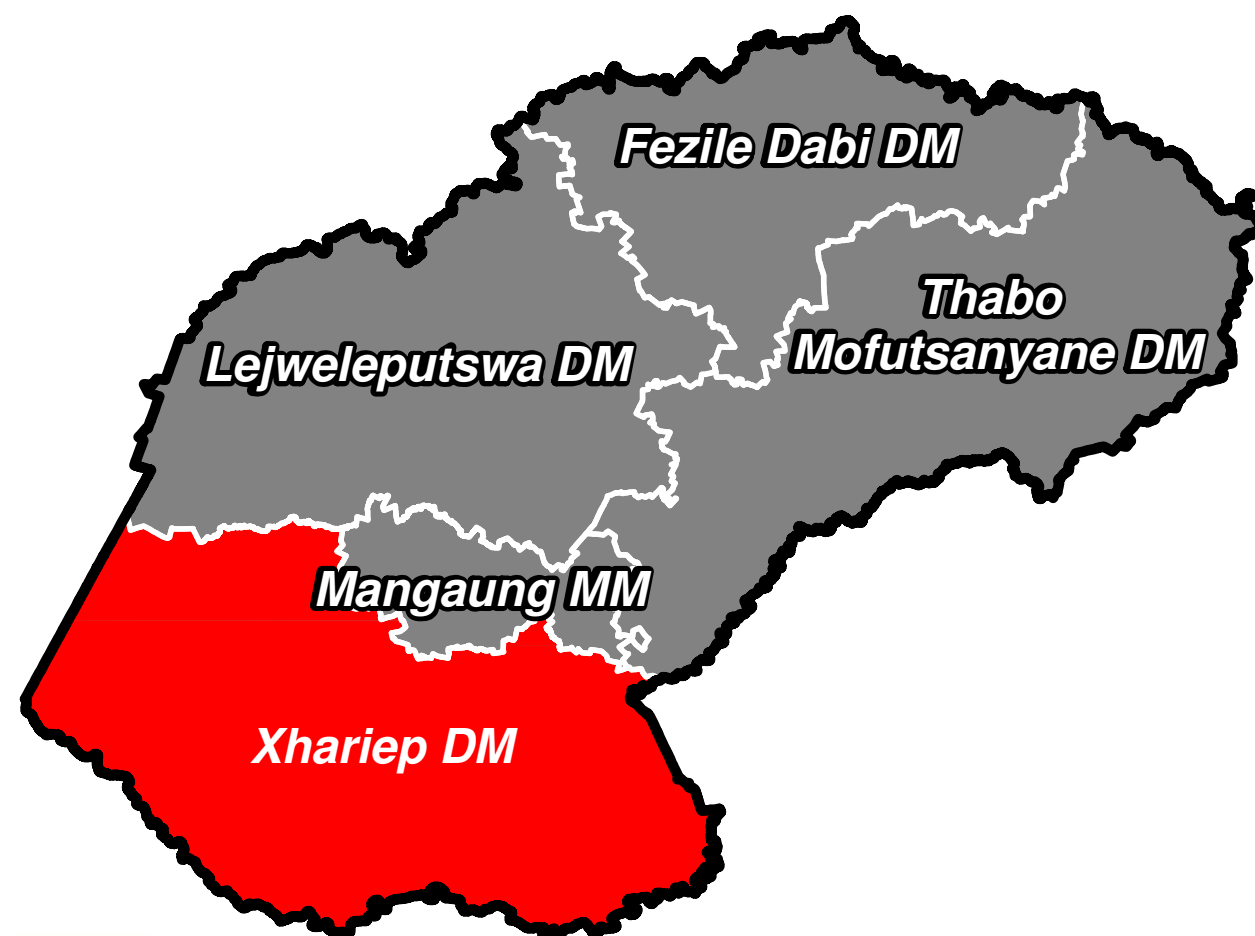


Water Infrastructure Status & Intervention Plans

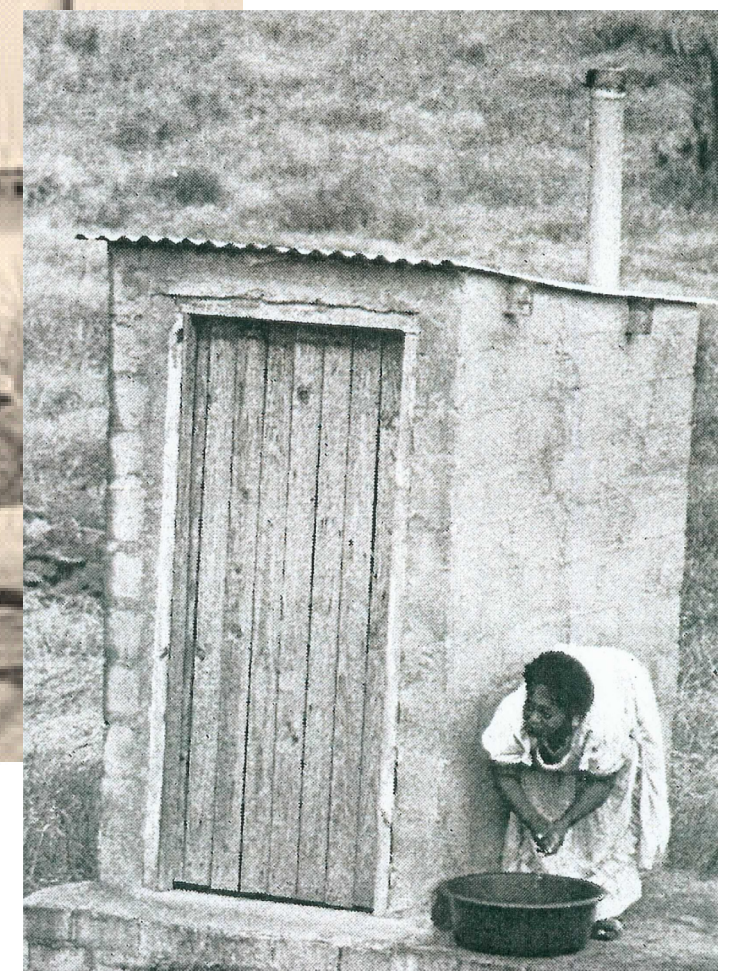


**XHARIEP
DISTRICT MUNICIPALITY**

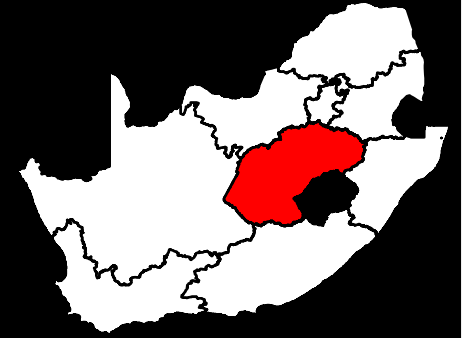
March 2012



DEPARTMENT OF WATER AFFAIRS
Directorate Planning and Information



Water Services Status & Intervention Plans



Purpose of Document

The purpose of the document is to provide a Provincial Summary on issues relating to the Water Services Development Plan (WSDP). The issues that were focussed on, for the purpose of this document, include Demographics, Water & Sanitation Needs, Associated Services, Water Resource Management, Conservation Demand Management, Initiatives & Goals, Gap Analysis and High Priority Target Areas.

