



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Audit overview of water infrastructure

Presented by:
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Water Infrastructure Development

09 September 2015

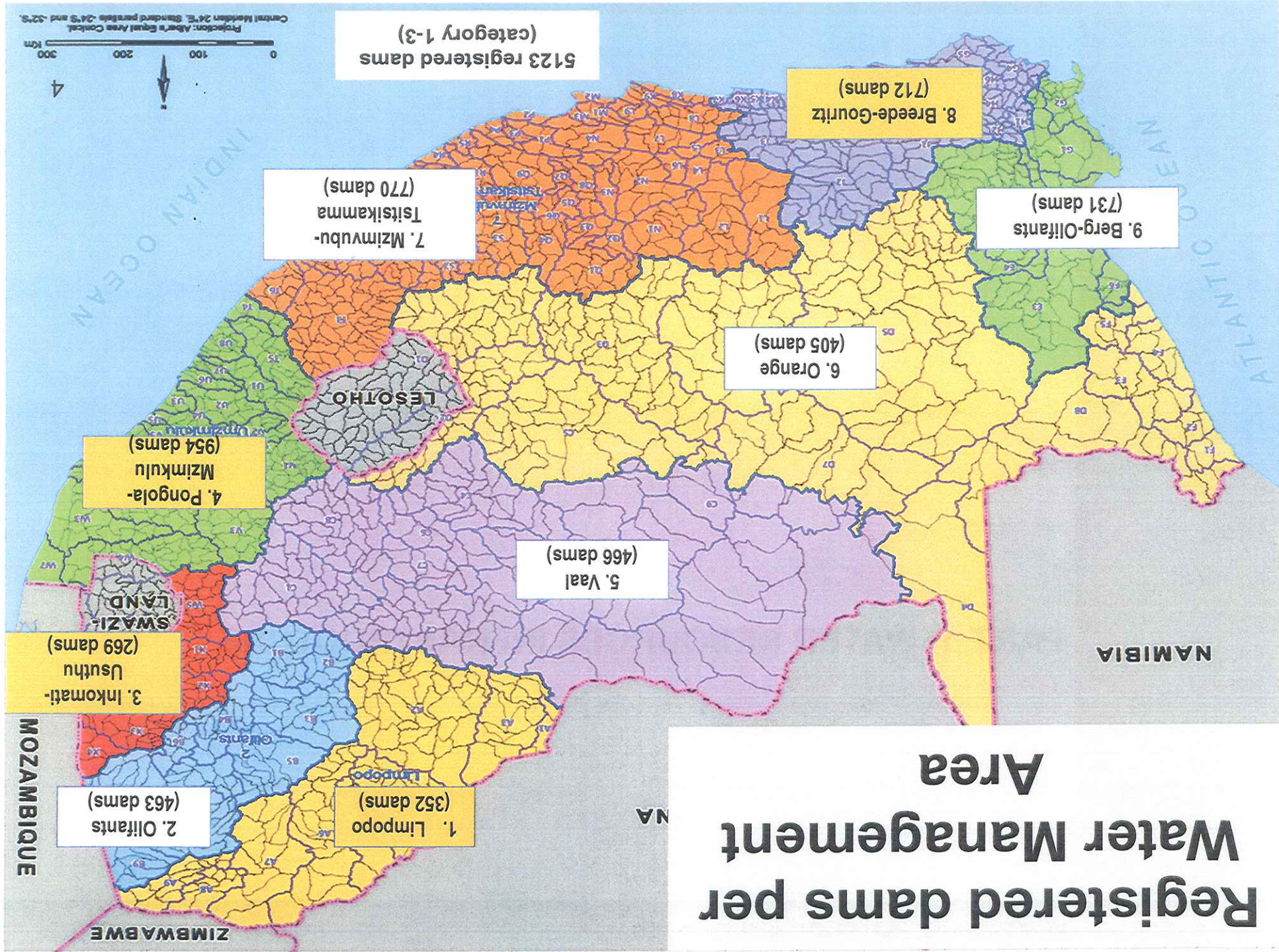
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- Part 1: Water resources infrastructure
- Part 2: Bulk water infrastructure
- Part 3: Water services infrastructure



