreational angling at all);

- Bioregional- and biodiversity management plans;
- Applicable international agreements binding on the Republic;
- The Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000); and
- Any requirements that may be prescribed (South Africa, 2004(a)).

In terms of Section 88 of the NEMBA, the issuing authority may require the applicant to conduct an independent risk assessment at the applicant's expense (South Africa, 2004(a)). It is unimaginable that an angler be requested to do a risk assessment before being able to angle.

Section 92(1)(b) deals with integrated permits and states that if the carrying out of an activity is also regulated in terms of other law (e.g. provincial angling legislation), the relevant authorities may issue a single integrated permit instead of a separate permit and authorisation (South Africa, 2004(a)). The impact of this section will be discussed in paragraph 3.2.3.4.

In terms of Section 101(1) the carrying out of a restricted activity regarding a threatened, protected, alien or listed invasive species is an offence, punishable in terms of Section 102) with a fine, or to imprisonment for maximum period of five years, or to both the fine and imprisonment. Section 101(2) stipulates that the fine may not exceed an amount which is equal to three times the commercial value of the specimen in respect of which the offence was committed, whichever is the greater.

3.2.3.4. The TOPS Regulations and Lists

The TOPS Regulations and TOPS Lists were published in 2007 and came into effect on 1 February 2008 (DEA, 2007:31). For the purposes of analysing the TOPS regulations, the following issues will be addressed:

- Which freshwater fish are listed in the TOPS regulations?
- Is the NEMBA and TOPS Regulations applicable to freshwater anglers?

- The impact of the NEMBA and TOPS Regulations on freshwater anglers?

3.2.3.4.1. Which freshwater fish are listed in the TOPS regulations?

As stated above in paragraph 3.2.3.1, Section 57(1) of the NEMBA prohibits the carrying out of a restricted activity involving a listed threatened or protected species if such activity has not been authorised by a NEMBA permit (South Africa, 2004(a)). The freshwater fish species which are currently listed as TOPS species are indicated in Table 3.43 to 3.45 (South Africa, 2007(a)).

Table 3.43: Critically endangered freshwater fish

Indigenous freshwater fish species facing an <u>extremely high risk of extinction</u> in the wild in the <u>immediate future</u>	
<i>Labeo seeberi</i>	Clanwilliam Sandfish

Table 3.44: Endangered freshwater fish

Indigenous freshwater fish species facing a <u>high risk of extinction</u> in the wild in the <u>near future</u> , although they are not critically endangered	
<i>Barbus andrewi</i>	Whitefish
<i>Barbus serra</i>	Sawfin

Table 3.45: Vulnerable freshwater fish

Indigenous freshwater fish species facing a <u>high risk of extinction</u> in the wild in the <u>medium-term future</u> , although they are not critically endangered or endangered	
<i>Labeobarbus capensis</i>	Clanwilliam Yellowfish
<i>Labeobarbus kimberleyensis</i>	Vaal-Orange Largemouth Yellowfish
<i>Myxus capensis</i>	Freshwater Mullet
<i>Oreochromis placidus</i>	Black Tilapia
<i>Serranochromis meridianus</i>	Lowveld Largemouth

Table 3.46: Protected freshwater fish

Indigenous freshwater fish species of high conservation value or national importance that require national protection	
<i>Hydrocynus vittatus</i>	Tigerfish
<i>Nothobranchius orthonotus</i>	Spotted Killifish
<i>Nothobranchius rachovii</i>	Rainbow Killifish
<i>Varicorhinus nelspruitensis</i>	Incomati Chiselmouth

The reasons for the listing of each species cannot be discussed in this dissertation, but the account of the Whitefish's near extinction serves as sad proof why a risk averse and cautious approach should be taken with regard to the introducing of foreign species into South African waters. According to Impson (2005:59, 60):

- Whitefish are only found in the Berg and Breede River systems of the South-Western Cape.
- In the 1930s the Berg River was unpolluted with large numbers of indigenous fishes, so much so that the Whitefish was regarded as a pest.
- The Groot Drakenstein Angling Society, therefore, decided to introduce Smallmouth Bass into the Berg River in 1930s to get rid of the "*witvis pest*" and to provide a gamefish for the middle reaches of the river. (The huge negative impact of Smallmouth Bass on indigenous fish species is indicated in paragraph 3.1.6.4 of this dissertation.)
- In addition to the Smallmouth Bass, the Whitefish was also negatively impacted on by the intensification of agriculture and expansion of Paarl and Wellington, the canalisation of the river and deterioration of the river's water quality, the introduction of Rainbow and Brown Trout, the building of dams, bulldozing of rivers, use of pesticides, treated sewerage releases into the river, as well as the growing numbers of alien plants in the riparian zone, such as Black Wattle, Pines and Eucalypts which caused river bank collapses and increased sedimentation in pools which reduced the river's depth.
- During intensive surveys in 1998, 2003 and 2004 no Whitefish were caught but 8 species of alien fishes were, namely Banded Tilapia, Carp, Mosquitofish (*Gambusia*

affinis) which was introduced by The Cape Department of Fisheries (Skelton, 1993:279), Mozambique Tilapia, Smallmouth Bass, Spotted Bass, Rainbow Trout and Sharptooth Catfish.

- The only remaining large population of Whitefish is to be found in the Brandvlei Dam.

In terms of Regulation 2, the purpose of the TOPS Regulations – adapted for freshwater angling - is, *inter alia*, to:

- Further regulate the permit system set out in the NEMBA regarding restricted activities involving listed freshwater fish species;
- Provide for the regulation of the carrying out of hunting;
- Provide for the prohibition of specific restricted activities involving specific listed freshwater fish species; and
- Provide for the protection of wild populations of listed freshwater fish species.

3.2.3.4.2. Are the NEMBA and TOPS Regulations applicable to freshwater anglers?

In order to ascertain whether the TOPS regulations are applicable to angling for freshwater fish species listed in the TOPS list, Sections 1 and 57 of the NEMBA must be read together with the TOPS list. If this is done, it is clear that the following angling activities may not be undertaken involving a listed freshwater fish species, unless authorised by a TOPS permit:

- The hunting, catching, capturing or killing of a listed freshwater fish species by any means, method or device whatsoever, including searching, lying in wait, luring, alluring, or injuring with intent to hunt, catch, capture or kill it;
- Having in possession or exercising physical control over a listed freshwater fish species.

“Hunting” is defined in Regulation 1 of the TOPS Regulations (South Africa, 2007(b)) as the:

- Intentional killing of a listed freshwater fish species by any means, method or device whatsoever;
- Capturing of a listed freshwater fish species by any means, method or device whatsoever with the intent to kill;
- Searching for, lie in wait for or immobilising a listed freshwater fish species with the intent to kill; or
- Luring by any means, method or device whatsoever, a listed freshwater fish species with the intent to kill.

It is clear that if an angler catches and kills a listed freshwater fish species, the NEMBA and the TOPS Regulations will be applicable to him. If he wants to catch and kill a tigerfish, for example, he will have to apply for a TOPS hunting permit. If the angler has not yet killed the fish, it may be quite difficult, depending on the circumstances of the case, for the law enforcer to prove that the angler was of the intention to kill the fish. The author is of the opinion, however, that the prohibition on the killing of a listed freshwater fish species is commendable.

There is, however, a school of thought that is of the opinion that, should an angler catch and release a listed freshwater fish species, the NEMBA and the TOPS Regulations will not be applicable to him. Boshoff (2009), the DEA's Deputy Director: Policy Development: Directorate of Regulatory and Monitoring Services: Biodiversity (Biodiversity and Conservation) indicated to author that this is indeed how the NEMBA and the TOPS Regulations should be applied.

While the author appreciates her stance, the fact of the matter is that the NEMBA stipulates otherwise as it specifically includes the phrases "catching", "capturing", "having in possession" and "exercising physical control over" in the definition of "restricted activity" (South Africa, 2007(b)). Even if an angler has the fish in his possession for only a few seconds, the NEMBA and the TOPS Regulations will be applicable to him. De Villiers (2007(b)) also indicated to author that the nature conservation official will have to use his discretion. It is submitted, with respect, that

government officials should be granted the minimum discretion, as it may lead to abuse and legal uncertainty.

3.2.3.4.3. Concerns regarding the impact of the TOPS Regulations on freshwater anglers

There are quite a few problems with regard to the implementation of the NEMBA and the TOPS Regulations to freshwater angling:

- Fish, unlike their terrestrial counterparts, live in an underwater world and therefore, to a large degree, anglers do not know what they are going to catch. When angling in the Vaal River, for example, an angler may, while setting out to catch Smallmouth Yellowfish on artificial flies, catch a Largemouth Yellowfish, Mudfish, Moggel, Carp or Barbel instead. That is 5 species he did not set out to catch! Fish are unpredictable. The Moggel's diet, for example, is supposed to consist of "soft mud and organic silt (Skelton, 1993:177). However, the author was present when a Moggel was caught with a live Platanna (*Xenopus laevis*). It is submitted that, while each freshwater fish species has its preferred food source, it will not hesitate to consume basically any edible matter in its vicinity.

The question which arises is whether an angler should obtain a TOPS Permit merely because there is a chance that he may catch a listed freshwater fish species, even if that was not his targeted quarry? It is submitted that, irrespective of Boshoff's (2009) stance above, this is indeed the case. If a TOPS permit is refused, it means that an angler may not angle at all in waters where a listed freshwater fish species occurs, as it may, by chance, be caught. It is submitted that, in the light hereof, the NEMBA and the TOPS Regulations are unreasonable regarding angling.

- It is clear that the NEMBA and the TOPS Regulations were drafted with terrestrial organisms in mind. This was confirmed by Willemse (2008) who indicated to the author that:
 - The public participation process for the drafting of the TOPS Regulations was “hijacked” by the “anti canned lion hunting lobby”.
 - Game farmers in South Africa created a forum to interact with the Minister during the drafting process of the TOPS regulations. As a result, the TOPS regulations “*was written for the game farmers*” and little or no attention was given as to whether the legislation is indeed appropriate to freshwater angling (Willemse, 2008).
 - The angling community was never consulted during the consultation process (Willemse, 2008).

Boshoff (2009) added that the purpose of grouping all organisms (e.g. terrestrial and aquatic) together into one act was to prevent fragmentation. She conceded that it did not work and, as a matter of fact, only increased the level of fragmentation.

It is submitted that, with regard to freshwater angling, the TOPS regulations were poorly drafted.

- The issue of where a TOPS permit can be obtained is quite problematic for anglers. In terms of Regulation 3 of the TOPS Regulations (South Africa, 2007(b)) and paragraph 2.2 of the DEA’s Guidelines for the Implementation and Interpretation of Threatened or Protected Species (TOPS) Regulations and the Issuance of TOPS permits (“TOPS Guideline”) (DEA, 2007:4), TOPS permits regarding listed freshwater fish must be issued by the provincial conservation authorities. The problems that anglers have herewith are numerous:
 - The offices of the provincial conservation authorities are few and far between. Not every town has a resident provincial conservation authority office.

- At the time of writing this dissertation, none of the provinces were sure how the TOPS Permits will be issued and definite answers could not be provided regarding the following concerns:
 - Must anglers apply for the permits in person? In this regard the example of a person living in Cape Town who is going to angle on the Gauteng side of the Vaal River (and may, perhaps, even if he is trying to catch other species, catch a Largemouth Yellowfish) will suffice. Will it be expected of such angler to travel to the Johannesburg offices of the GDARD to apply for a TOPS permit? If he fishes from a boat and crosses the border between Gauteng and the Free State, is he supposed to, beforehand, also travel to Bloemfontein or Welkom to obtain a TOPS permit form the Free State authorities?
 - May anglers make the application by post, fax or e-mail?
 - Will an electronic application system be established?
 - Having regard to the quality of South Africa's postal system, an applicant may be inclined to make use of a courier service for fear that the original documentation may get lost.
- Boshoff (2009) indicated in March 2009 that the DEA was "working on" an electronic permitting system. In a subsequent interview in April 2010, Boshoff indicated that no progress was made in this regard (Boshoff, 2010).
- In terms of Regulation 7 of the TOPS Regulations (South Africa, 2007(b)) and the TOPS Guideline (DEA, 2007:6), the written consent of the landowner must, in certain instances, be obtained:
 - *"If the restricted activity involves critically endangered, endangered or vulnerable species, the applicant must obtain the written permission from the landowner prior to submitting the application to the Issuing Authority and*
 - *If the restricted activity involves protected species, the applicant must obtain the written permission from the landowner prior to the undertaking of the restricted activity. This written permission is not required at the time of*

submitting the application. However, for activities such as hunting or catching, written permission should preferably be submitted with the application”.

While obtaining written consent makes sense regarding the hunting of a terrestrial species e.g. the Black Rhinoceros (*Diceros bicornis*), it is submitted that it is totally inappropriate (bearing in mind that the angler may, by accident, catch a listed species, while it is not his target species) regarding freshwater angling as the following issues indicate:

- An angler will have to obtain the written consent from every landowner on whose property he is going to fish. It is a commonly known fact that most anglers angle at a variety of venues during the year. In terms of the TOPS Regulations an angler will have to obtain a separate permit for each and every venue he will be angling at for each and every time he is visiting a venue. This means that he will have to obtain the written consent of quite a few owners, even more than once. This may become very expensive, as the TOPS permits cost a R100 a permit. Boshoff (2009) indicated that with regard to freshwater angling, an integrated permit can be obtained in terms of Section 92 of NEMBA (South Africa, 2004(a)). Such a permit is supposed to give one access to the whole province and numerous applications should not be necessary. The issue of integrated permits will be analysed in Chapter 5.
- As stated in paragraph 3.1.1.1 above, the NWA specifically states that “*water is a natural resource that belongs to all people*” (South Africa, 1998(a)). Water in its natural state can, therefore, not be owned. It could be argued, specifically where the owner’s property does not completely surround a water resource) therefore, that if the owner of land is not the owner of the water, he is also not the owner of the fish in the water. The owner of land, therefore, does not have any legal basis in terms of which he is entitled to give permission that a listed freshwater fish may be angled for.