Background to Reference Framework

District and Local Municipalities (DM, LM) acting as Water Services Authorities (WSA) must manage and maintain water services in their area of jurisdiction. In order to develop a sufficient strategy to manage these services WSDP's were drawn up for the WSA's providing statistics on users and their requirements as well as five year guidelines for implementing water services projects and management of these services. Completed WSDP's were approved by the WSA's as their five-year plan and submitted to the Department of Water Affairs (DWA). The Department has to evaluate the content of the WSDP's and align Macro Planning with activities outlined in the WSDP's. In order to evaluate the WSDP's the Department needs a Reference Framework (RF) document addressing the same issues outlined in the WSDP guideline from the Department perspective. The RF documents can also be utilised to provide strategic support and information to Local Government and Water Services Providers to assist in strategic planning and daily functions. The RF was developed by utilising the Directorate Macro Planning and Information Systems GIS data to compile base maps to address specific topics. Provincial Water Services Planning Teams (PSP's) were appointed to utilise their knowledge and experience in a specific WSA to address the information requirements. Information gathered within the process will feed to a national information system in order to create RF documents that reflect information on a provincial and national level.

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Water Services Status & Intervention Plans

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1. INTRODUCTION TO XHARIEP DISTRICT MUNICIPALITY

1.1 Locality in the Free State Province

Free State Province has the following five (5) District Municipalities (DM's).

- Xhariep DM
- Lejweleputswa DM
- Thabo Mofutsanyane DM
- Fezile Dabi DM
- Mangaung MM

The Xhariep District Municipality has the following four (4) Local Municipalities.

- Letsemeng LM
- Kopanong LM
- Naledi LM
- Mohokare LM

The main towns within the district are Jacobsdal, Petrusburg, Koffiefontein, Luckhoff, Fauresmith, Jagersfontein, Edenburg, Reddersburg, Dewetsdorp, Wepener, Van Stadensrus, Zastron, Rouxville, Smithfield, Bethulie, Trompsburg, Springfontein, Gariep dam and Philippolis.

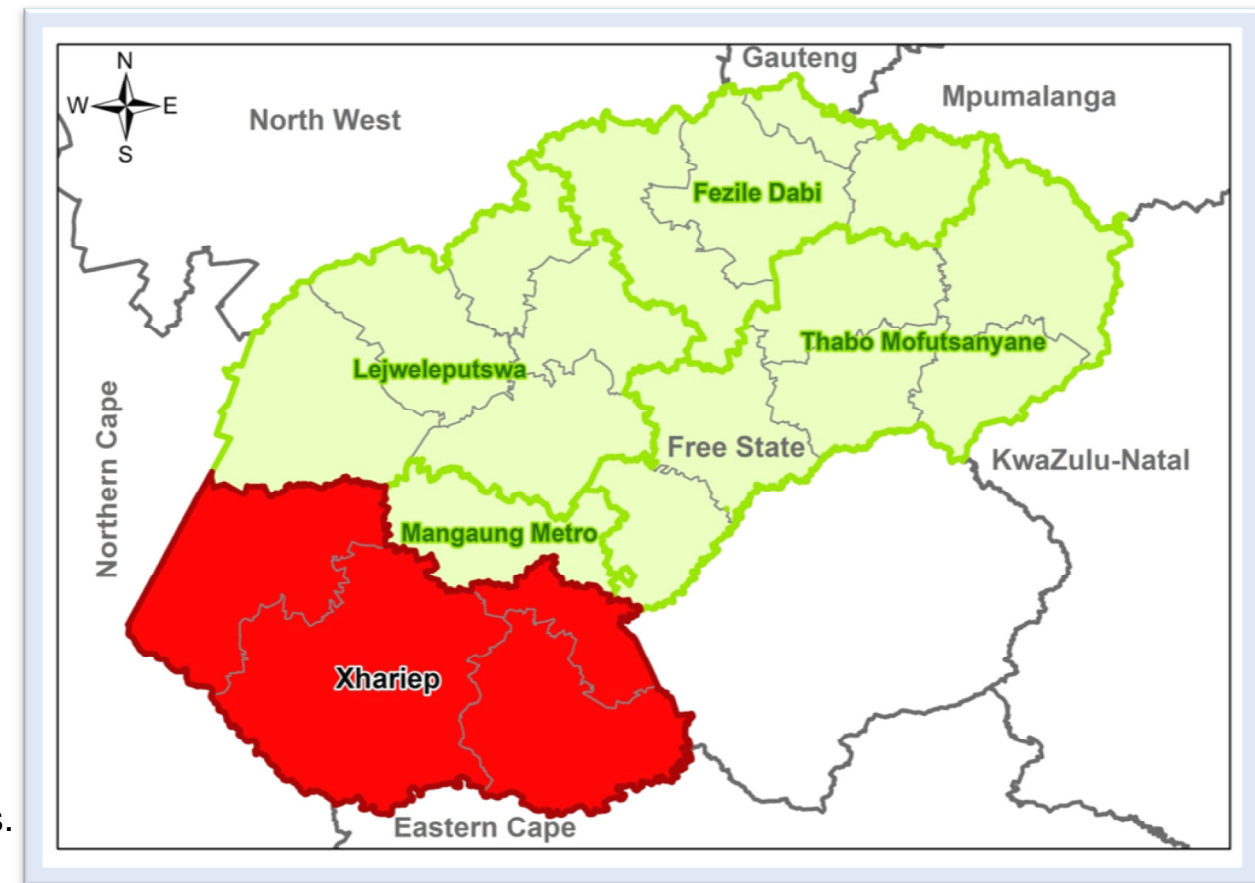
Pages 01 and 02 in section 2 provides detail information on settlement distribution and population figures.