PART 1: WATER RESOURCES INFRASTRUCTURE

Registered dams per Area

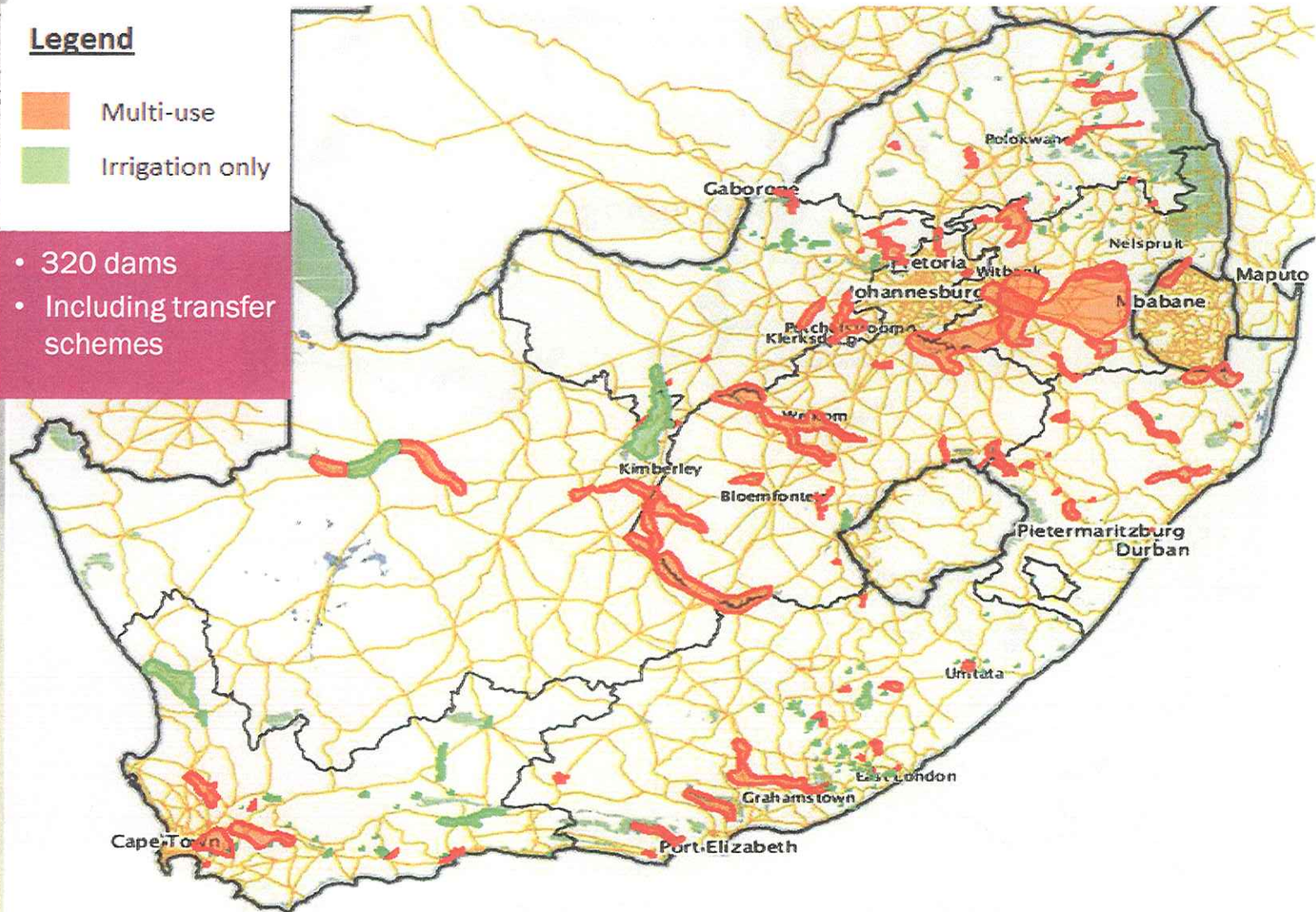


Water resource schemes

Legend

- Multi-use
- Irrigation only

- 320 dams
- Including transfer schemes



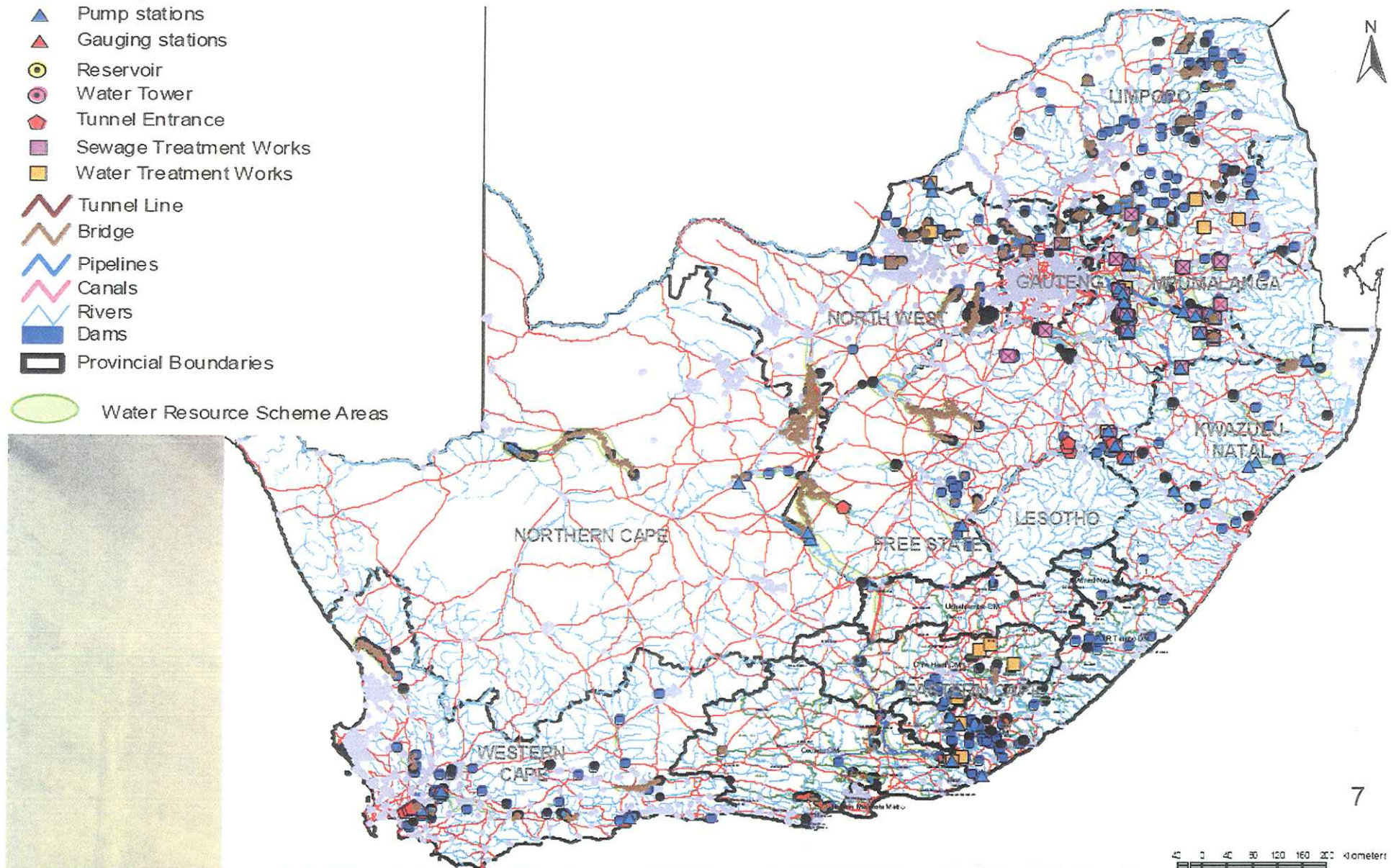
Irrigation Water Schemes



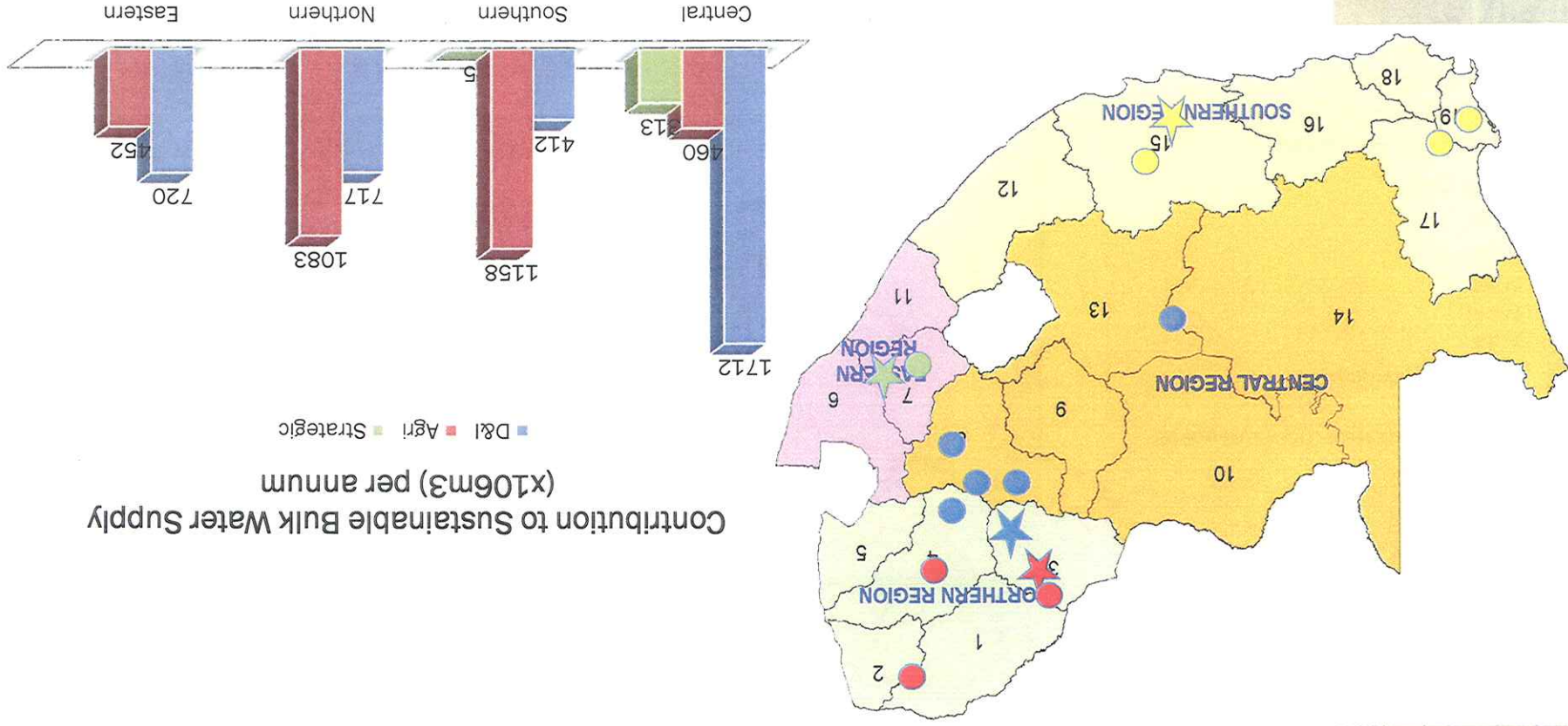
Legend:

- Measuring Facilities
- Building Points
- ▲ Pump stations
- ▲ Gauging stations
- Reservoir
- Water Tower
- ◆ Tunnel Entrance
- Sewage Treatment Works
- Water Treatment Works
- Tunnel Line
- Bridge
- Pipelines
- Canals
- Rivers
- Dams
- ▭ Provincial Boundaries
- Water Resource Scheme Areas