- A hunter knows on whose property he is and whose written permission to obtain. But the angler using a boat, canoe or float tube may not be so lucky. He may enter the angling waters at one property and angle at various places in the river or dam, in the process fishing next to various different properties owned by various different owners. He may even enter the angling waters at one property, fishes for a few kilometres downstream and then exit the river at somebody else's property. The questions that arise are: which landowner's written permission is required? The first or the last landowner? Or both? Or all the landowners of the properties in between as well?
- Bearing in mind that an angler must apply for a TOPS permit for a listed freshwater fish he may catch by accident, the permitting process is extremely cumbersome and lengthy. It must be borne in mind that anglers have always (in the cases that it is indeed available) merely bought an angling licence. This situation has changed as a written application must be made. The application process (adapted from the TOPS guidelines (DEA, 2007:25 – 29) is indicated in Annexure 4. When reading Regulations 8, 9(1) and (2) and 17(2) of the TOPS Regulations together, it becomes clear that it may take up to 39 working days (approximately 53 normal days – nearly 2 months) to obtain a permit (South Africa, 2007(b));
- In terms of Regulations 11(a) and 46(2) of the TOPS Regulations, an issuing authority may require a risk assessment to be done by a person applying for a TOPS Permit (South Africa, 2007(b). Such a risk assessment, must be conducted by an independent expert environmental impact assessment practitioner at the angler's own cost and must include the following information in terms of Regulation 15:
 - (a) *“Information regarding the species, including –*
 - (i) *the taxonomy of the species, including the class, order, family, scientific name, scientific synonyms and common names of the species;*
 - (ii) *the national and provincial conservation status of the species, including IUCN Red List Status;*

- (iii) *the population status and trends of the species, including -*
 - (aa) *its national population status;*
 - (bb) *the size of its local population which will be affected by the restricted activity in respect of which application is made; and*
 - (cc) *its current national and local population trends;*
 - (iv) *the geographic distribution and trends of the species, including -*
 - (aa) *the distribution of the natural population;*
 - (bb) *the distribution of any translocated and introduced populations; and*
 - (cc) *the geographic distribution trends;*
 - (v) *the requirements of the species with respect to habitat and climate;*
 - (vi) *the role of the species in its ecosystem, taking into account –*
 - (aa) *whether the species is a keystone or indicator species;*
 - (bb) *the species' level in the food-chain; and*
 - (cc) *the functions which the species performs in its ecosystem; and*
 - (vii) *the major threats affecting the species nationally and locally;*
- (b) *information regarding, the restricted activity in respect of which application is made, including –*
- (i) *the nature of the restricted activity;*
 - (ii) *the reason for the restricted activity;*
 - (iii) *where the restricted activity is to be carried out;*
 - (iv) *the gender, age and number of the specimens of the species involved;*
and
 - (v) *the intended destination of the specimens, if they are to be translocated;*
- (c) *any regulations, policies, norms and standards or international agreements binding on the Republic which may be applicable to the application;*
- (d) *the potential risks associated with the restricted activity to the particular listed threatened or protected species and a specific population of such threatened or protected species or to any other species or ecosystems, including –*

- (i) *degradation and fragmentation of a species' habitat;*
 - (ii) *creation of a significant change in an ecosystem caused by the removal or addition of keystone species;*
 - (iii) *over-exploitation of a species; and*
 - (iv) *hybridisation of species;*
- (e) *evaluation of the risk identified under paragraph (d) in terms of-*
 - (i) *the likelihood of the risk being realised; and*
 - (ii) *the severity of the risk and consequences of the realisation of the risk for the particular species as well as for other species, habitats and ecosystems; and*
- (f) *options for minimising potential risks;*
- (g) *management of potential risks; and*
- (h) *any other information as the issuing authority may determine.” (South Africa, 2007(b)).*

Bearing in mind that an angler must apply for a TOPS permit for a listed freshwater fish he may perhaps catch, it is submitted that it would be unreasonable to require a risk assessment to be conducted by an angler. It is submitted, further, that the government should have, and should in future, (in terms of its obligations in terms of Section 24 of the Constitution and because it is the trustee of South Africa's biodiversity in terms of Section 3 of the NEMBA), conducted detailed studies regarding all indigenous freshwater fish species (taking into account the requirements for a risk assessment as listed in Regulation 15 of the TOPS Regulations) prior to the listing of a species.

If the State has the correct and sufficient information, it will be able to, up front, determine, for example:

- Whether a permit may be issued for a specific species at all,

- Whether only catch-and-release may be practised (this may depend from species to species and water resource to water resource); or
- What the bag and size limits with regard to each listed freshwater fish must be.

The application for permits can then be done away with and anglers should be able to just buy a permit (if allowed for a specific species).

- In terms of Section 21(1)(b)(ii) of the TOPS Regulations a permit holder must within 21 days after the hunt furnish the issuing authority with a written report stating, *inter alia*, the species, sex and number of animals hunted (South Africa, 2007(b)). It is submitted that, in most fish species, male and female fish look alike and it will be extremely difficult for an angler to give an accurate report in this regard. Listed freshwater fish such as Tigerfish (Skelton, 1993:206), Largemouth Yellowfish (Skelton, 1993:167), Whitefish (Skelton, 1993:165) and the Clanwilliam Yellowfish (Skelton, 1993:171) do not have any external features which can be used to differentiate between males and females, except that, in some species, the females grow larger than the males.
- Listed freshwater fish may, in terms of Regulation Section 26(1)(b)(i)(aa), be hunted (i.e. caught and killed) when using bait but, in terms of Section 26(1)(b)(ii)-(iv), it may not be hunted by means of sounds, smell or any other induced luring method. This is yet another indication that the Regulations are totally inappropriate with regard to angling because:
 - “Bait”, is generally understood in angling circles to be “natural baits” such as meat, mielies, worms, crickets, fish and frogs.
 - Flavourings (e.g. vanilla essence) are often used by bait anglers to lure fish to the bait and to entice the fish to take the bait.
 - Artificial lures and flies lure fish by the noise or vibration they create in the water (usually mimicking a wounded aquatic organism or insect) or by visual stimulation.

- The effect of Section 26 is that an angler may hunt (i.e. catch and kill) a listed freshwater fish when using bait, but if he uses an attractants such as flavouring, the fish may not be killed. Similarly, a fish caught on an artificial fly or artificial lure may also not be killed. Therefore, a tigerfish caught on bait may be kept for the pan, but not one caught with an artificial lure.
 - It is common knowledge amongst fishermen that fish will more readily take bait than artificial lures of flies.
 - It follows that Section 26 does not serve the purpose of the NEMBA, namely to protect the listed species.
 - It seems that, yet again, the focus was on terrestrial species which are quite often hunted by luring it by, for example, playing the animal's call over loudspeakers.
- Some fish species are quite difficult to identify and anglers sometimes do not know when they have caught a listed freshwater fish. The Largemouth Yellowfish (listed as vulnerable in the TOPS Lists) is a point in case. The fish's colouring and body shape can differ from waterbody to waterbody. The Largemouth Yellowfish in Annexure 5 was caught at Sterkfontein Dam during the 9th Yellowfish Working Group AGM, which was attended by ichthyologists, provincial nature conservation officials and anglers. The fish was only correctly identified after a lengthy debate. If the experts have trouble identifying a species, how much more difficult will it be for mere anglers?
 - Conflicts between the NEMBA and TOPS Regulations on the one hand and the provincial freshwater angling legislation on the other, may prove to be problematic. Section 146(2)(a) of the Constitution states that:

“National legislation that applies uniformly with regard to the country as a whole prevails over provincial legislation if ... the national legislation deals with a matter that cannot be regulated effectively by legislation enacted by the respective provinces individually.” (South Africa: 1996)

It is submitted that it was shown in the analysis of the provincial freshwater angling legislation that it does not (and, in its current format, cannot) regulate the protection of indigenous freshwater fish species, as well as freshwater angling effectively. It is submitted, therefore, that the NEMBA and TOPS Regulations prevail over the provincial freshwater angling legislation. This is also the point of departure of Boshoff (2010) and the TOPS Guidelines which states that:

“Provincial conservation authorities may apply stricter measures than required in terms of the TOPS regulations, but not less strict measures” (DEA, 2007:4)

Should a province enact legislation which is more effective than the NEMBA and TOPS Regulations, such provincial legislation will take precedence over the NEMBA and TOPS Regulations and may well lead to the protection of fish species that requires protection, but the law may, yet again, become more difficult to understand.

- Another situation which proves to be problematic is that, as indicated in the TOPS Guidelines:
 - *“The TOPS regulations apply **only** to those species that are listed as threatened or protected in terms of the Biodiversity Act. Provincial legislation still applies to all species **not** listed as threatened or protected.*
 - *The TOPS regulations **do not** replace or repeal any provincial legislation, but apply **in addition to** provincial legislation” (DEA, 2007:4).*

The reasons why the above is problematic are the following:

- As was shown in the analysis of the provincial legislation, very few indigenous freshwater fish are actually protected by provincial legislation;
- Therefore, quite a lot of indigenous freshwater fish “falls through the conservation cracks”.

The Papermouth (*Barbus matozzi*), which is found in the Limpopo River system in the Limpopo province is a case in point. Anecdotal evidence by

anglers suggests that there are far fewer fish now than, say, 20 years ago. Despite its dwindling numbers, this fish is not protected by either national or provincial legislation. The reason why the Papermouth was not listed was because when it was decided which species should be listed, the focus was not on the population status of the species. Only those species which were negatively impacted on by restricted activities specifically, was listed (Boshoff, 2009 and 2010). This methodology was, with respect, upside down. The Papermouth, for example, has never been (and will never really be) threatened by angling as it does not grow large and is not really a good eating fish. That does not mean that the species are not threatened by other factors. Nevertheless, it is not listed in the TOPS Regulations and is not afforded the protection it deserves.

- Bearing in mind that an angler must apply for a TOPS permit for a listed freshwater fish he may catch by accident), Regulation 73 of the TOPS Regulations states that it is an offence if a person undertakes a restricted activity involving a listed freshwater fish without a permit, which offence is, in terms of Regulation 74 of the TOPS Regulations, punishable with:
 - a fine of R100 000; or
 - a fine of three times the commercial value of the specimen in respect of which the offence was committed, whichever is the greater; or
 - imprisonment for a period not exceeding five years; or
 - to both a fine and imprisonment (South Africa, 2007(b)).

3.2.3.4.4. The effect of the NEMBA and TOPS regulations on freshwater angling and listed freshwater fish

It is submitted that, with regard to freshwater angling, the TOPS regulations were poorly drafted. In light of the mostly theoretical concerns listed above, as well as in the light of the fact that TOPS Regulations have been in force for more than two years, the question

that arises is what the actual impact of the NEMBA was on freshwater angling or the listed freshwater fish in South Africa. The news is both negative and positive.

Positive impacts

Of all the yellowfish species, only the Whitefish, Sawfin, Clanwilliam Yellowfish, Vaal-Orange Largemouth Yellowfish are listed in the TOPS List (South Africa, 2007(a)). Mr Johann Grobler, at the time a representative of the South African Freshwater Bank Anglers Federation (“SAFBAF”), indicated that SAFBAF decided, because of the enactment of the TOPS Regulations, that no species of yellowfish may be weighed in during an angling competition which takes place under SAFBAF’s banner. All yellowfish must be immediately released when caught (Grobler, 2007). The reasons for this decision were twofold:

- Firstly, SAFBAF wanted to ensure that its members are compliant with the law;
- Secondly, it is sometimes difficult to differentiate between the various yellowfish species (Grobler, 2007).

A blanket ban on the weighing in of all yellowfish species, was therefore the only way to ensure that its members are 100% compliant (Grobler, 2007). The positive news is, therefore, that all yellowfishes and not only those listed in the TOPS Regulations are, as far as SAFBAF competitions are concerned, protected.

Negative impacts

One negative impact is that the author is not aware that any of the other listed freshwater fish species are protected in the same way as the yellowfishes.

A second is that anglers do not even apply for TOPS permits. Both Boshoff (2010) and Rogers (2010) indicated to the author that they are not aware of any angler having applied for a TOPS Permit. The NEMBA and TOPS regulations are ignored by anglers because, in the opinion of the author:

- Anglers may not be aware of the legislation;
- Anglers regard the legislation as unreasonable and ignore same, thereby confirming Hahlo and Kahn's (1973:32) statement that legal rules must be reasonable if they are to find ready obedience; and
- The law is not enforced properly. As Kidd (2008: 213-214) correctly states:

“Inadequate policing is a further problem faced by South Africa ... The situation is hardly likely to improve. The administration of a number of South African environmental statutes (e.g. NEMBA and the TOPS Regulations) have been assigned to provinces who are spending most of their budgets on matters which are seen as more pressing, namely education, health and welfare.”

This is not a recent occurrence. The author has been angling for more than 30 years and has never been requested by a nature conservation official to present his angling licence. The author's father has not been asked to present his angling licence in nearly 50 years of angling.

It is submitted that a large majority of South African only comply with the law because of the fear of the penalty that may be imposed should they get caught. In the absence of such fear the law is not complied with. The same is applicable to anglers. One would be foolish to expect them to comply with legislation that has very seldom been enforced.

3.2.3.5. Draft Alien and Invasive Species Regulations

In terms of section 70(1) of the NEMBA, the Minister must publish a list of invasive species (South Africa, 2004(a)) regarding which restricted activities may not be undertaken without a permit (South Africa, 2004(a)). The DEA is currently in the process of drafting the lists and regulations to regulate restricted activities regarding the listed alien and invasive species. The Draft Alien and Invasive Species Regulations,

2009 (“Draft AIS Regulations”) was published on 3 April 2009 (South Africa, 2009(a)). It is, however, not in force yet. The NEMBA and the TOPS and AIS Regs will be implemented by both the DEA and the provincial departments managing environmental matters.

Restricted activities regarding alien or listed invasive species includes a ban on the releasing of such species. Catch-and-release may, therefore, not be practised with these species (South Africa, 2009(a): Regulation 22(1)(c)).

In terms of the Draft AIS Regulations, different categories of alien and invasive freshwater fish species are listed, namely:

- **Prohibited alien species**

- In terms of Regulation 26 of the Draft AIS Regulations (South Africa, 2009(a)), no restricted activity is allowed regarding species which are listed in List 2: List of Prohibited Alien Species (South Africa, 2009(c)). The freshwater fish species listed as such are indicated in Annexure 6 of this dissertation.

- **Invasive species requiring compulsory control**

- In terms of Regulation 27 of the Draft AIS Regulations (South Africa, 2009(a)), no restricted activity is allowed for species which are listed in List 3(1)(a): List of Invasive Species Requiring Compulsory Control (South Africa, 2009(d)). The freshwater fish species listed as such are indicated in Annexure 7 of this dissertation.

- **Invasive species controlled by invasive species management programme**

- In terms of Regulation 28 of the Draft AIS Regulations (South Africa, 2009(a)), no restricted activity is allowed for species which are listed in List 3(1)(b): List of Invasive Species Controlled by Invasive Species Management Programme (South Africa, 2009(d)). The freshwater fish species listed as such are indicated in Annexure 7 of this dissertation.

- **Invasive species regulated by area**

- In terms of Regulation 29 of the Draft AIS Regulations (South Africa, 2009(a)), no restricted activity is allowed for species which are listed in List 3(2): List of Invasive Species Regulated by Area (South Africa, 2009(d)). The freshwater fish species listed as such are indicated in Annexure 7 of this dissertation.
- The South African Institute for Aquatic Biodiversity (“SAIAB”) is currently, in terms of Regulation 30 of the Draft AIS Regulations (South Africa, 2009(a)), mapping areas where restricted activities involving these species may be undertaken without a permit (e.g. breeding and stocking of trout). In order to do this, they are not using provincial boundaries, but rather water courses and catchments that have the same fish species.
- For each and every listed freshwater fish a map will be drawn on which it will be indicated where exactly, which restricted activities may be performed regarding such listed species.

- **Invasive species controlled by activity**

- In terms of Regulation 31 of the Draft AIS Regulations (South Africa, 2009(a)), no restricted activity is allowed for species which are listed in List 3(3): List of Invasive species regulated by area (South Africa, 2009(d)). No freshwater fish is listed as such.

While the Draft AIS Regulations was not analysed in detail in this dissertation it is submitted that it will contribute to the confusing landscape of South African freshwater angling legislation. With regard to provincial legislation, the country is already divided into 15 “angling provinces”. It is submitted that the AIS Regulations will create additional “angling provinces” when the species maps are enacted.

3.2.4. The National Water Act

The National Water Act ("NWA") is also of importance to freshwater angling. Before it is analysed, cognisance should be taken of some relevant concepts defined in Schedule 1 and listed in Table 3.47 (South Africa, 1998(a)). Please note that the definitions were adapted to apply to freshwater angling.