There are approximately 191227 people residing within ± 57083 households which occupies approximately 55 communities. The DM consists of 51 urban settlements (20 formal towns and 31 former townships), one squatter camp and farming settlements which are spread throughout the district. The District Municipality spans over an area of $\pm 36,674\text{km}^2$ which equates to 28.46% of the overall Free State Province.

The age and gender profile already gives an indication that men and women mostly work within the District Municipality and Province. The male/female split is 49/51 – this does not indicate permanent labour migration.

Xhariep District shares international borders with Lesotho. The other borders are with the Eastern Cape Province, Northern Cape Province, Mangaung Metropolitan, Lejweleputswa District and Thabo Mofutsanyane District.

Xhariep DM accounts to approx 7.7% of the Free State economy. The unemployment rate is approximately 6.9% which is less than the provincial average. The economy of Xhariep is made up of trade, mining, manufacturing, agriculture and construction.



2. WATER SERVICES PROFILE

The DM has Water Service Authority Status and is therefore responsible to provide efficient, effective and sustainable water services to the people within their area of jurisdiction.

The accepted minimum levels of service provision as prescribed by the Reconstruction and Development Programme (RDP) are:

- ◆ Water
 - A minimum availability of 25l/capita/day,
 - A minimum flow rate of 10l/minute,
 - A maximum walking distance of 200m to the nearest tap,
 - Water must meet SABS 0284 quality standards in terms of chemical content, microbial content, taste, colour and appearance and a guaranteed assurance of water of more than 98% of the year.
- ◆ Sanitation
 - Individual households to have access to a Ventilated Improved Pit (VIP) latrine as the minimum standard in human sanitation requirements; and a maximum walking distance of 50m from the homestead to the closest sanitation facility.

The level of hardship figures for water services can be defined as water and sanitation services not meeting **all** of the basic RDP criteria mentioned above. Further to this, the DWA Directorate Planning and Information has prepared a Topic Extract on Water Backlog Eradication Strategy for every Water Services Authority and should be read supplementary to this document. The hardship within the DM is discussed in more detail in the paragraphs here after.

2.1 Water Supply Needs

The service level profile of the District Municipality shows significant progress in the provision of basic services for water. Adequate service levels have so far reached about 55293 households which represents 96.7% of the population for water to at least within 200m. This leaves a gap of 3.3% water backlog. The backlog is a combination of infrastructure provision (capital works) as well as operational/management aspects. The critical shortage of O&M funds and adequate staffing result in systems not being maintained and operated efficiently.