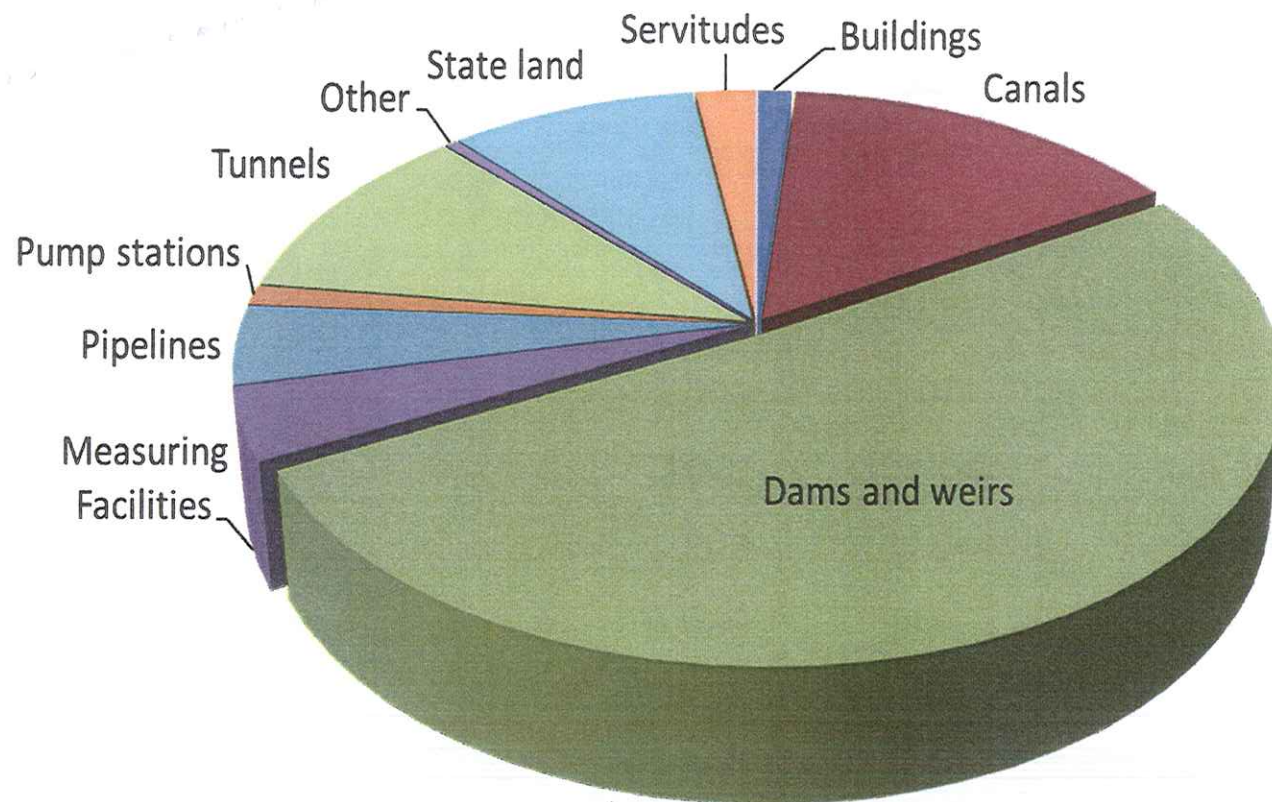
Distribution of assets



Contribution: per operational cluster

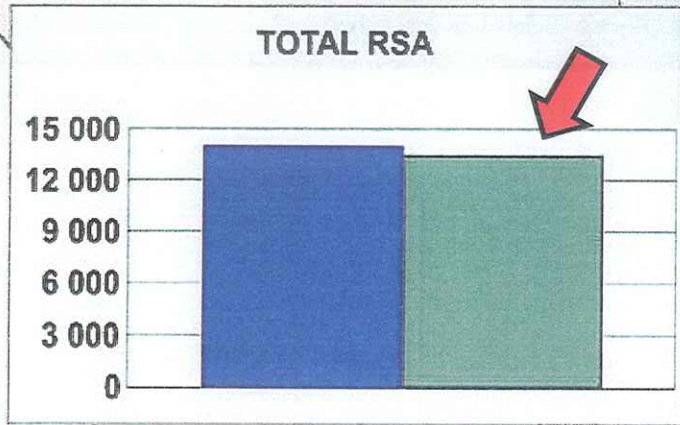


Distribution of asset value

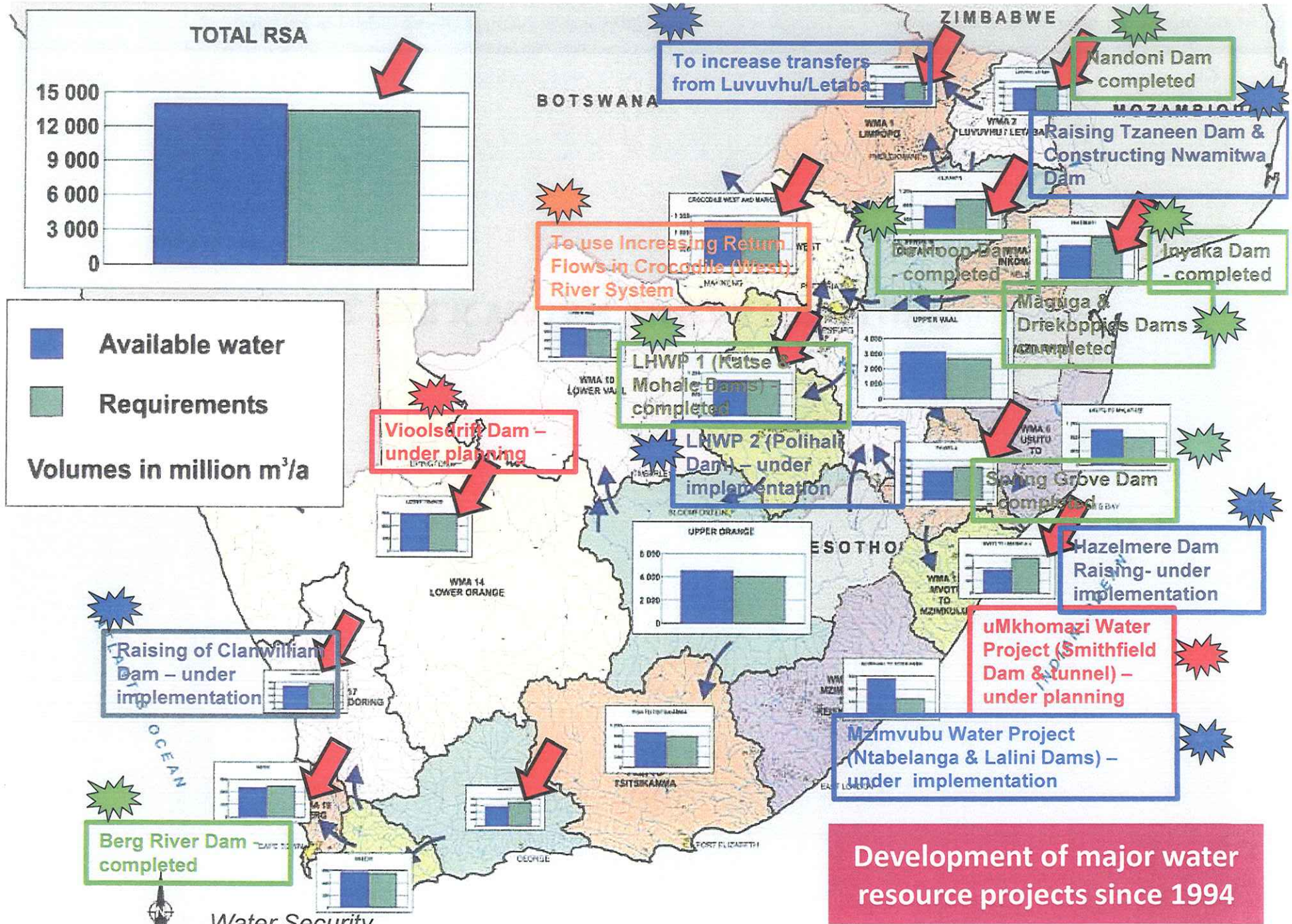


Extent of Assets

Asset Class	Extent	Replacement Value (R bn)
Buildings	2 572 Number	2 301
Canals	8 036 km	29 073
Dams and weirs	359 Number	72 002
Measuring Facilities	3 011 Number	7 381
Pipelines	1 063 km	8 044
Pump stations	57 Number	1 673
Reservoirs	51 Number	631
Treatment works	62 Number	69
Tunnels	171 km	18 354
Other	77 Number	85
State owned land	343 237 Ha	6 792
Servitudes	51 849 Ha	769
TOTAL		147 974