Table 3.47: National Water Act definitions relevant to freshwater angling

<u>Concept</u>	<u>Definition</u>
Catchment	In relation to a watercourse or watercourses or part of a watercourse, means the area from which any rainfall will drain into the watercourse or watercourses or part of a watercourse, through surface flow to a common point or common points
Pollution	The alteration of the physical, chemical or biological properties of a water resource so as to make it - (a) less fit for any beneficial purpose for which it may reasonably be expected to be used; or (b) harmful or potentially harmful to- (aa) the welfare of human beings; (bb) aquatic organisms; or (cc) the resource quality
Protection	In relation to a water resource – (a) maintenance of the quality of the water resource to the extent that the water resource may be used in an ecologically sustainable way; (b) prevention of the degradation of the water resource; and (c) the rehabilitation of the water resource
Reserve	The quantity and quality of water required to protect aquatic ecosystems in order to secure ecologically

	sustainable development and use of the relevant water resource
Resource quality	The quality of all the aspects of a water resource including – (b) the biological characteristics of the water; (c) the character and condition of the instream and riparian habitat; and (d) the characteristics, condition and distribution of the aquatic biota
Water management area	An area established as a management unit in the national water resource strategy within which a catchment management agency will conduct the protection, use, development, conservation, management and control of water resources

3.2.4.1. The purpose of the National Water Act

The purposes of the NWA which are relevant to freshwater angling are to be found in Section 2(d), (g) and (h) thereof which state that:

“The purpose of this Act is to ensure that the nation’s water resources are protected, used ... developed ... managed and controlled in ways which take into account amongst other factors –

- (d) promoting the efficient, sustainable and beneficial use of water in the public interest;*
 - (g) protecting aquatic and associated ecosystems and their biological diversity;*
 - (h) reducing and preventing pollution and degradation of water resources;*
- and for achieving this purpose, to establish suitable institutions ...” (South Africa, 1998(a)).*

In terms of Section 3 of the NWA, the national government is the public trustee of South Africa's freshwater resources and must ensure that water is protected, used, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons (South Africa, 1998(a)).

3.2.4.2. Entitlement to water use

In terms of Section 4(1) read together with Schedule 1(1)(e) of the NWA, water may be used for angling provided that the angler has lawful access to the water (South Africa, 1998(a)).

3.2.4.3. Water pollution control

The stocking of waters with invasive fish species is considered to be water pollution and, as such, prohibited by the NWA, although one has to read quite a few sections together to come to this conclusion. In terms of Section 1, pollution is:

“... the alteration of the ... biological properties of a water resource so as to make it ... harmful or potentially harmful to ... aquatic organisms or the resource quality” (South Africa, 1998(a)).

Resource quality, in turn, is defined in Section 1 of the NWA as:

“The quality of ... a water resource including ... the biological characteristics of the water ... and ... the characteristics, condition and distribution of the aquatic biota” (South Africa, 1998(a)).

3.2.4.4. Water management areas

The author is of the opinion that the NWA can (and in fact should) be used to protect indigenous freshwater fish species. In terms of Section 5(1) of the NWA, a national water resource strategy was established (South Africa, 1998(a)). South Africa's water resources must, according to Section 5(3) of the NWA, be protected and used in accordance with the said strategy (South Africa, 1998(a)).

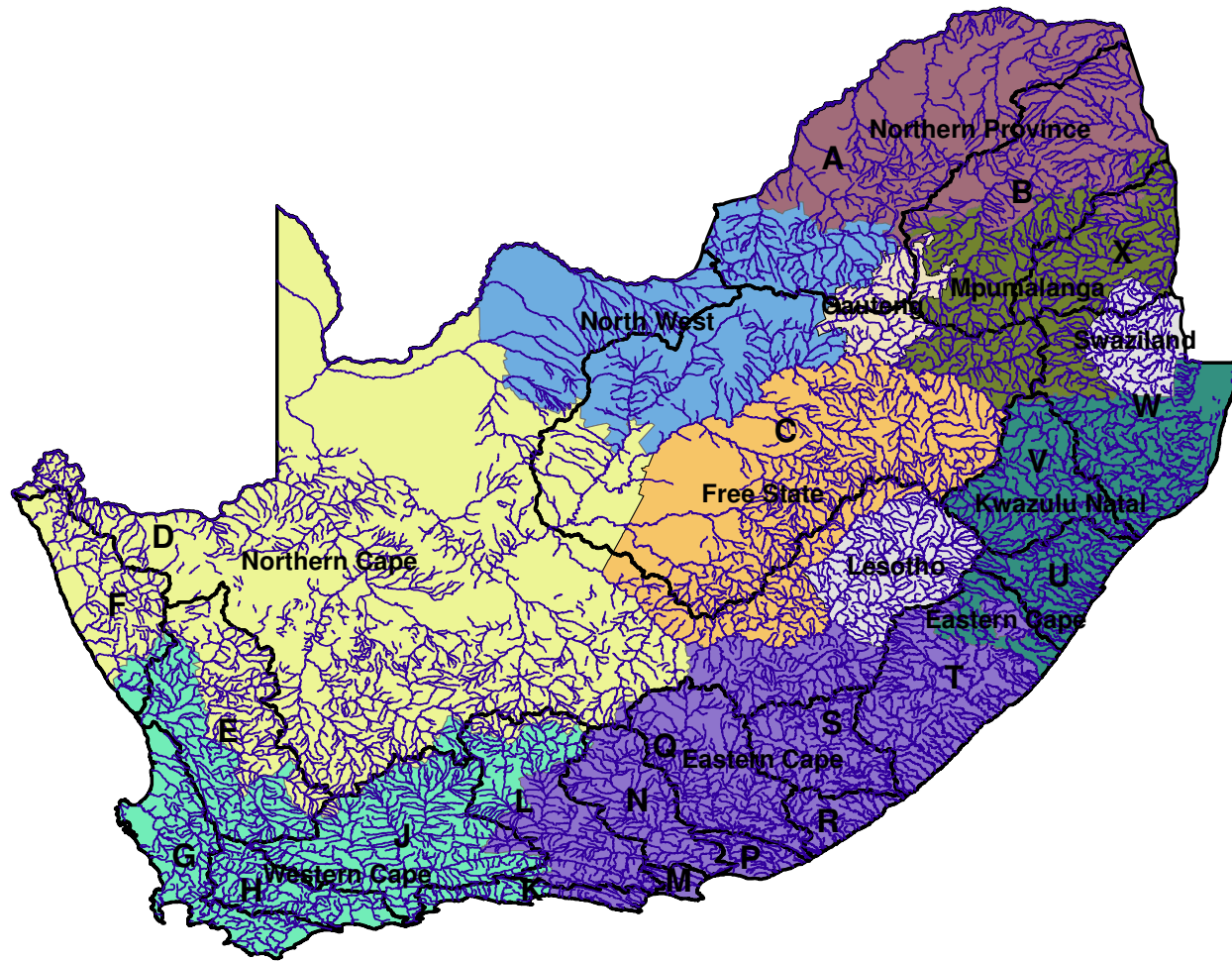
In terms of Section 6(1)(c) water management areas for South Africa was established (South Africa, 1998(a)) which is indicated in Map 3.30 on the next page. It should be noted that the boundaries of the water management areas do not follow South Africa's provincial boundaries.

The water management areas are protected, used, managed and controlled by either catchment management agencies (if it has been delegated the relevant powers) or the Department of Water Affairs ("DWA") (if the powers have not yet been delegated) in terms of a catchment management strategy (Section 8(1) of the NWA) (South Africa, 1998(a)).

Such a catchment management strategy must, in terms of Section 9(a) of the NWA take the resource quality objectives and the requirements of the Reserve into account (South Africa, 1998(a)). The resource quality objectives may, in terms of Section 13(3)(e) – (g) relate to the:

- (e) Quality of the water resource (it must be borne in mind that "quality" includes the biological characteristics of the water and the characteristics, condition and distribution of the aquatic biota (e.g. freshwater fish));
- (f) Characteristics and distribution of aquatic biota (e.g. freshwater fish); and
- (g) Regulation or prohibition of instream or landbased activities which may affect the quality of the water resource (e.g. freshwater angling) (South Africa, 1998(a)).

Map3.30: South Africa's water management areas



Such a catchment management strategy must, in terms of Section 9(a) of the NWA take the resource quality objectives and the requirements of the Reserve into account (South Africa, 1998(a)). The resource quality objectives may, in terms of Section 13(3)(e) – (g) relate to the:

- (e) Quality of the water resource (it must be borne in mind that “quality” includes the biological characteristics of the water and the characteristics, condition and distribution of the aquatic biota (e.g. freshwater fish));
- (f) Characteristics and distribution of aquatic biota (e.g. freshwater fish); and
- (g) Regulation or prohibition of instream or landbased activities which may affect the quality of the water resource (e.g. freshwater angling) (South Africa, 1998(a)).

In terms of Schedule 3(1)(b) of the NWA, a catchment management agency may protect the resource quality within its water management area (South Africa, 1998(a)). In terms of Schedule 3(3) a catchment management agency may make rules to regulate water use regarding to, inter alia, the manner in which the water may be used (South Africa, 1998(a)).

It is submitted that, in the light of the above, catchment management agencies are, in terms of the NWA mandated to play a big role in the protection of indigenous freshwater fish and to regulate freshwater angling.

3.2.5. The Marine Living Resources Act

As this dissertation focuses on freshwater angling specifically, the Marine Living Resources Act 18 of 1998 (South Africa, 1998(b) and the Regulations issued in terms thereof will not be analysed, suffice to say that it deals with all fish in the sea on a national basis. A single angling licence applicable to all sea fishes in the whole South Africa may be obtained from the South African Post Office.

CHAPTER 4

QUESTIONNAIRE RESULTS

4.1. Introduction

As stated in paragraph 2.2, questionnaires were completed by anglers in order to reach the research objective, as the freshwater angling legislation impacts them directly.

It is reiterated that the following must be taken into account when analysing the questionnaires:

- Not all the questions had mere “yes” or “no” answers. Respondents were allowed to give more than one answer per question.
- In cases where some questions were left unanswered, the results were compiled by focussing on the number of answers given to the specific question, rather than the total number of respondents.

4.2. Do you think we should have angling licences in SA at all?

The first question was: “Do you think we should have angling licences in SA at all?” It was very interesting to see that 89% of the anglers were in favour of angling licences, given the fact that, in the author’s experience at least, anglers do not buy angling licences anymore. Comments by the pro-licence respondents include:

- *“Without angling licences our waters will be swept soon”.*
- *“Follows the ‘user pays’ principle. Without licences chaos results”.*
- *“Fees for licences to be utilised for maintaining and securing fishing grounds”.*
- *“To control the quantity/size of fish caught and not released”.*
- *“In order to protect our fish species through legislation”.*

Comments by respondents opposed to angling licences include:

- *“The fees go into the general fiscus and not used in conservation”.*
- *“Licence fees are not channelled back to anglers. It goes missing into somebody’s pocket”.*

It is submitted that the positive sentiment towards angling licences should be read together with the responses to question 2.

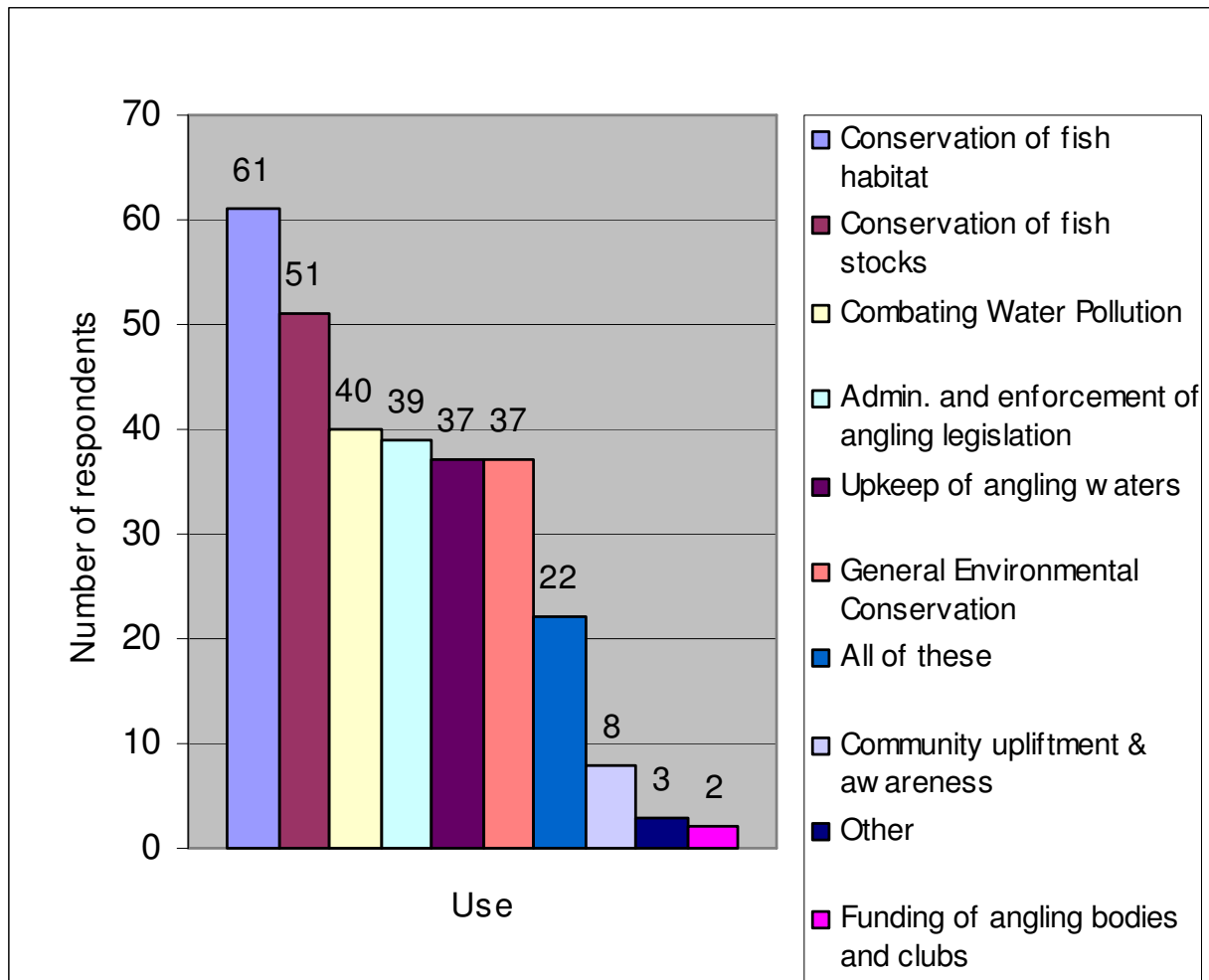
4.3. What should the licence fees be used for?

The results to this question are reflected in Figure 4.1. The respondents were not limited to pick just one answer, but had the opportunity to choose more than one option. As stated above, the respondent’s positive attitude regarding angling licences must be read in conjunction with the response to this question. It is clear that the majority of readers were in favour of angling licences provided that the money is ploughed back into angling.

Some of the comments to this question include:

- *“Moneys should be used to upgrade fishing facilities”*
- *“Hengel het die potensiaal om miljoene Rande te genereer en werk te skep”.*
- *“Any money collected must be used only for the control and protection of fishing”.*
- *“Get breeding grounds like St. Lucia open for fish, keep trollers away, control fish kraals, no gill nets”.*

Figure 4.1: What should the licence fees be used for?



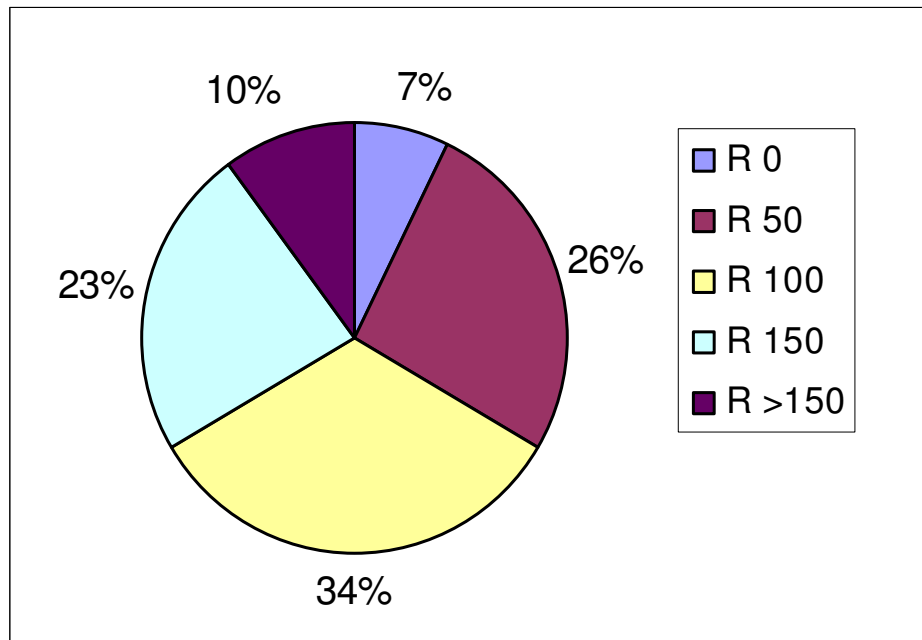
4.4. How much are you willing to pay for a national angling licence (per year)?

The results to this question are reflected in Figure 4.2. The majority of the respondents (34%) indicated that they would be willing to pay a R100 per year for a national freshwater angling licence. In total, 67% of the respondents indicated that they were willing to pay R100 or more per annum.

These results must, yet again, be linked to question 2. Quite a few respondents said they are willing to pay for an angling licence, but then the income must be used “for the

correct reason". It is submitted that the results show that the majority of anglers are willing to pay for angling licences, but then the income generated must be used to promote angling (e.g. conservation of fish habitat, fish stocks, combating water pollution, administration and enforcement of angling legislation and the upkeep of angling waters).

Figure 4.2: How much are you willing to pay for a national angling licence?



Some of the comments to this question include:

- "... if there is breeding and proper control, I'll pay R200".
- "Provided that the money is utilised for the purpose required and is administered by an independent association (something like an NGO) with the national Department of Water Affairs and the Department of Environmental Affairs having an overseeing capacity".

4.5. Is there a need for a single national angling licence?

An overwhelming majority of the respondents (80%) indicated that a single licence is

required. If it is taken into account that the persons who responded negatively to this question, were those who were opposed to angling licences as such (see question 1), it can be surmised that the great majority of respondents in favour of licences, are also in favour of a single national angling licence.

The reasons given by the respondents confirm the author's analysis of angling legislation in South Africa and are indicative of their frustration with the current fragmented state of affairs. Comments received include the following:

- *"This will stop confusion and then you can't say you didn't know"*
- *"If you fish all over the country you don't have to have more than 1 licence"*
- *"Al die reëls op provinsies moet as een wees, te veel laat net verwarring"*
- *"To make things more simple"*
- *"Dit sal makliker wees om te beheer"*
- *"Onmoontlik om verskillende lisensies te bekom. Sukkel selfs om in jou eie streek lisensies te kry"*

However, the respondents opposed to a national angling licence made valid points:

- *"All provinces are different in biodiversity"*
- *"But there has to be specific rules concerning species in the different systems"*
- *"Subject to regional licence conditions depending on conservation status"*

It seems that, while the majority of respondent's are in favour of a national angling licence, it is important to make sure that the conservation status of fish species in different water systems is taken into account when drafting size and bag limits.

4.6. Should there be a single, national law for angling?

90% of the respondents were in favour a single law dealing with angling in South Africa.

The comments that were received include:

- *“Fish knows no political boundaries and one should only differentiate based on either species scarceness or catchments.”*
- *“Yes, with teeth, and with clarity so that it can be understood and readily enforced. We lack the skills and resources at provincial level, and we would end up with skewed and inconsistent/more misinformed approaches”.*

4.7. Should there be separate licences for fresh and salt water angling?

The respondents were divided regarding this issue with a small majority (59%) in favour of separate licences and a minority of 41% against. The distinction between salt and freshwater makes sense to the author, as there are great differences between the fresh and saltwater species and angling methods.

Comments of respondents in favour of separate licences include:

- *“Because the needs and methods for conservation differ totally”.*
- *“Both have different needs”.*
- *“More practical”.*

Comments of respondents opposed to separate licences include the following:

- *“Most anglers fish inland and at the coast”.*
- *“Why complicate things?”*
- *“Dit sal die verkryging en toepassing bemoeilik”.*

It must be born in mind that estuaries, which form the interface between the marine and freshwater environments, and harbours species from both, can be regarded as a

potentially problematic area. Careful consideration should be given to the following questions if new, sensible legislation is to be drafted:

- Should estuaries be regarded as freshwater or marine?
- Should angling for estuarine species be regulated in terms of the Marine Living Resources Act or rather by other legislation?

4.8. Should there be separate legislation for each province, each with its own licence?

90% of the respondents were against separate laws and licences for each province. Some of the comments include:

- *“Dit sal toepassing bemoeilik”*
- *“If I live in the Free State and fish in the Northern Cape once a year I need to have 2 licences. Much more convenient with a national licence”*
- *“Simplicity and centralised control and audit. Unsound scientific base at provincial level”.*

4.9. Should there be separate legislation for each province which is summarised on a single national angling licence?

This question was specifically asked to highlight the option that each province's unique requirements can still be addressed while anglers have the luxury of obtaining just one licence. However, 69% of the respondents were opposed to this idea and only 31% in favour thereof. Some of the comments include:

- *“Too complicated. 1 Country – 1 Land – 1 Licence”.*
- *“Onnodig”*
- *Dit sal nie werk nie”.*

4.10. Should there be separate legislation and licences for each province?

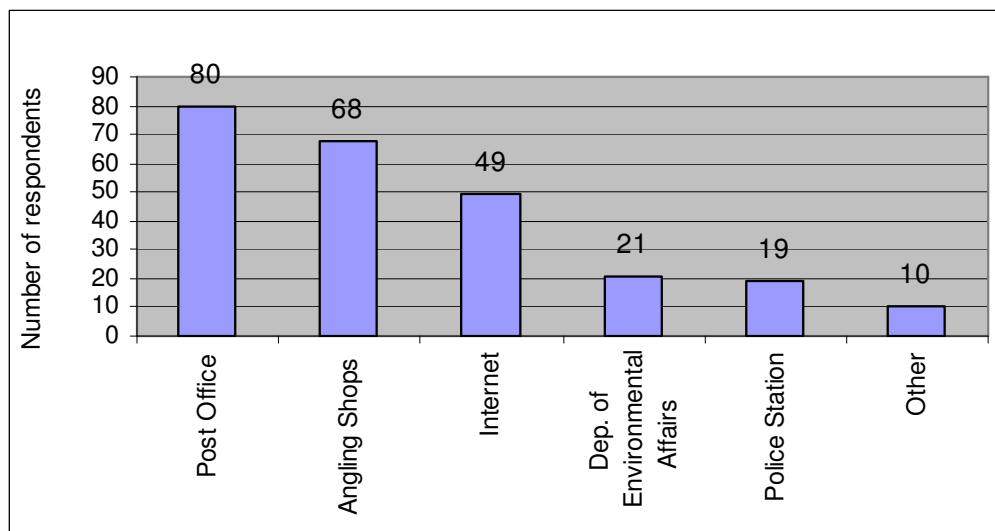
The overwhelming majority of respondents (92%) were opposed to this suggestion. The results highlighted the opposition to the current state of affairs and confirm the affinity towards a single, national licence (see paragraph 4.6). Some of the comments include:

- *“Separate the 3 coastal provinces from the 6 inland provinces”.*
- *“Difficult to remember other province’s laws”.*
- *“Confusing”.*
- *“I think an all-in-one would be easier to sell i.e. more attractive”.*

4.11. Where should one be able to obtain an angling licence?

The results to this question are reflected in Figure 4.3. The respondents were allowed to give more than one answer to this question. The figures below, therefore, represent the actual number of answers per option and not the percentage of the total of respondents.

Figure 4.3: Where should one be able to obtain an angling licence?



The Post Office and angling shops are the most popular venues for obtaining angling licences. The fairly low number of responses calling for internet licensing (as opposed to obtaining licences from the Post Office and angling shops) was quite surprising to the author. One of the challenges faced at government departments is the lack of manpower. The author is of the opinion that an electronic system will minimise the need for manpower and the funds can go directly to a dedicated bank account to be used for angling related expenses exclusively. Some of the comments by the respondents include:

- *“All anglers visit tackle shops, some have internet”.*
- *“All of these”*
- *“As many places as possible”*

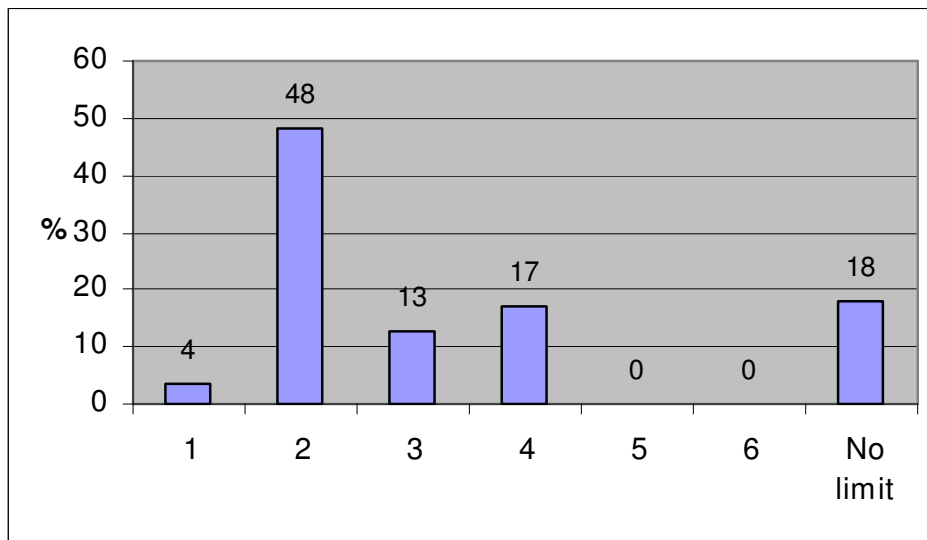
4.12. How many rods should an angler be allowed to fish with?

The results are reflected in Figure 4.4. Most of the provincial laws limit the number of fishing rods (referred to as “lines” in the laws) to 2 per person. The author’s personal view is that the number of rods should not be a factor at all if catch-and-release is practised and if the legislated bag and size limits are complied with. When catching alien or invasive fish species, the more rods the better as one can assist the authorities in trying to get rid of them.

At first glance it seems that the majority of respondents (48%) want the number of rods limited to 2. However, another 48% are in favour of more than 2 rods per person (13% in favour of three rods per person, 17% in favour of four rods per person and 18% in favour of the use of an unlimited number of rods). Only 4% of the respondents were of the opinion that one rod per angler is sufficient. Some of the respondents’ comments include:

- *“4 is still a reasonable number. It’s not about the rods, but about your bag limits”.*
- *“Twee per teikenspesie”.*
- *“There isn’t no point in restricting the number of rods.”*
- *“Why would an angler use more than two?”*

Table 4.4: How many rods should an angler be allowed to fish with?



4.13. How many hooks per rod should an angler be allowed to fish with?

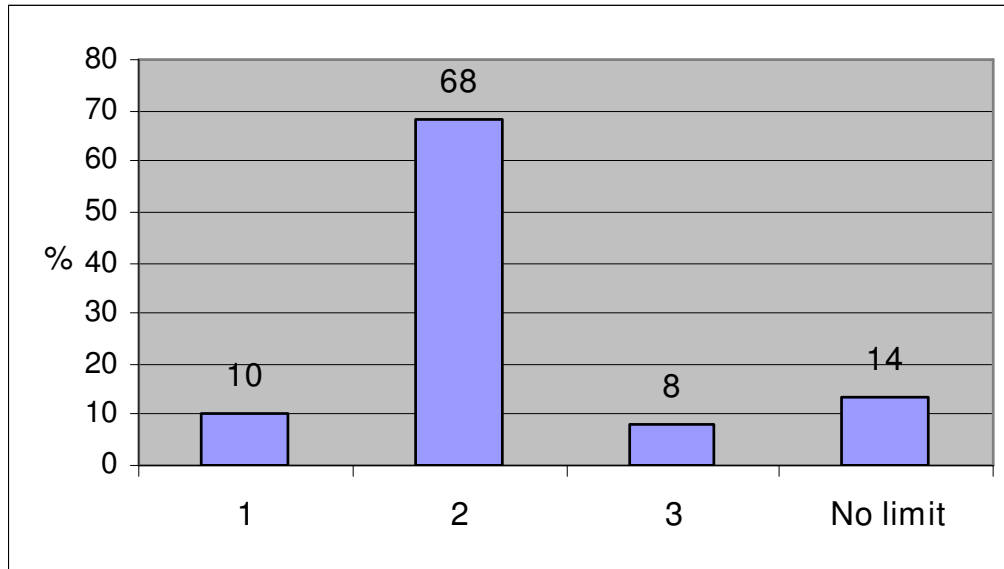
The results to this question are reflected in Figure 4.5. All provinces, except the pre-1993 Natal and Transkei, allow a maximum of 2 hooks per rod (line). It seems that the respondents are content with this number. As a matter of fact, only 22% were in favour of using more than two hooks per rod.

Some of the comments regarding the number of hooks that may be used, include:

- *“No more than 2. If the fish don’t take 1 of the 2 then it won’t take”*
- *“More than two only cause lines to hook and strangle underwater that kill fish”.*

- *“2 single hooks are sufficient”.*

Figure 4.5: How many hooks per rod should an angler be allowed to fish with?



4.14. Should anglers be prohibited from using keep nets?

The reason this question was asked is because of the fact that fish get injured in keep nets. Anglers will quite often keep fish in a keep net for a day or weekend only to release the fish when they go home. A large number of these fish do not survive. The majority of anglers (82%), however, are opposed to the banning of keep nets with 18% indicating that keep nets should be outlawed. Some of the comments regarding this issue include:

- *“No, but catch and release should be promoted as a counter balance”.*
- *“Some people keep fish for eating”*
- *“Hou net vis wat geëet gaan word”*
- *Some species need to be controlled. Not all is catch and release”.*

4.15. Should all species of fish caught be released?

This question was asked because there is an increasing trend amongst anglers to practice catch-and-release (with regard to both indigenous and invasive species) on the one hand and the pending prohibition of the practice of catch-and-release with regard to alien and invasive freshwater fish species in terms of the NEMBA and AIS Regulations on the other hand.

56% of the respondents said that all fish species caught should not be released, while 28% indicated that only indigenous species should be released. 16% said that all species should be released. Some of the comments include:

- *“Carp should not be released – make space for other fish”.*
- *“Yes, unless it’s a problem species”.*
- *“Yes, it’s not the fish’s fault it’s in our system”*
- *“No, keep for the pan”*

4.16. Should feeding places be allowed?

The making of feeding places has been a bone of contention for many years, as it is used to lure fish to the angler’s bait. It also increases the chances of catching more fish per angling session. Some anglers, the author included, are of the opinion that, if catch-and-release is practiced regarding indigenous species, no harm is done with the making of a feeding place. With regard to alien or invasive species, anglers can assist the DEA or provincial government by catching and keeping more fish.

Other anglers strongly feel that feeding places are unsporting and have likened it to “canned lion hunting”. Another negative of feeding places is that if you have not made one, but your neighbour has, he will be catching fish and you not. Even if you make a

feeding place, but your neighbour did so long before you arrived, you will also battle to get a bite.

Ultimately anglers are divided over this issue, with 51% opposed to feeding places and 49% in favour thereof. Some of the respondents' comments include:

- *"No. I believe this is a sport and should be fair for both fish and fisherman."*
- *"No. Not fair to any party".*
- *"Yes, but no bags or cages".*
- *"Yes. Feeding places should be allowed as this has become a specialised part of angling and usually affects only one species of fish, limiting the number of fish per angler will result in the rest being released anyway. The baits used as feed in feeding places has resulted in the creation of many badly needed jobs that will be lost if feeding places are not allowed."*

4.17. Should markers for feeding places be allowed?

Markers are floating objects, such as an empty plastic bottle, fastened to a length of rope or line which is, in turn, fastened to a heavy object such as a brick. The brick is put into the water and allowed to sink right where the feeding place is made, while the plastic bottle floats on top of the water, indicating to the angler where the feeding place is.