■ Available water
■ Requirements
 Volumes in million m³/a



To use Increasing Return Flows in Crocodile (West) River System

To increase transfers from Luvuvhu/Letaba

Nandoni Dam completed

Raising Tzaneen Dam & Constructing Nwamitwa Dam

Inyaka Dam - completed

Maguga & Driekoppies Dams completed

LHWP 1 (Katse & Mohale Dams) - completed

LHWP 2 (Polihali Dam) - under implementation

Spring Grove Dam completed

Hazelmere Dam Raising- under implementation

uMkhomazi Water Project (Smithfield Dam & tunnel) - under planning

Mzimvubu Water Project (Ntabelanga & Lalini Dams) - under implementation

Voolsdrif Dam - under planning

Raising of Clanwilliam Dam - under implementation

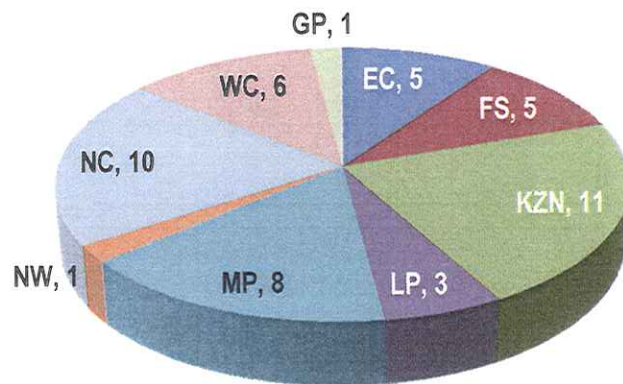
Berg River Dam completed

Development of major water resource projects since 1994

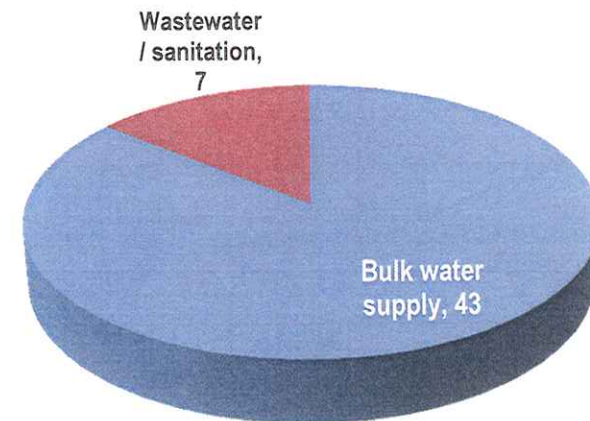
PART 2: BULK WATER INFRASTRUCTURE

Completed projects: 2007 to date

Projects numbers per province

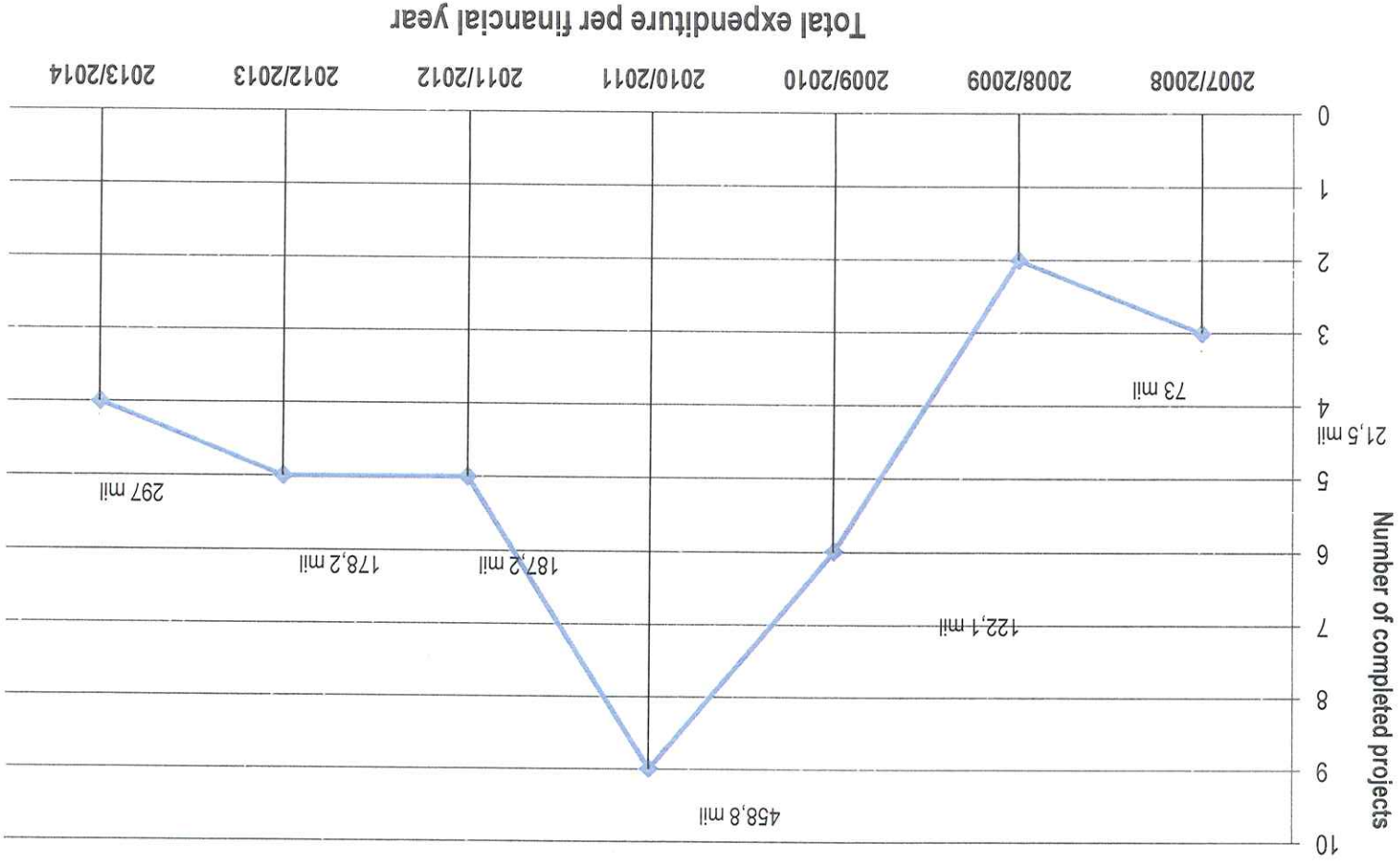


Project number per deliverable



With an investment of R 3 249 861 734.00

Completed projects: 2007 to date



PROJECTS COMPLETED

Eastern Cape: Regional Bulk

Code	Scheme	Owner	Operations	DWS Project Cost
ECRNE W	Mbhashe North Bulk Water Supply	Amatole	Amatole	4 000 000
ECR014	Chris Hani Tsomo RDP2 (Amahlathi, IntsikaYethu, Emalahleni) BWS	Chris Hani	Chris Hani	6 000 000
ECR026	Tsomo RDP2 Northern Bulk Water Supply	Chris Hani	Chris Hani	9 700 757
ECR012	OR Tambo Mthatha Bulk Water Intervention	O.R.Tambo	O.R.Tambo	36 869 198
ECR016	OR Tambo-Coffee Bay Bulk Water Supply	O.R.Tambo	O.R.Tambo	93 951 191

PROJECTS COMPLETED

Free State: Regional Bulk				
FSR004	Ngwathe Bulk Water Supply	Ngwathe	Ngwathe	14 710 191
FSR002	Jagersfontein /Fauresmith Bulk Water Supply Phase 1	Kopanong	Kopanong	75 775 368
FSR008	Tokologo Regional Water Supply	Tokologo	Tokologo	123 496 320
FSR003	Dihlabeng Bulk Water Supply	Dihlabeng	Dihlabeng	73 487 998
FSR007	Sterkfontein Dam Bulk Water Supply Scheme Phase1	Maluti-a-Phofung	Maluti-a-Phofung	272 145 755
Gauteng: Regional Bulk				
GPR002	Westonaria Regional Waste Water Treatment Works (Hannes van Niekerk)	Westonaria	Rand Water	319 356 949

PROJECTS COMPLETED

Limpopo: Regional Bulk			
LPR010	Greater Sekhukhune	Greater Sekhukhune	30 508 523
LPR014	Water Works	Capricorn	178 359 723
LPR013	Speccon Bulk Water Supply	Capricorn	58 500 000