The results show that some anglers who are pro-feeding places, are opposed to the using of markers because it is seen to be unsporting and it can create pollution as quite a number of anglers have the energy to put a marker in the water, but not to take it out. A marker can also create a danger to boats, skiers and aquatic fauna. The majority of respondents (66%) indicated that they were opposed to the use of markers while only 34% were in favour thereof. Some of the comments include:

- *“Definitely not!!! Angling is a sport and should not be made less so by tilting the playing field too much. Feeding places should not be marked as this will result in the markers remaining in the water once the anglers have left. Anglers on the whole are responsible, but many humans are lazy and many of the anglers will ‘forget’ the markers when packing up. The markers are unsightly and form part of pollution if left, creating opportunities where waterfowl can become entangled and drown or die.”*

4.18. Should freshwater anglers be allowed to fish with live bait?

This question was asked for two reasons:

- Some provinces allow live bait, but not live fish, to be used (e.g. Gauteng, Limpopo and Mpumalanga). In other provinces live fish may indeed be used as live bait (e.g. Northern and Western Cape) and
- One may use live fish as bait when angling in the sea (irrespective in which province you are), but not in some freshwater resources.

The large majority of respondents (76%) were in favour of using live fish as bait in freshwater, with only 24% opposed thereto. Some of the respondent’s comments include the following:

- *“Yes. You would have to differentiate between worms, crickets, platties and fish as well as study the cruelty to animals act”.*
- *“Yes. Predatory fish hunts live fish in any case”.*
- *“Yes, but with restrictions”.*
- *Yes, but live bait should only be from sustainable resources”.*

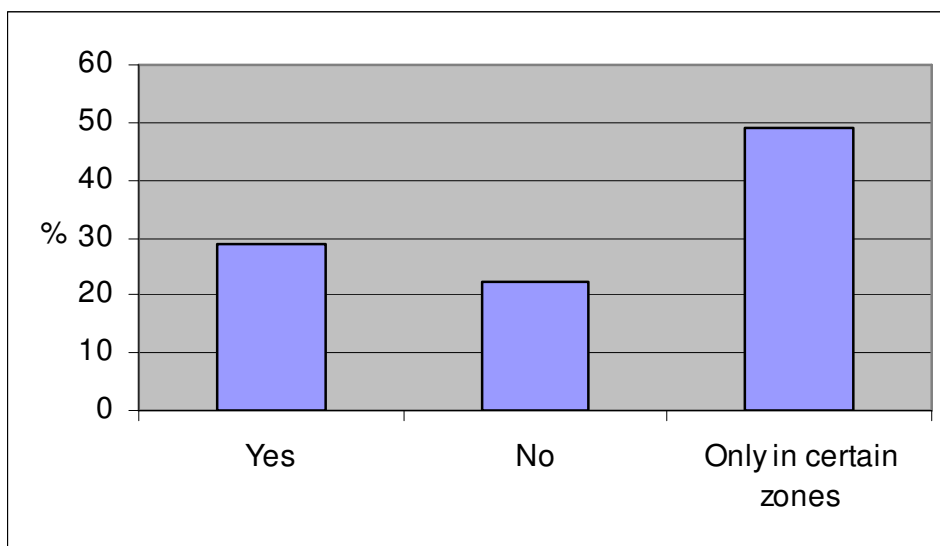
4.19. Should anglers be forced not to return any alien invasive species (bass, carp & trout) to our waters?

This question was not answered by the Tight Lines respondents, as indicated in paragraph 2.2. The results to this question are reflected in Figure 4.6. This question was asked in the light of the fact that the NEMBA and AIS Regulations will, in future, prohibit the catching and releasing of listed invasive freshwater fish species.

The majority of respondents (49%) were of the opinion that prohibition should only be applicable to specific waters, while 29% were of the opinion that alien invasive fish should never be returned and 22% stated that anglers should not be forced to keep alien invasive fish. Some of the respondents' comments include the following:

- *“Yes, except in isolated man-made ponds with no connection to natural water bodies”.*
- *“Yes, it’s a good idea, the practice to be encouraged through better education/improved communication – how to enforce?”*

Figure 4.6: Should anglers be forced not to return any alien invasive species (bass, carp & trout) to our waters?



4.20. Should fishing with gill nets/any other manner of fishing that does not involve a rod and reel be allowed?

This question was not answered by the Tight Lines respondents, as indicated in paragraph 2.2.

The majority of respondents (72%) were against the use of any equipment other than normal angling gear to catch fish. However, the author was quite surprised to note that 28% of the respondents were in favour of using alternative fishing methods, until it was realised that some of the respondents use so-called cast-nets to catch baitfish. While this practice is regarded as acceptable, the respondents frowned upon indiscriminate fishing methods, such as gill netting. Some of the comments include:

- *“No. Indiscriminate fishing is bad”.*
- *“No, not in freshwater”.*
- *“Yes. Only cast-nets to get baitfish”.*
- *“Yes. Legislation allows for bait harvesting with certain licensed nets. Illegal gill netting should be totally outlawed”.*

4.21. Should anglers in possession of an angling licence be allowed to enter any angling waters, without having to pay an entrance fee?

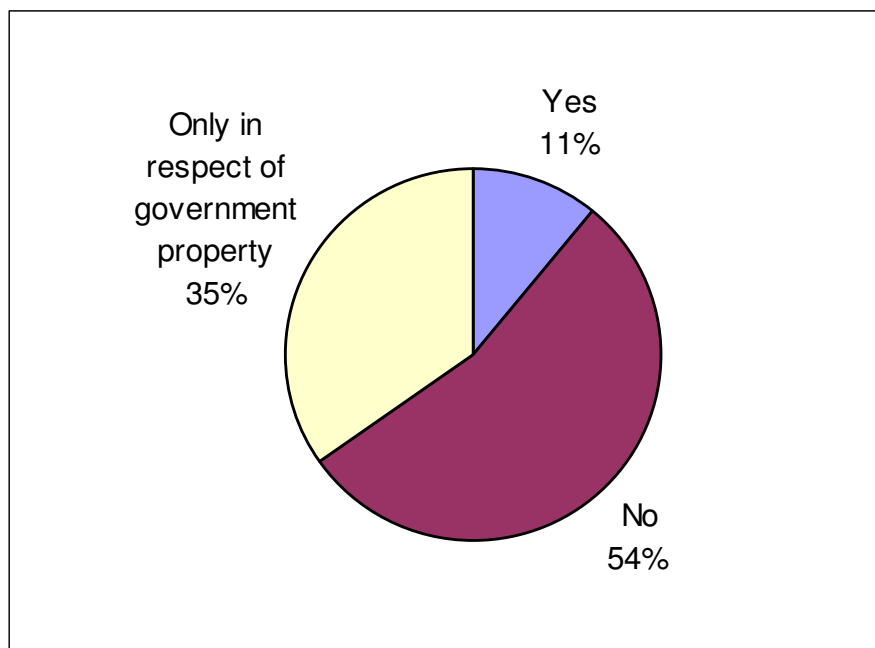
This question was not answered by the Tight Lines respondents, as indicated in paragraph 2.2.

The results to this question are reflected in Figure 4.7. The reason for putting this question to the respondents was that author is aware of the opinion being expressed that government property belongs to the citizens of South Africa. Therefore, while it is understood that an angling licence serves a purpose, the income generated by the sale

of licences should be used to grant free entry onto government land which is situated adjacent to angling waters. The author wanted to assess anglers' stance on this issue.

The majority of respondents (54%) were opposed to an angling licence being a tool to obtain entry into "angling property". However, a 35% was in favour of it being used to gain entry to government property.

Figure 4.7: Should anglers in possession of an angling licence be allowed to enter any angling waters, without having to pay an entrance fee?



Some of the comments include:

- *"No, but the money must go to conserving and bettering that area. Not to support people or build houses".*
- *"Yes. This can be a separate license that a person pay a larger amount on, but not linked to any governmental departments".*
- *"Only in respect of government property". Exactly my point. If you pay the powers-that-be to fish, you must be allowed access to the very venue/s you pay to develop/keep up?*

- *“No. Private areas should be respected. Government areas should be managed and payment should be according to facilities provided.”*

4.22. Conclusion

It is submitted that the concerns raised in Chapter 3 of this dissertation were not merely theoretical. The respondents share the same concerns. It is heartening to note that the majority of anglers are conservation-minded, and do not mind that their sport is regulated, provided that the rules of the game are reasonable. Fragmented legislation must make way for simple, effective national legislation. With regard to licences, it is clear that anglers would not mind to pay a licence fee, but then the income generated therefrom must be utilised to protect their sport, which by definition includes the fish and their habitat.

CHAPTER 5

CONCLUSION

In this chapter conclusions are drawn from the data obtained in order to address the sub-objectives, namely:

- To establish what the purpose of legislation governing freshwater angling in South Africa is;
- To establish whether the current legislative framework for freshwater angling in South Africa is aligned with such purpose;
- To gauge the views of anglers and regulating authorities on the current legislative framework; and
- To make recommendations for an improved legislative framework for freshwater angling in South Africa.

5.1. The purpose of South African freshwater angling legislation

In order to ascertain what the purpose of angling legislation is, the Constitution, National Environmental Management Act, National Environmental Management: Biodiversity Act and the provincial legislation should be analysed.

5.1.1. The Constitution

As the Constitution is the supreme law in South Africa and other laws must comply therewith, it is logical to look for the purpose in Section 24 thereof (South Africa, 1996), the salient points of which are:

- Everyone has the right to an environment that is not harmful to their well-being;

- Everyone has the right to have indigenous freshwater fish protected through reasonable legislative measures that:
 - Promote its conservation; and
 - Secure the ecologically sustainable use thereof.

5.1.2. The NEMA

The second act that must be taken into account is the NEMA, as it is South Africa's framework environmental legislation which guides the interpretation, administration and implementation of all laws pertaining to the protection or management of the environment. The important principles set out in Section 2 of NEMA (South Africa, 1998(c)) which must be taken into account when addressing the issue of the purpose of freshwater angling legislation are, *inter alia*:

- The management of freshwater angling must place freshwater anglers and their needs at the forefront of its concern, and serve their social interests equitably;
- The use and exploitation of freshwater fish must not exceed the level beyond which their integrity is jeopardised;
- Equitable access to freshwater fish to ensure human well-being must be pursued;
- The beneficial use of freshwater fish (i.e. angling) must serve the public interest;
- Indigenous freshwater fish species must be protected as the people's common heritage; and
- The policies, legislation and actions relating to freshwater angling must be coordinated and harmonised between the different spheres and departments of government.

Please note that the above-mentioned principles have been adapted to freshwater angling specifically – for the *verbatim* version of the principles, please refer Section 2 of NEMA).

5.1.3. **The NEMBA**

Section 2 of the NEMBA (South Africa, 2004(a)) provides for, *inter alia*, the:

- Management and conservation of biological diversity; and
- Use of indigenous biological resources in a sustainable manner.

According to Willemse (2005), the NEMBA is a specific biodiversity instrument which forms part of a suite of environmental legislative tools that is tailor-made for specific purposes. Adapting Willemse's view of NEMBA, the purpose thereof, with regard to freshwater angling, includes the:

- Effective conservation of freshwater fish;
- Responsible use of freshwater fish;
- Efficient management of the impact of anglers on freshwater fish;
- Standardisation of authorisations;
- Ensuring nationally valid authorisations; and
- Uniformity in enforcement.

5.1.4. **Provincial legislation**

Few of the provincial laws dealing with freshwater angling specify the purpose thereof. Most only refer in their preambles that it deals with nature conservation. The more modern legislation, such as the Limpopo Environmental Management Act (Section 2(1)) does state its specific purpose, e.g. to:

- Manage and protect the environment in Limpopo;
- Secure the responsible use of the natural resources in Limpopo; and
- To contribute to the progressive realisation of the fundamental rights contained in Section 24 of the Constitution (Limpopo, 2003).

Having regard to the analysis of the provincial legislation in Chapter 3 of this dissertation, it is suggested that the purpose thereof is to protect freshwater fish and to

regulate freshwater angling within its boundaries. Although the modern catchphrase “sustainable use” did not exist in the era when most of the provincial legislation was drafted, it is the author’s opinion that this is indeed one of the purposes thereof, as it deals with both the use and protection of freshwater fish.

5.1.5. Conclusion

In the light of the above, it is submitted that the purpose of freshwater angling legislation is to:

- Promote the conservation of freshwater fish; and
- Facilitate the sustainable use thereof.

Such legislation must:

- Be reasonable; and
- Facilitate intergovernmental co-ordination and harmonisation of legislation relating to freshwater angling.

5.2. Is the current legislative framework for freshwater angling in South Africa aligned with the purpose thereof?

In order to assess whether the current legislative framework for freshwater angling in South Africa aligned with the purpose thereof, it is submitted that the following questions must be answered:

- Does South African freshwater angling legislation facilitate the conservation and sustainable use of freshwater fish?
- Is the South African freshwater angling legislation reasonable, as required by the Constitution?

- Does South African freshwater angling legislation facilitate intergovernmental coordination and harmonisation between the different spheres and departments of government?
- Does South African freshwater angling legislation facilitate compliance with the postulates of justice?

5.2.1. Does South African freshwater angling legislation facilitate the conservation and sustainable use of freshwater fish?

It was shown in Chapter 3 of this dissertation that:

- A number of indigenous fish species are not afforded any protection (e.g. the Papermouth and Eel species), while a number of alien and invasive fish species (such as the Bass and Trout species) are actually protected. Although the listing of species in terms of the TOPS Regulations is a step in the right direction, a large number of indigenous species falls through the cracks of legislative fragmentation;
- The bag and size limits for species are archaic. The provincial legislation authorises the removal of large numbers of indigenous species from the water (e.g. a bag limit of 20 Blue Kurper per person per day in the North-West), but limits the numbers of alien and invasives that may be removed (e.g. Trout in KwaZulu-Natal);
- Catch-and-release is not encouraged by legislation, except in the North-West;
- Sustainable use can only be calculated if the population status of each species in each waterbody is known. This is confirmed by Karssing (2009) from the Ezemvelo KZN Wildlife who states:

“I would very much like to see the KZN Yellowfish (Labeobarbus natalensis) listed as a TOPS protected species since it is endemic to the province and I suspect long lived and slow growing. My gut feeling is that it would require further research (empirical data) on this species to substantiate its TOPS listing.”

Such studies were never undertaken. Instead, during the drafting of the TOPS Lists, the focus was on the restricted activity, rather than the status of the species. It is acknowledged, however, that such studies will be cumbersome, expensive and difficult to undertake because of, inter alia, the following:

- It will be much more difficult to do that, for example, game counts. One will have to catch, tag and release the fish and the re-catch it again, which will prove to be very difficult and, most probably, not very effective;
- The studies will have to be repeated regularly; and
- Populations of species in different water bodies differ naturally. It will, therefore, be difficult to conduct a scientifically valid study;

This again serves as proof that legislation, such as the TOPS Regulations follows a terrestrial approach, while a different approach is required for the management and regulation of freshwater; and

- Licences are not available or not even applied for.

In the light of the above it is submitted that South African freshwater angling legislation does not facilitate the conservation and sustainable use of freshwater fish.

5.2.2. Is the South African freshwater angling legislation reasonable, as required by the Constitution?

South African freshwater angling legislation does not afford freshwater fish reasonable protection, nor does it facilitate sustainable use thereof. The fragmented nature of the freshwater angling legislation results in, for example, different bag and size limits for fish caught in the same water body, but from different provinces. Largemouth Yellowfish caught in the Vaal River on the North-West bank of the river, must immediately be released, while an angler fishing from the Free State bank, may keep 10!

In light of the above, the author is of the opinion that the data shows the South African freshwater angling legislation is not reasonable.

5.2.3. Does South African freshwater angling legislation facilitate intergovernmental co-ordination and harmonisation between the different spheres and departments of government?

It is clear from the analysis in Chapter 3 that South African freshwater angling legislation does not facilitate intergovernmental co-ordination and harmonisation between the different spheres and departments of government. Boshoff (2009), for example, placed the blame of the failure of the TOPS Regulations (as far as freshwater angling is concerned) squarely on the shoulders of the provinces. In this regard, please refer to paragraph 5.4.2 below. The provinces, however, are waiting for national government to finalise its legislation before it will move to get their own houses in order.

The existence of up to three pieces of legislation governing freshwater angling in a single province (e.g. the Eastern Cape and North-West), as well as the difference in bag and size limits for fish from a shared watercourse further indicates fragmentation rather than co-ordination and harmonisation.

Boshoff's admission that the NEMBA and TOPS regulations failed to facilitate co-ordination and harmonisation was discussed in paragraph 3.2.3.4.3 above.

5.2.4. Does South African freshwater angling legislation facilitate comply with the postulates of justice?

The postulates of justice are reasonableness, generality, equality, certainty and fair process.

Reasonableness

It was shown in paragraph 5.2.2 that the current South African freshwater angling legislation is not reasonable. It is submitted that this is one of the reasons why anglers have not applied for TOPS permits. One of the reasons why the TOPS Regulations, as far as freshwater angling is concerned, do not find ready obedience is because it is not reasonable.

Generality

According to Hahlo and Kahn (1973:32) laws should consist of general rules which apply equally to all persons. It is submitted that South African freshwater angling legislation does indeed apply equally to all persons. However, according to Hahlo and Kahn (1973:32) it is not enough to have general rules, it must also be applied consistently. To date, the author is not aware that South Africa's freshwater angling legislation has been enforced against one person and not against the other.

Equality

"Equality is another offspring of reasonableness. Persons in the same legal condition can expect to be dealt with alike." (Hahlo and Kahn, 1973:34).

It is submitted that the legislative freshwater angling framework, in certain circumstances, does not comply with this requirement, e.g. anglers on different banks of a river may be treated differently regarding the catching of the same species of fish.

Certainty

According to Hahlo and Kahn (1973:35) generality, reasonableness and equality produce certainty. It was shown above that the generality and equality tests are not passed by the South African freshwater angling legislation. In addition, it is clear from the analysis in Chapter 3 and the comments from anglers in Chapter 4 that "certainty" is most definitely not a trait of South African freshwater angling legislation as:

- It is terribly fragmented;
- South Africa is divided into 15 “angling provinces”;
- Knowing the “rules of the game” is extremely difficult for both anglers and enforcement officials; and
- Numerous conflicts between the laws exist.

Fair process

“Fair process” deals with the just application of the rules of law (Hahlo and Kahn, 1973:38). As this actually refers to the judicial process (e.g. court cases) it will not be dealt with in this dissertation. However, it is submitted that leaving too much room for discretion to be exercised by government officials, such as in the case of the TOPS Regulations, the requirement of fair process may well be not complied with.

5.2.5. Conclusion

In conclusion it can be stated that the research shows that the current legislative framework for freshwater angling in South Africa is not aligned with the purpose thereof.

5.3. What are the views of anglers regarding the current legislative framework for freshwater angling in South Africa?

The data analysed in Chapter shows that anglers:

- Agree that South Africa’s freshwater angling legislation is too complex;
- Are in favour of angling being regulated by a single law and single licensing system;
- Are willing to pay a fair amount for an angling licence, provided that:
 - The licence is applicable to South Africa as a whole; and
 - The licensing fees are ploughed back into angling. Krüger (2010) summarises the general opinion of anglers perfectly:

“In principle I believe the requirement that the recreational angler should have a fishing permit is a good thing, as long as the revenue generated is being properly utilised for the protection and conservation of our ... environments. Sadly, I suspect it is not, as I don’t see effective or adequate policing in any of the areas I regularly fish ... I fully understand the need for regulation to avoid abuse of our natural resources, but then I want to see the revenue generated from the sale of permits being used to monitor and protect the environment I am fishing.”

5.4. Recommendations for an improved legislative framework for freshwater angling in South Africa

It is submitted that it was shown that the current legislative frame work is not aligned with the purpose thereof namely to promote the conservation of freshwater fish, while at the same time facilitating the sustainable use thereof.

It is acknowledged that the conservation of freshwater fish and the management of angling are extremely complex and that no easy fix exists. However, it is submitted that there are a few options available to improve the legislative framework for freshwater angling in South Africa, namely:

- Update the existing legislation;
- Promote integrated permits; or
- Create a new national legislative framework for freshwater angling.

However, as a point of departure it must be stated that, whichever of the recommended options are taken, the author is of the opinion that the status (e.g. the population health and size in each water body) of each freshwater fish species should be focused on, rather than the impact of a specific activity. At the moment the legislation focuses on the

impact of angling *per se* on fish populations, while angling is only a part of a number of threats.

It is submitted if the status of each fish species (be it indigenous or alien or invasive) and the threats thereto is determined in each water body where such species occur, each species will be effectively protected and managed on the basis of scientific data.

5.4.1. Update the existing legislation

The first option to improve the current South African freshwater angling framework is to leave the framework as it is (i.e. separate legislation for each province with some issues being dealt with by national legislation). This will entail that each province must ensure that:

- It has only one law dealing with freshwater angling. The multiple laws currently applicable to certain provinces (e.g. the Eastern Cape or the North-West), must be replaced with a single law;
- All freshwater fish (whether it is threatened, protected, alien or invasive) found in the province should be covered in such legislation;
- Its legislation is co-ordinated and harmonised with its neighbouring provinces in respect of fish found in watercourses shared with other provinces;

The positive quality of this option is that an angler will know in which province he finds himself in and should know which laws are applicable to him. However, the downside to this option is that he will still have at least three pieces of legislation applicable to him (i.e. the provincial legislation, the TOPS Regulations and the AIS Regulations). Legal uncertainty will still prevail.

5.4.2. Integrated permits

Another option to improve the legislative framework for freshwater angling in South Africa is to make use of a tool provided in the TOPS regulations, namely “integrated permits”.

Regulation 4(1) of the TOPS Regulations has the effect that a provincial angling licence can be regarded as a TOPS permit (South Africa, 2007(b)). However, this can only happen if the relevant provisions of both the TOPS Regulations and the provincial legislation have been complied with and the permit contains all the compulsory information required in terms of the TOPS regulations and specifies the authority that has issued the permit. Therefore, in order for the “integrated permit”-option to work, the provincial legislation will have to be amended to ensure that it is aligned with the TOPS Regulations.

Boshoff (2009) indicated that the integrated permitting system can work, but then the provinces must to their bit, something that has, to date, not been done. Boshoff (2009) went further to say that:

- Each province was supposed to conduct in depth studies regarding listed freshwater fish populations found within its borders, taking into account the criteria set out in Regulation 15 of the TOPS regulations (South Africa, 2007(b));
- As soon as the population studies were completed, the results should have been used to draft bag and size limits for each listed species;
- On the basis of the information gained from the population studies, an integrated permit can then merely be sold, instead of an angler having to fill in a detailed application form which must undergo a rigorous evaluation process.
- The provinces were also supposed to hold workshops to work out the best way to implement the TOPS regulations.
- None of the above ever occurred.
- In light hereof, Boshoff (2009) is of the opinion that the provinces were not pro-active regarding the implementation of the TOPS Regulations.

It is submitted that, even if the above-mentioned work is done by the provinces, the execution of this option will still be problematic, as:

- South Africa will still have 15 angling provinces. The mere integration with the NEMBA or TOPS Regulations or AIS Regulations will not assist with the defragmentation of the South African freshwater angling legislative framework.
- Certain fish species will still not be included in either the provincial legislation, or the TOPS Regulations. These species will still “fall through the cracks of legislative fragmentation” and will not be protected or managed at all.
- The provincial legislation (or the TOPS Regulations) will, therefore still have to be updated in order to make sure that all freshwater fish are protected or managed.
- Some provinces, such as KwaZulu-Natal and Limpopo do not require angling licences. The “integrated permit”-option will not be workable in these provinces.
- In some provinces angling licenses may be sold by angling shops. In terms of the TOPS Regulations, TOPS permits may only be issued by the Provincial Conservation Authorities. Therefore, angling licences sold by angling shops may not be regarded as integrated permits.

In the light of the above, it is submitted that this option is not workable.

5.4.3. Create a new national legislative framework for freshwater angling

The author’s final recommendation to improve the legislative framework for freshwater angling in South Africa entails an overhaul of the entire framework. As stated above, the focus of the legislation should fall on the fish and not on the activities. In light hereof it is proposed that the protection and management of freshwater fish be dealt with on a catchment basis (as opposed to a provincial basis) in terms of national legislation.

It is submitted that dealing with freshwater angling on a national basis will successfully defragment the legislative framework. It is submitted further that both anglers and the

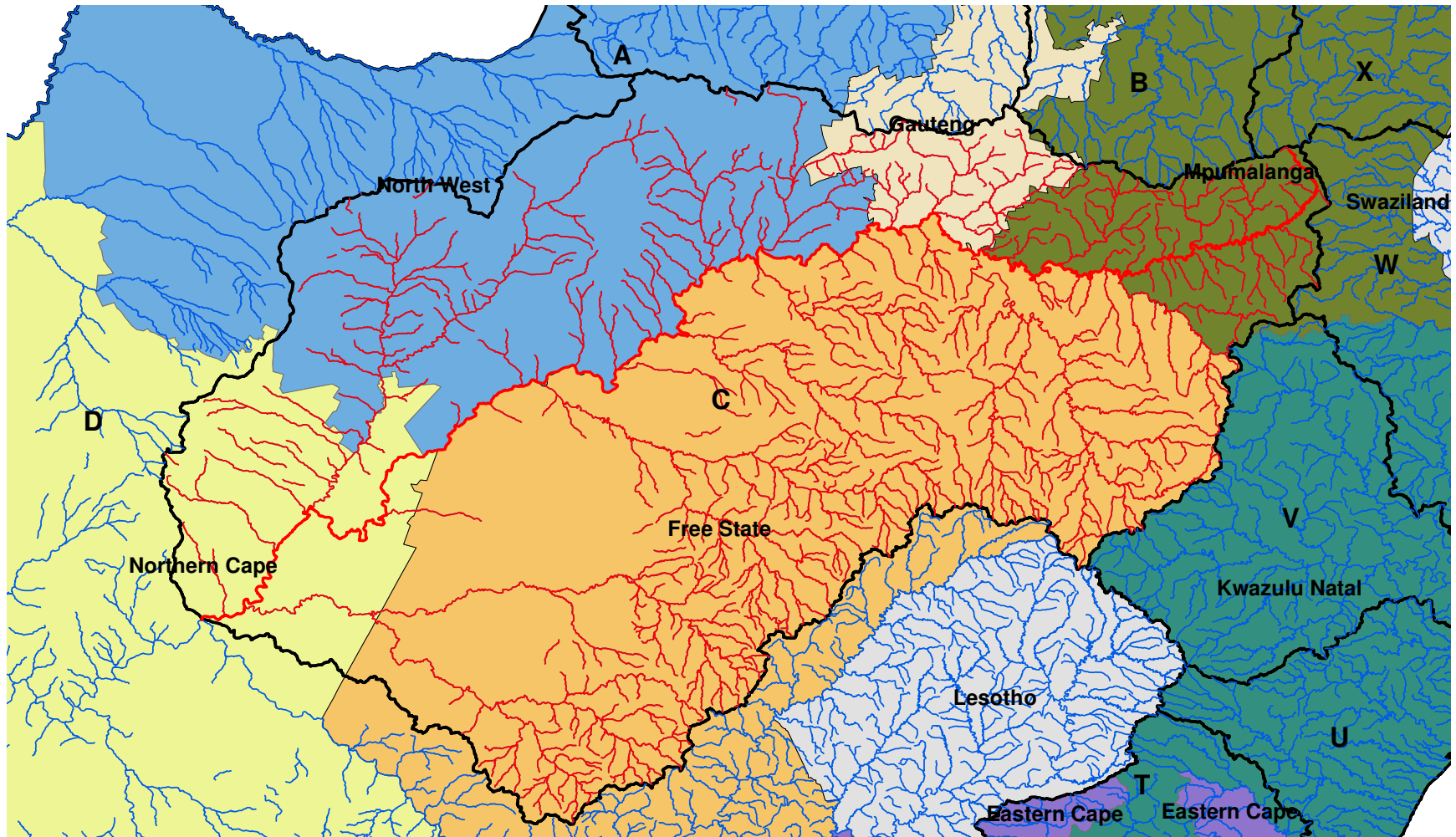
authorities (De Villiers, 2009, Boshoff 2009 and Karssing, 2009) are in favour of freshwater angling being regulated from a national perspective. Boshoff (2010) indicated to the author that the DEA is definitely considering regulating freshwater angling by means of a single, national angling licence, but that the method to be used has not been decided on yet.

It is submitted that the current national legal system (i.e. NEMBA, the TOPS regulations and the AIS regulations) can be successfully used. In terms of this method:

- All references to freshwater angling must be deleted from the provincial nature conservation legislation;
- All freshwater fish species in South Africa should be listed as threatened, protected, alien or invasive in terms of the TOPS or AIS Regulations. Although all freshwater fish species are not necessarily threatened, it is the author's submission that all indigenous freshwater fish species should at least be regarded as protected (i.e. all indigenous freshwater fish species are of such high conservation value or national importance that it requires national legislative protection);
- Such listing should be done on a water management area or catchment basis, taking into account the status and health of each fish population in each catchment (as defined by DWA) in South Africa. This is suggested because:
 - Listing on a provincial basis, as showed in Chapter 3, leads to fragmentation and unreasonableness;
 - Catchments tend to have, naturally, the same indigenous fish species, as it is cut-off from other areas. (This is the reason why the Sharptooth Catfish, for example, did not naturally occur in the Western Cape rivers.) The catchment can then be managed as a whole.
 - In this regard reference is made to Map 5.1 which indicates the Vaal River catchment. It is clear that the catchment stretches over the political boundaries of Mpumalanga, Gauteng, the Free State, North-West and the Northern Cape.
 - The same fish species occur throughout the catchment, although the distribution may differ in the different sub-catchments.

- It is submitted that, instead of having 5 provincial laws governing this area (the current position), it should be governed and managed as a unit with, for example, a single bag and size limit for a specific species, irrespective whether it is caught in Gauteng or the Free State side of the river.
- As CMAs and the DWA are mandated (as discussed in paragraph 3.2.4.4) in terms of the NWA to protect, manage and control water management areas they can assist in enforcing the freshwater angling legislation. This will increase the number of enforcement officials which will allow for better enforcement of the legislation.
- National Regulations must then be drafted. This can be done by way of adding a separate chapter to each of the TOPS and AIS regulations which deals with freshwater fish and angling exclusively. These regulations must be drafted in such a manner that all the concerns expressed in Chapters 3 and 4 of this dissertation are addressed. The problem with this method is that some fragmentation may still exist as one will still have three pieces of legislation to deal with (i.e. the NEMBA, the TOPS regulations and the AIS regulations).
- The possible above-mentioned fragmentation can be overcome by drafting a single set of regulations in terms of Sections 56 (Threatened or Protected Species), 67 (Alien Species) and 70 (Invasive Species) of the NEMBA to include all fish species.
- A single freshwater angling licence, valid throughout South Africa, can then be issued in terms of both the TOPS and AIS Regulations (e.g. the licence should deal with the bag and size limits for freshwater fish listed in terms of either the regulations).
- Maps indicating the various catchments and bag and size limits of each species in such catchment should be printed on each licence or, if impractical, it should be obtainable from the source the licence is bought (i.e. the Post Office) or downloadable from the internet.
- The licensing fees must be paid into a specific, separate account (which can be done very successfully with an electronic system) to be used only for the monitoring and enforcement required in terms of the angling legislation (including the funding of DWA or CMA's for fulfilling their NWA-mandates).