Mpumalanga: Regional Bulk			
MPR030	Ermelo Bulk Water Supply	Muskaligwa	37 894 605
MPR023	Muskaligwa regional water supply scheme	Muskaligwa	32 314 128
MPR008	Delmas Phase 1 Water Supply	Victor Khanye	11 514 000
MPR008	Delmas Phase 2 Ground Water Supply	Victor Khanye	7 000 000
MPR016	Bloemendal Water Pipeline	Rand Water	57 481 397
MPR003	Thaba Chwen Ground Water Supply	Thaba Chwen	7 335 792
MPR007	Mjejana Trust Bulk Water Supply	Mjejana Trust	17 500 000
MPR001	Hoxane BWS (Inyaka Marite bulk)	Bushbuckridge	14 579 741
MPR015	Acornhoek Bulk Water Supply	DWS	159 147 433
MPR002	Mbombela 2010 Water and Sanitation	Mbombela	44 923 262

REGIONAL BULK INFRASTRUCTURE GRANT PROJECTS COMPLETED

KwaZulu Natal: Regional Bulk

KNR004	Mathulini Bulk Water Supply	Ugu	Ugu	21 600 000
KNR012	Malangeni Waterborne Sanitation	Ugu	Ugu	10 500 200
KNR006	Greater Eston Water Scheme	Umgeni Water	Umgeni Water	204 871 648
KNR010	Driefontein Complex Bulk Water Scheme	uThukela	uThukela	123 853 105
KNR008	Greytown Regional Bulk Water Scheme Phase 1	Umzinyathi	Umzinyathi	21 259 700
KNR009	Emadlangeni Regional Bulk Water Scheme	Amajuba	Amajuba	50 994 499
KNR002	Mandlakazi Bulk Water Supply	Zululand	Zululand	159 383 901
KNR003	Hlabisa Bulk Water Supply	uMkhanyakude	uMkhanyakude	198 944 674
KNR005	Greater Mthonjaneni Bulk Water Phase 1	uThungulu	uThungulu	40 000 100
KNR016	Middledrift (Nkandla) Water Treatment Works	uThungulu	uThungulu	29 362 798
KNR007	Bulwer Emergency Water Scheme	Harry Gwala	Harry Gwala	88 557 574

PROJECTS COMPLETED

Northern Cape: Regional Bulk

NCR006/1	Van Wyksvlei interim solutions	Kareeberg	Kareeberg	5 881 634
NCR006/2	Van der Kloof/ Petrusville Bulk Water Supply	Renosterberg	Renosterberg	33 200 000
NCR010	Colesberg Waste Water Treatment Works	Umsobomvu	Umsobomvu	15 596 941
NCR010	Oranje river - Colesberg Bulk Water Supply	Umsobomvu	Umsobomvu	120 878 281
NCR014	Thembelihle Bulk Water Supply	Thembelihle	Thembelihle	27 714 104
NCR022	Niekerkshoop Bulk Water Supply	Siyathemba	Siyathemba	9 424 139
NCR007	Kenhart Bulk Water Supply	Kai Garib	Kai Garib	69 220 360
NCR011	Tsantsabane Waste Water Treatment Works and Water Supply	Tsantsabane	Tsantsabane	45 438 655
NCR013	Riemvasmaak Water Supply	Kai Garib	Kai Garib	3 068 721
NCR019	Kathu Waste Water Treatment Works	Gamagara	Gamagara	17 583 915

PROJECTS COMPLETED

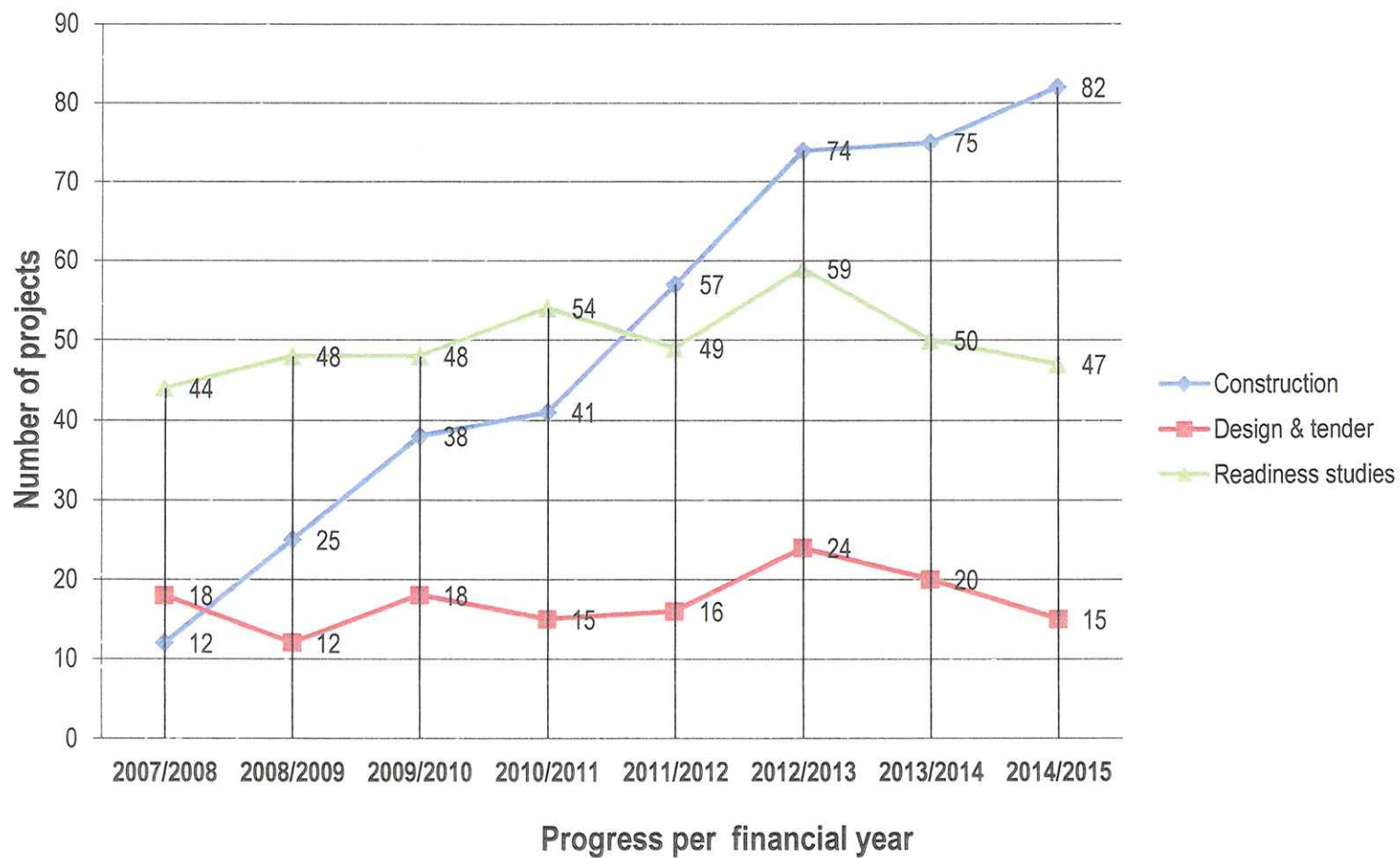
North West: Regional Bulk			
NWR001	Magwass! Hills Regional Water Supply	Dr Kenneth Kaunda	Bloem Water
NWR010	Ventersdorp Bulk Water Supply	Dr Kenneth Kaunda	Ventersdorp
			66 000 000
			33 855 985