Map 5.1: Vaal River catchment



- Catch-and-release of indigenous species (to the exclusion of alien and translocated species) must be encouraged.

It is important to note, however, that the status of each population of each species of fish in each catchment (or sub-catchment, if required) must be ascertained prior to the drafting of the new regulations. This will ensure that sufficient data will be available to draft scientifically defensible size and bag limits and will make the application process for a licence redundant.

5.4.4. Recommended option

The author recommends the option detailed in paragraph 5.4.3. An overhaul of the whole system is required and the mere piecemeal updating of provincial legislation will not suffice.

5.5. Areas for further research

Because of a lack of information and the value it will add to solve the freshwater angling legislation concerns in South Africa, it is recommended that the following issues be researched:

- How should bag and size limits be calculated in order to protect breeding stock? Each freshwater fish species will have to be studied individually.
- A catchment-by-catchment survey should be done to determine the population status of each South African freshwater fish species in order to be able to draft scientifically sound legislation.
- Creating maps based on the population status to indicate the bag and size limits for each freshwater fish species in South Africa.

- What should the provisions in an angling licence be (e.g. bag and size limits, number of rods and hooks to be used, whether feeding places and markers should be allowed etc.).
- Ways of selling angling licences (e.g. at the post office, electronically etc.).
- Where should income generated by angling licences be distributed to? What must be done, in terms of legal requirements, to channel the money to nature conservation bodies? If the money is to go to nature conservation bodies:
 - Should it be utilised for angling related purposes only, or nature conservation in general?
 - How should the money to be allocated in order to ensure that it is fairly distributed amongst the various national and provincial government departments (taking into account that a national angling licence may be bought in one province, but the angling takes place in another).
- How can CMAs and the DWA be used to assist in implementation and enforcement of angling legislation in conjunction with the DEA and provincial nature conservation departments?

5.6. **Conclusion**

It is submitted that the South African freshwater angling legislation was critically analysed and the sub-objectives were reached:

- The purpose of freshwater angling legislation is:
 - To promote the conservation of freshwater fish, while simultaneously
 - Facilitating the sustainable use thereof.
- The current legislative framework is not aligned with such purpose;
- The views of anglers with regard to the current legislative framework were obtained; and
- Recommendations for an improved legislative framework for freshwater angling in South Africa were made.

It is submitted, that the South African freshwater angling legislation must adapt to changing circumstances. Lord Atkin, as quoted by Hahlo and Kahn (1973:35), aptly states that:

“When these ghosts of the past stand in the path of justice clanking their medieval chains, the proper course for the judge is to pass through them undeterred.”

It is, therefore submitted, in conclusion, that South Africa requires an urgent freshwater angling legislation revolution. If the current legislative framework is not drastically modified, our indigenous freshwater fish will not be protected and anglers’ constitutional right to the sustainable use thereof will be infringed.

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Annexure 1

Questionnaire published in the Tight Lines magazine

THE ANGLER AND THE LAW
DIE HENGELAAR EN DIE REG

Morné Viljoen is an avid angler and a legal consultant specialising in environmental, water and mining law at CLS Consulting (Pty) Ltd.

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Angling Licences Study

As stated in previous articles, numerous laws are applicable to the angler. In light hereof I have embarked on a study to assess what the best way is to protect our fresh water fish species through the regulation of angling. For this to succeed your input and buy-in as anglers are required. It would be appreciated if you could assist me in this study.

Please complete the questionnaire by marking the appropriate box with an **X** give a short reason for your answer and copy and fax it to **(012) 307- 5857** or to scan and e-mail it to **morne.viljoen@consult-cls.com**.

I wish all Tight Lines readers a blessed Christmas and wonderful 2009.
May your reels never stop screaming. Tight Lines.

Angling Licence Questionnaire

Name _____ Cell No: _____ E-Mail _____

1. Do you think we should have angling licences in SA at all?
Yes ☐ No ☐

Comment: _____

2. What should the licence fees be used for? (You may give more than one answer)
Administration and enforcement of angling legislation ☐ General Environmental Conservation ☐ Funding of angling bodies and clubs ☐ Upkeep of angling waters (e.g. supplying security or sanitation) ☐ Conservation of fish stocks (including breeding programmes) ☐ Conservation of fish habitat ☐ Combating Water Pollution ☐ Community upliftment & awareness ☐ Other ☐ All of these ☐

Comment: _____

3. How much are you willing to pay for a national angling licence (per year)?
R 0 ☐ R 50 ☐ R 100 ☐ R 150 ☐ More than R 150 ☐

Comment: _____

4. Is there a need for a single national angling licence?
Yes ☐ No ☐

Comment: _____

5. Should there be a single, national law for angling?
Yes ☐ No ☐

Comment: _____

6. Should there be separate licences for fresh and salt water angling?
Yes ☐ No ☐

Comment: _____

7. Should there be separate legislation for each province, each with its own licence?
Yes ☐ No ☐

Comment: _____

8. Should there be separate legislation for each province which is summarised on a single national angling licence?
Yes ☐ No ☐

Comment: _____

9. Should there be separate legislation and licences for each province?
Yes ☐ No ☐

Comment: _____

10. Where should one be able to obtain an angling licence?
Department of Environmental Affairs ☐ Police Station ☐
Post Office ☐ Angling Shops ☐ Internet ☐ Other ☐

Comment: _____

11. How many rods should an angler be allowed to fish with?
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ No limit ☐

Comment: _____

11. How many hooks per rod should an angler be allowed to fish with?
1 ☐ 2 ☐ 3 ☐ No limit ☐

Comment: _____

12. Should anglers be prohibited from using keep nets?
Yes ☐ No ☐

Comment: _____

13. Should all species of fish caught be released?
Yes ☐ No ☐ Only indigenous species

Comment: _____

14. Should feeding places be allowed?
Yes ☐ No ☐

Comment: _____

15. Should markers for feeding spots be allowed?
Yes ☐ No ☐

Comment: _____

16. Should fresh water anglers be allowed to fish with live bait?
Yes ☐ No ☐

Comment: _____

Annexure 2

Questionnaire circulated at the Yellowfish Working Group Conference, 2009

1. Do you think we should have angling licences in SA at all?

Yes	No
-----	----

Comment: _____

2. What should the licence fees be used for? (You may give more than one answer)

Administration and enforcement of angling legislation	General Environmental Conservation	Funding of angling bodies and clubs	Upkeep of angling waters (e.g. supplying security or sanitation)	Conservation of fish stocks (including breeding programmes/fish ladders etc.)
Conservation of fish habitat	Combating Water Pollution	Community upliftment & awareness	Other	All of these

Comment: _____

3. How much are you willing to pay for a national angling licence (per year)?

R 0	R 50	R 100	R 150	More than R 150
-----	------	-------	-------	-----------------

Comment: _____

4. Is there a need for a single national angling licence?

Yes	No
-----	----

Comment: _____

5. Should there be a single, national law for angling?

Yes	No
-----	----

Comment: _____

6. Should there be separate licences for fresh and salt water angling?

Yes	No
-----	----

Comment: _____

7. Should there be separate legislation for each province, each with its own licence?

Yes	No
-----	----

Comment: _____

8. Should there be separate legislation for each province which is summarised on a single national angling licence?

Yes	No
-----	----

Comment: _____

9. Should there be separate legislation and licences for each province?

Yes	No
-----	----

Comment: _____

10. Where should one be able to obtain an angling licence?

Department of Environmental Affairs	Police Station	Post Office	Angling Shops	Internet	Other
-------------------------------------	----------------	-------------	---------------	----------	-------

Comment: _____

11. How many rods should an angler be allowed to fish with?

1	2	3	4	5	6	No limit
---	---	---	---	---	---	----------

Comment: _____

11. How many hooks per rod should an angler be allowed to fish with?

1	2	3	No limit
---	---	---	----------

Comment: _____

12. Should anglers be prohibited from using keep nets?

Yes	No
-----	----

Comment: _____

13. Should all species of fish caught be released?

Yes	No	Only indigenous species
-----	----	-------------------------

Comment: _____

14. Should feeding places be allowed?

Yes	No
-----	----

Comment: _____

15. Should markers for feeding spots be allowed?

Yes	No
-----	----

Comment: _____

16. Should freshwater anglers be allowed to fish with live bait?

Yes	No		
-----	----	--	--

Comment: _____

17. Should anglers be forced not to return any alien invasive species (bass, carp & trout) to our waters?

Yes	No	Only in certain zones
-----	----	-----------------------

Comment: _____

18. Should fishing with gill nets/any other manner of fishing that does not involve a rod and reel be allowed?

Yes	No
-----	----

Comment: _____

19. Should anglers in possession of an angling licence be allowed to enter any angling waters, without having to pay an entrance fee?

Yes	No	Only in respect of government property
-----	----	--

Comment: _____

Annexure 3

Questionnaire results

Angling Licence Questionnaire

Please complete the questionnaire by marking the appropriate box with an **X**, give a short reason for your answer and e-mail it to morne.viljoen@consult-cla.com or fax it to (012) 307-5857

Name _____ Cell No: _____ E-Mail _____

1. Do you think we should have angling licences in SA at all?

Yes 101	No 12
----------------	--------------

Comment: _____

2. What should the licence fees be used for? (You may give more than one answer)

Administration and enforcement of angling legislation 1=39	General Environmental Conservation 2 = 37	Funding of angling bodies and clubs 10=2	Upkeep of angling waters (e.g. supplying security or sanitation) 3=37	Conservation of fish stocks (including breeding programmes/fish ladders etc.) 4=51
Conservation of fish habitat 5=61	Combating Water Pollution 6=40	Community upliftment & awareness 7=8	Other 8=3	All of these 9=22

Comment: _____

3. How much are you willing to pay for a national angling licence (per year)?

R 0 8	R 50 29	R 100 37	R 150 26	More than R 150 11
--------------	----------------	-----------------	-----------------	------------------------------

Comment: _____

4. Is there a need for a single national angling licence?

Yes 91	No 19	N/A 3
---------------	--------------	--------------

Comment: _____

6. Should there be a single, national law for angling?

Yes 102	No 11
----------------	--------------

Comment: **Avoids confusion**

6. Should there be separate licences for fresh and salt water angling?

Yes 65	No 45	N/A 2
---------------	--------------	--------------

Comment: _____

7. Should there be separate legislation for each province, each with its own licence?

Yes 11	No 100	N/A 1
--------	--------	-------

Comment: _____

8. Should there be separate legislation for each province which is summarised on a single national angling licence?

Yes 34	No 75	N/A 2	No Answer 1
--------	-------	-------	-------------

Comment: _____

9. Should there be separate legislation and licences for each province?

Yes 9	No 100	N/A 2	Not Answered 1
-------	--------	-------	----------------

Comment: _____

10. Where should one be able to obtain an angling licence?

Department of Environmental Affairs 1 21	Police Station 2 19	Post Office 3 80	Angling Shops 4 68	Internet 5 49	Other 6 10	N/A 8 5	Not answered 9 2
--	------------------------	---------------------	-----------------------	------------------	---------------	------------	------------------------

Comment: _____

11.a How many rods should an angler be allowed to fish with?

1 4	2 54	3 14	4 19	5 0	6 0	No limit 20
-----	------	------	------	-----	-----	-------------

Comment: _____

11.b How many hooks per rod should an angler be allowed to fish with?

1 11	2 75	3 9	No limit 15
------	------	-----	-------------

Comment: _____

12. Should anglers be prohibited from using keep nets?

Yes 20	No 90
--------	-------

Comment: _____

13. Should all species of fish caught be released?

Yes 17	No 61	Only indigenous species 31
--------	-------	----------------------------

Comment: _____

14. Should feeding places be allowed?

Yes 52	No 55
--------	-------

Comment: _____

15. Should markers for feeding spots be allowed?

Yes 37	No 73
--------	-------

Comment: _____

16. Should freshwater anglers be allowed to fish with live bait?

Yes	83	No	26		
-----	----	----	----	--	--

Comment: _____

ONLY IRO E-MAILED & YWG RESPONSES

17. Should anglers be forced not to return any alien invasive species (bass, carp & trout) to our waters?

Yes	13	No	10	Only in certain zones	22
-----	----	----	----	-----------------------	----

Comment: _____

18. Should fishing with gill nets/any other manner of fishing that does not involve a rod and reel be allowed?

Yes	13	No	33
-----	----	----	----

Comment: _____

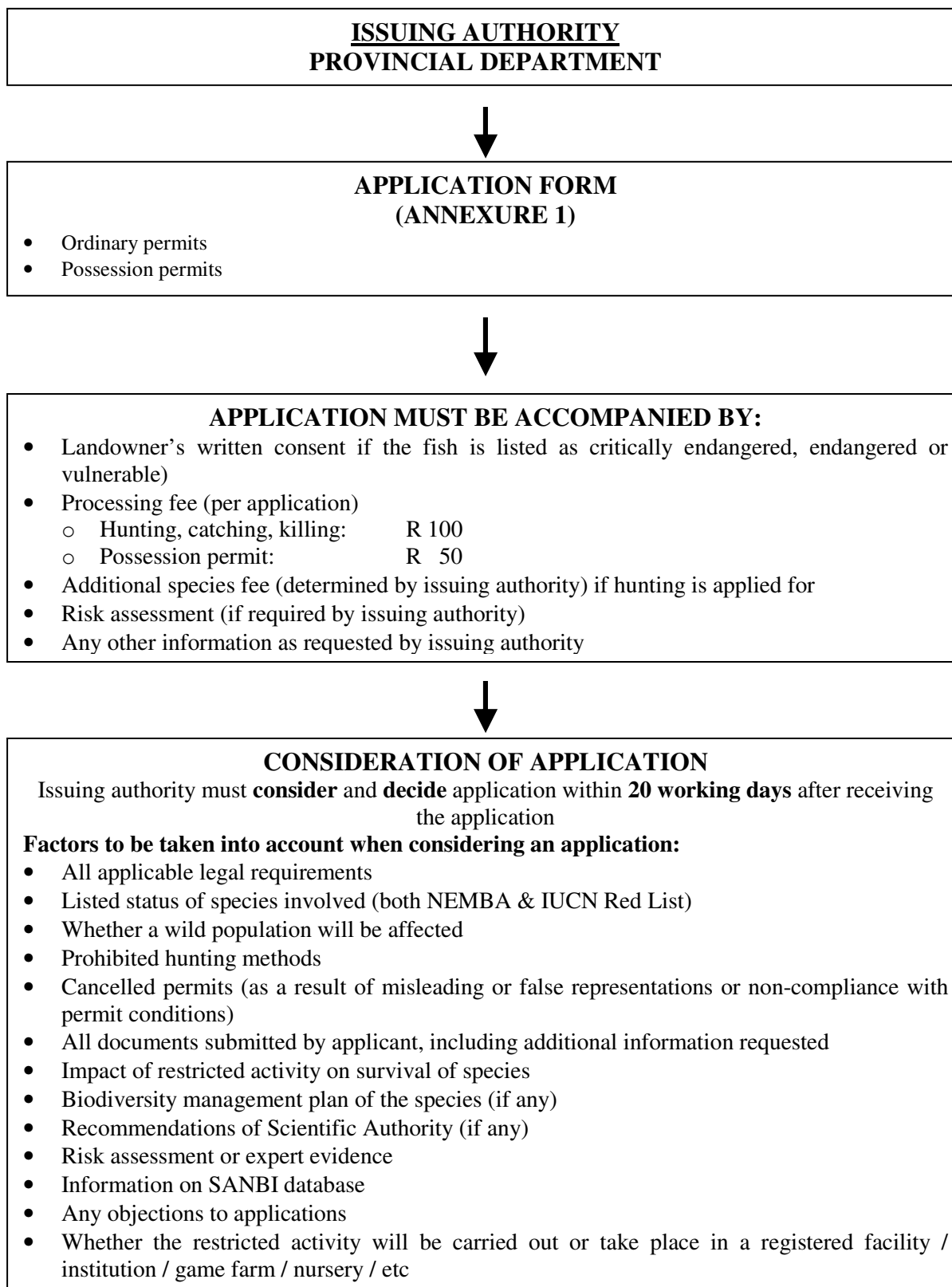
19. Should anglers in possession of an angling licence be allowed to enter any angling waters, without having to pay an entrance fee?

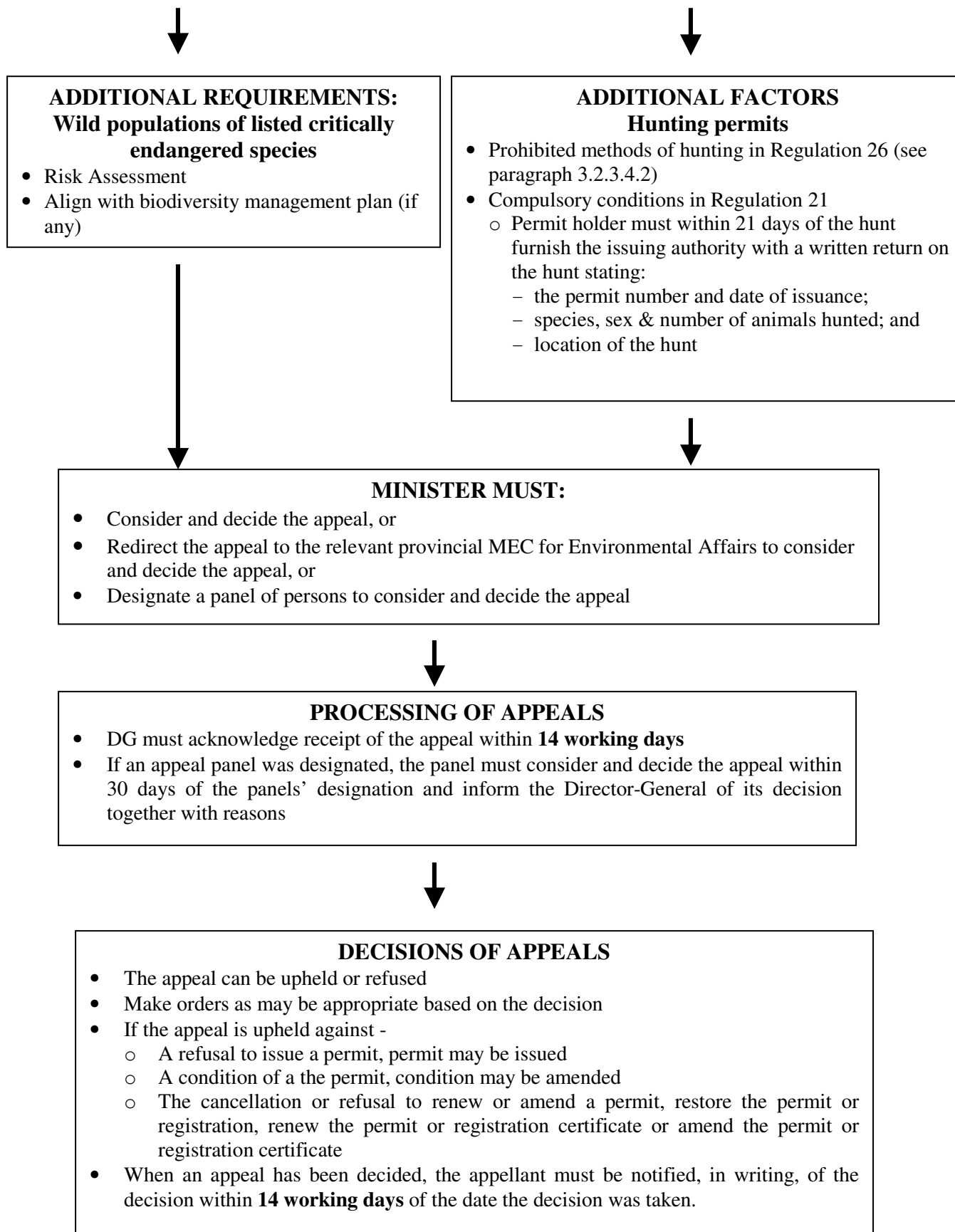
Yes	5	No	25	Only in respect of government property	16
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Comment: _____

Annexure 4

TOPS permit application processes





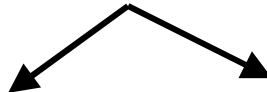
RENEWAL APPLICATION

- The holder of a permit may, **before the expiry**, apply in writing for renewal thereof
- The application must be accompanied by reasons and R 50 processing fee



CONSIDERATION DECISION OF RENEWAL APPLICATIONS

- Issuing authority **must** consider the application upon receipt
- The issuing authority **may** require the applicant to provide additional information



APPROVAL OF RENEWAL

The issuing authority must issue a new permit

REFUSAL OF RENEWAL

The issuing authority must

- Notify the applicant of the decision in writing
- Give reasons for the refusal
- Inform the applicant of his / her right to appeal

Annexure 5

Largemouth Yellowfish (*Labeobarbus kimberleyensis*)



Annexure 6

Draft list of prohibited alien species

82 No. 32090

GOVERNMENT GAZETTE, 3 APRIL 2009

Freshwater fish		
	Scientific Name	Common name
148.	<i>Abramis spp.</i>	bream
149.	<i>Acantharchus spp.</i>	
150.	<i>Acheilognathus spp.</i>	bitterling
151.	<i>Acipenser spp.</i>	sturgeon
152.	<i>Ameiurus spp.</i>	bullheads
153.	<i>Amia calva</i>	Bowfin/Mudfish/Dogfish
154.	<i>Amphilius spp.</i>	Golden African kuhli
155.	<i>Anabas spp.</i>	Climbing perch/Climbing fish
156.	<i>Anguilla spp.</i>	
157.	<i>Aphanius spp.</i>	minnow
158.	<i>Aplocheilichthys spp.</i>	killifish
159.	<i>Arapaima gigas</i>	Arapaima
160.	<i>Bagrus spp.</i>	
161.	<i>Barilius spp.</i>	
162.	<i>Bathyclarias spp.</i>	Catfish
163.	<i>Centrarchus spp.</i>	
164.	<i>Chaca chaca</i>	Frogmouth catfish
165.	<i>Channa spp.</i>	snakeheads
166.	<i>Chela spp.</i>	
167.	<i>Chetia spp.</i>	
168.	<i>Chiloglanis spp.</i>	
169.	<i>Chologaster cornutus</i>	
170.	<i>Chondrostoma spp.</i>	Nasling
171.	<i>Chrysichthys spp.</i>	
172.	<i>Cichla spp.</i>	Peacock cichlid
173.	<i>Colossoma spp.</i>	pacu
174.	<i>Coregonus spp.</i>	
175.	<i>Cottus spp.</i>	
176.	<i>Croilia spp.</i>	
177.	<i>Cyprinodon spp.</i>	pupfish
178.	<i>Docimodus spp.</i>	Catfish
179.	<i>Elassoma spp.</i>	
180.	<i>Electrophorus electricus</i>	Electric eel
181.	<i>Engraulicyprus spp.</i>	
182.	<i>Enneacanthus spp.</i>	
183.	<i>Esox spp.</i>	
184.	<i>Eutropius spp.</i>	
185.	<i>Fundulus spp.</i>	
186.	<i>Galaxias spp.</i>	galaxias
187.	<i>Gambusia spp.</i>	
188.	<i>Gasterosteus spp.</i>	
189.	<i>Gephyroglanis spp.</i>	
190.	<i>Glossogobius spp.</i>	
191.	<i>Gobio spp.</i>	
192.	<i>Gymnallabes spp.</i>	
193.	<i>Heterobranchus spp.</i>	

194.	<i>Hucho hucho</i>	Huchen
195.	<i>Huso huso</i>	Beluga sturgeon
196.	<i>Hydrocynus spp.</i>	African tiger fish
197.	<i>Ictalurus spp.</i>	
198.	<i>Idus idus</i>	Silver/Golden orf
199.	<i>Jordanella floridae</i>	American flagfish
200.	<i>Lampetra spp.</i>	
201.	<i>Lates spp.</i>	
202.	<i>Lepomis spp.</i>	sunfishes
203.	<i>Leptoglanis spp.</i>	
204.	<i>Leuciscus spp.</i>	
205.	<i>Liposarcus spp.</i>	Plecostomus
206.	<i>Lota lota</i>	Burbot
207.	<i>Luciosoma setigerum</i>	Apollo shark
208.	<i>Malapterurus spp.</i>	
209.	<i>Marcusenius spp.</i>	
210.	<i>Mesobola spp.</i>	
211.	<i>Micropterus spp.</i> (except the 3 species listed as restricted invasive species)	Bass
212.	<i>Misgurnus spp.</i>	Weather fish
213.	<i>Myleus spp.</i>	Brown metynnis
214.	<i>Neochanna spp.</i>	mudfish
215.	<i>Neomacheilus spp.</i>	Loaches
216.	<i>Notemigonus crysoleucas</i>	Golden shiner
217.	<i>Notropis spp.</i>	shiner
218.	<i>Oncorhynchus spp.</i> (excluding rainbow trout)	Trout / Salmon
219.	<i>Ophicephalus spp.</i>	Snakehead
220.	<i>Opsaridium spp.</i>	barilius
221.	<i>Oreochromis spp.</i> (excluding <i>Oreochromis species</i> and hybrids in zoning category for aquaculture)	tilapias
222.	<i>Oryzias spp.</i>	Rice fish/Geisha girl/Golden mede
223.	<i>Osmerus eperlanus</i>	Smelt
224.	<i>Paragalaxias spp.</i>	Paragalaxias
225.	<i>Perca spp.</i>	Perch
226.	<i>Percina spp.</i>	Percina darters
227.	<i>Petrocephalus spp.</i>	Mormyrid
228.	<i>Petromyzon marinus</i>	Lamprey
229.	<i>Phoxinus spp.</i>	Minnow
230.	<i>Plecostomus spp.</i>	plecostomus
231.	<i>Pogonopoma spp.</i>	catfish
232.	<i>Pomoxis spp.</i>	
233.	<i>Protopterus spp.</i>	Lung fish
234.	<i>Pseudocrenilabrus spp.</i>	
235.	<i>Pseudorasbora spp.</i>	Whiptail sturgeon
236.	<i>Pseudorinelepis spp.</i>	catfish
237.	<i>Pterygoplichthys spp.</i>	plecos

238.	<i>Pungitius spp.</i>	stickleback
239.	<i>Pygocentrus spp.</i>	Piranha
240.	<i>Pygosteus spp.</i>	stickleback
241.	<i>Rhinelepis spp.</i>	catfish
242.	<i>Rhamdia spp.</i>	
243.	<i>Rhinichthys atratulus atratulus</i>	Black-nose dance
244.	<i>Rhinichthys atratulus obtusus</i>	
245.	<i>Rhodeus spp.</i>	
246.	<i>Rooseveltiella spp.</i>	Piranha
247.	<i>Rutilus spp.</i>	Roach
248.	<i>Salmo spp.</i> (except brown trout and Atlantic salmon)	Trout and salmon
249.	<i>Salvelinus spp.</i>	
250.	<i>Sargochromis spp.</i>	
251.	<i>Sarotherodon spp.</i>	
252.	<i>Schilbe spp.</i>	
253.	<i>Serrasalmus spp.</i>	piranha
254.	<i>Silurus glanis</i>	European/Wels/Waller catfish
255.	<i>Thymallus thymallus</i>	Grayling
256.	<i>Tilapia spp.</i> excluding <i>Tilapia rendalli</i> & <i>Tilapia sparmanii</i> (regulated by area) and <i>Tilapia bakossiorum</i> & <i>Tilapia snyderae</i> (exempted)	

Reptiles and Amphibians		
	Scientific name	Common name
257.	<i>Agama agama</i>	Agama, common
258.	<i>Ambystoma tigrinum</i>	Salamander, Tiger
259.	<i>Anolis distichus</i>	Anole, bark
260.	<i>Anolis sagrei</i>	Anole, brown
261.	<i>Basiliscus vittatus</i>	Basilisk
262.	<i>Boiga irregularis</i>	Tree snake, brown
263.	<i>Bufo bufo</i>	Toad, European
264.	<i>Bufo marinus</i>	Toad, marine / cane
265.	<i>Chelydra macroclermys</i>	Turtle, alligator snapper
266.	<i>Eleutherodactylus coqui</i>	Coqui, Puerto Rican
267.	<i>Eleutherodactylus planirostris</i>	Frog, Greenhouse
268.	<i>Geochelone sulcata</i>	Tortoise, Spur thighed
269.	<i>Hemidactylus frenatus</i>	Gecko, house
270.	<i>Hemidactylus garnotii</i>	Gecko, Indo-Pacific
271.	<i>Hemidactylus turcicus</i>	Gecko, Mediterranean
272.	<i>Leiocephalus carinatus</i>	Lizard, Northern curlytail
273.	<i>Litoria caerulea</i>	Treefrog, Great green
274.	<i>Macrochelys temminckii</i>	Turtle, snapper
275.	<i>Notophthalmus viridescens viridescens</i>	Newt, Red-spotted
276.	<i>Osteopilus septentrionalis</i>	Treefrog, Cuban
277.	<i>Rana catesbeiana</i>	Bull frog, American

Annexure 7

List of Invasive Freshwater Fish Species

Category 1a: Invasive Species Requiring Compulsory Control

Category 1b: Invasive Species Controlled by Invasive Species Management Programme

Category 2: Invasive Species Regulated by Area

Freshwater fish			
No.	Scientific name	Common name	Category
29.	<i>Clarias gariepinus</i>	sharptooth catfish	2
30.	<i>Ctenopharyngodon idella</i>	grass carp	1b
31.	<i>Ctenopharyngodon idella</i>	grass carp (triploid)	2
32.	<i>Cyprinus carpio</i>	carp	2
33.	<i>Hypophthalmichthys molitrix</i>	silver carp	1b
34.	<i>Labeo capensis</i>	Orange river mudfish	2
35.	<i>Labeo umbratus</i>	moggel	2
36.	<i>Labeobarbus aeneus</i>	Orange-Vaal smallmouth yellowfish	2
37.	<i>Labeobarbus capensis</i>	Clanwilliam yellowfish	2
38.	<i>Labeobarbus natalensis</i>	KwaZulu-Natal yellowfish	2
39.	<i>Labeobarbus polylepis</i>	Lowveld largescale yellowfish	2
40.	<i>Lepomis macrochirus</i>	bluegill sunfish	1b
41.	<i>Micropterus dolomieu</i>	smallmouth bass	2
42.	<i>Micropterus punctulatus</i>	spotted bass	2
43.	<i>Micropterus salmoides</i>	largemouth bass	2
44.	<i>Oncorhynchus mykiss</i>	rainbow trout	2
45.	<i>Oreochromis mossambicus</i>	Mozambique tilapia	2
46.	<i>Oreochromis niloticus</i>	Nile tilapia and hybrids	2
47.	<i>Oreochromis niloticus</i> x <i>Oreochromis mossambicus</i>	Nile tilapia x Mozambique tilapia	2
48.	<i>Salmo trutta</i>	brown trout	2
49.	<i>Sandelia capensis</i>	Cape kurper	1b
50.	<i>Tilapia rendalli</i>	redbreast tilapia	2
51.	<i>Tilapia sparrmanii</i>	banded tilapia	1b
52.	Unless otherwise listed, all fertile hybrids where at least one parent is an indigenous species		1a