Western Cape: Regional Bulk			
WCR006	Drakenstein Waste Water Treatment Plant	Drakenstein	Drakenstein
WCR011	Hermanus Waste Water Treatment Works	Overstrand	Overstrand
WCR010	Hermanus Bulk Water Supply	Overstrand	Overstrand
WCR013	Struisbaai Waste Water Treatment Works	Cape Agulhas	Cape Agulhas
WCR012	Swellendam Waste Water Treatment Works	Swellendam	Swellendam
WCR002	George Bulk Water Supply Augmentation	George	George
			30 061 417
			42 907 666
			11 365 971
			20 729 663
			30 953 752
			30 100 000

PART 3: WATER SERVICES INFRASTRUCTURE

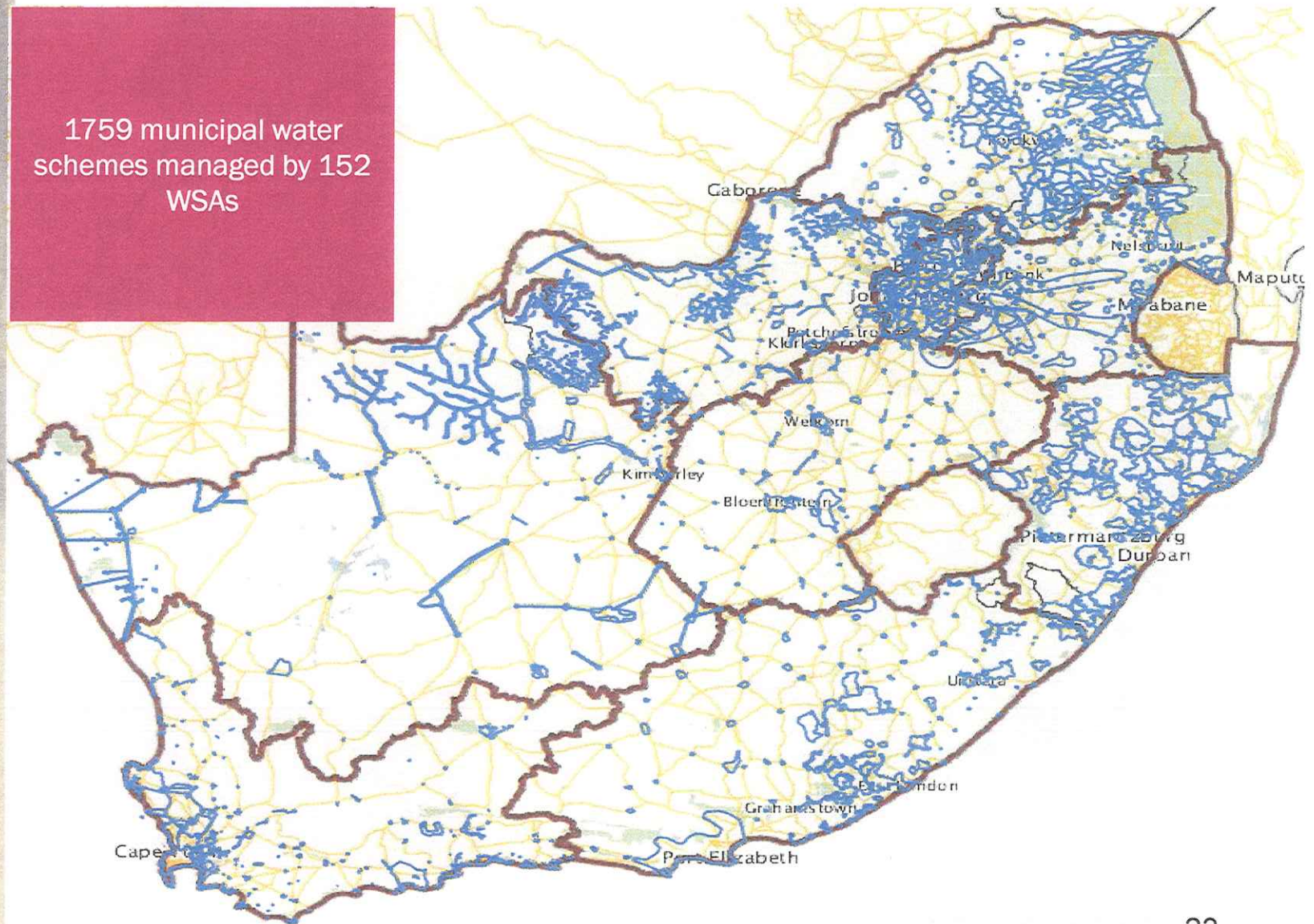


Implementation progress: 2007 to date

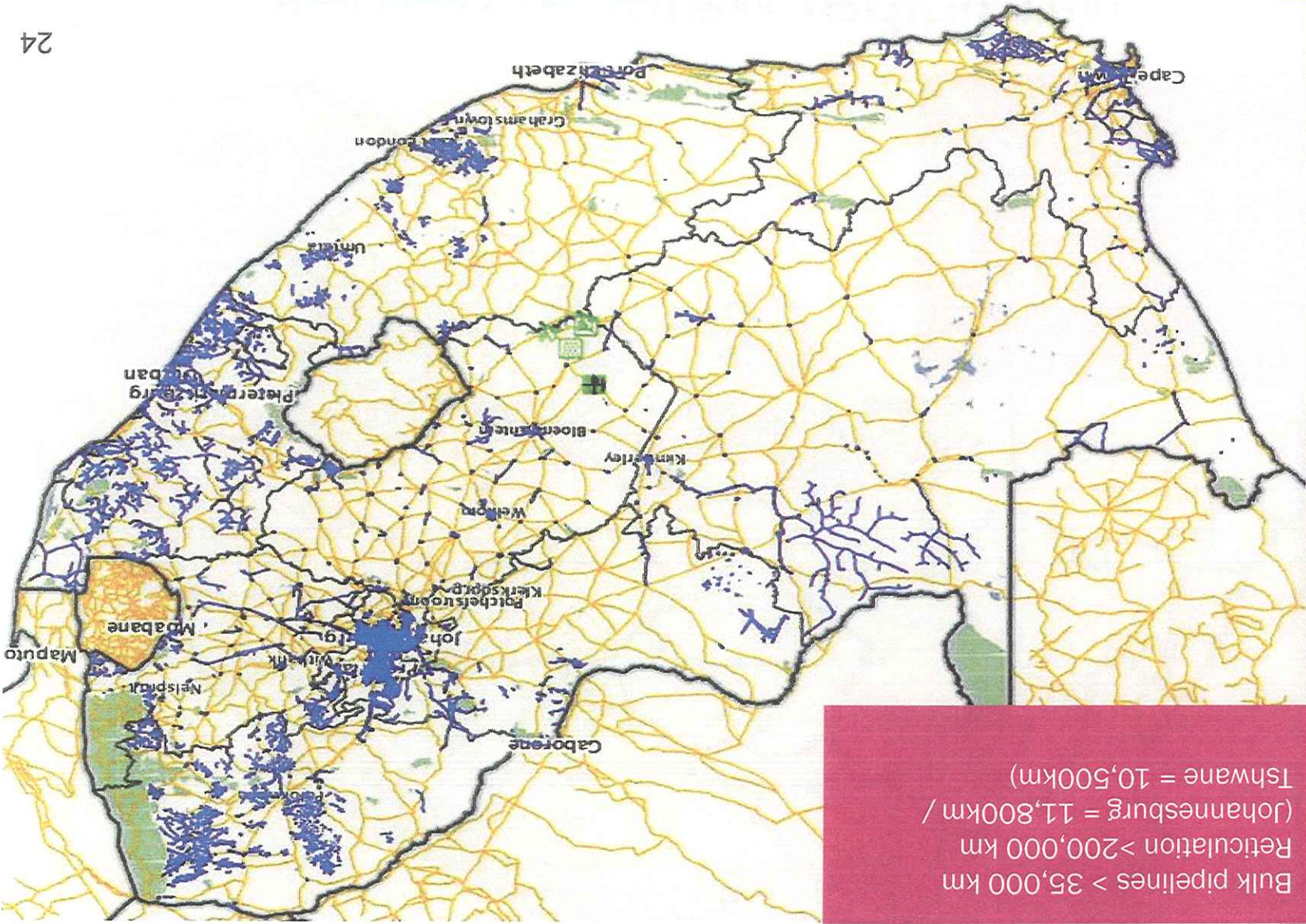


Municipal water schemes

1759 municipal water schemes managed by 152 WSAs



Water services infrastructure



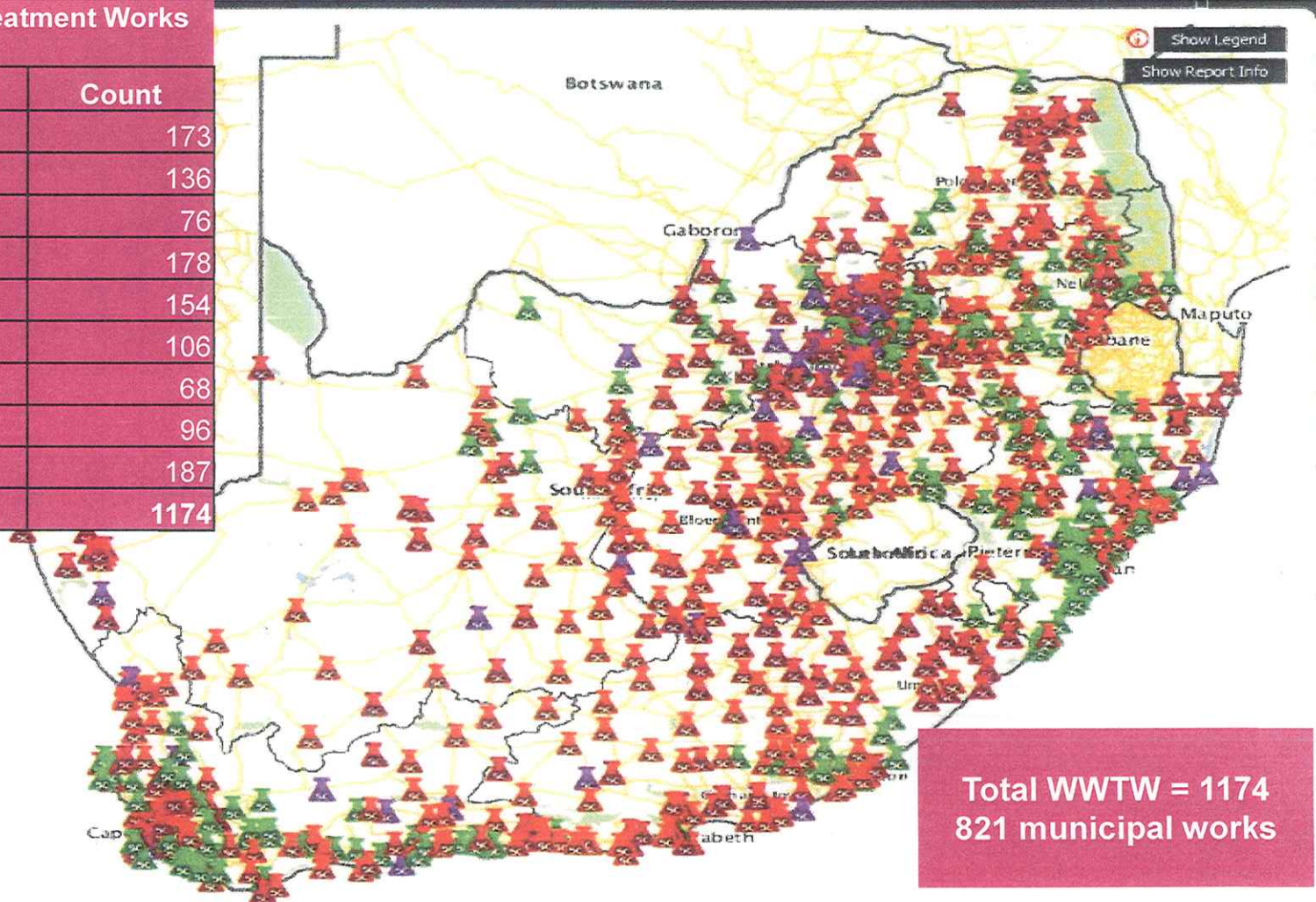
WATER IS LIFE - SANITATION IS DIGNITY

Toll Free: 0800 200 200 www.dwa.gov.za

Wastewater Treatment Works

Count of Wastewater Treatment Works

Province	Count
Eastern Cape Province	173
Free State Province	136
Gauteng Province	76
KwaZulu-Natal Province	178
Limpopo Province	154
Mpumalanga Province	106
North West Province	68
Northern Cape Province	96
Western Cape Province	187
Grand Total	1174



Total WWTW = 1174
821 municipal works

END