The uncontrolled higher levels of water use, vandalism, theft and unaccounted-for water cripples the water supply schemes. The water resources-, water services infrastructure-, upgrading-, refurbishment- and replacement needs are high due to higher levels of services required and expected by the water users.

Details on the water supply type per Settlement are tabled on pages 03 and 04. The District Municipality needs to integrate water related environmental issues in its integrated environmental management plans i.e. grey water management, threats of water pollution and other water resource related challenges.

Refer to page 3 and 4 in section 2 for more details in this regard.

2.2 Sanitation Needs

The most urgent area for sanitation is access to basic safe sanitation structures. The sanitation backlog is for about 13379 households, ie about 6.5% of the population. The largest backlog is present in the urban and farming settlements – this would be addressed by mostly new VIP structures and secondary by upgrading existing structures. The upgrading possibility may be problematic due to a view that such a household insisting on a new facility (as it is their right to have access to this).

The District Municipality is currently focusing on addressing backlogs for provision of basic service, but with a very small yearly budget. The extent of service level upgrading and covering full waterborne sanitation is currently confined to the settlements within the urban areas.

Details on the sanitation supply type per Settlement are tabled on pages 05 and 06.

Refer to page 5 and 6 in section 2 for more details in this regard.

2.3 Water Services Schemes: Number, Type and Sophistication

There are approximately 21 surface- and groundwater schemes within the DM aiming to serve the people at RDP standard. The district is well developed with local to regional schemes which supply water through extensive bulk distribution systems. These systems usually obtain water from major dams in the area. The most recent development is the construction of the Fauresmith/Jagersfontein BWS and the Rouxville/Smithfield/Zastron BWS regional bulk water supply projects. The smaller scheme areas are dependent on groundwater supply – the minority of systems rely on wellfield type of development. Groundwater is a major contributor to water supply and needs to be managed properly.

There are 11 Water Treatment Works (WTW) (with some package plants which were only supposed to be a temporary measure) serving the major water schemes. There are 24 Wastewater Treatment Works (WWTW) within the DM (captured on the DWA/WSA database). Very few (if any) of these works have been accredited with blue or green drop certification and has reached a stage where substantial refurbishment is required to keep the schemes functional. The operation and maintenance of these schemes are also a problem due to a lack of capacity within the LM’s.

Surface water as well as groundwater is the main water resources in the District Municipality. Without proper management, the resources will not be sufficient for the growing demand, especially in the urban areas.

Xhariep DM has not attended to the development of water scheme technical development plans, for all areas within the DM. Although these development plans address most of the major scheme areas, some are dated and needs to be updated.

2.4 Water Services Projects

The existing funding grants for the municipal capital projects and operating subsidies for water services are mainly funded by the Municipal Infrastructure Grant (MIG). The main objective of MIG is to assist WSAs by providing grant funding in removing the backlog concerning basic municipal services to poor households. The funding is allocated to the WSA, e.g. the LM. A complete water services project list is included within the latest LM WSDP. The RBIG funding has assisted in the development of the Jagersfontein/Fauresmith, Rouxville/Smithfield/Zastron, Naledi area.

The funding streams for infrastructure development over the next three years are tabled within Table 2.4: Funding Streams below:

Table 2.4: Funding Streams

FUNDING STREAM	2011/2012	2012/2013	2013/2014
Municipal Infrastructure Grant	R 29 601 520.04	R 6 180 000.00	R 0
Regional Bulk Infrastructure Grant	R 20 813 631.00	R 40 000 000.00	R 50 000 000.00
Sanitation Human Settlement Grant	R 0	R 0	R 0
Equitable Share (Infrastructure related services)	R 0	R 0	R 0
Accelerated Community Infrastructure Programme	R 0	R 0	R 0

The Topic Extract: Water Backlog Eradication Strategy for the DM has developed a basic cost benchmark for scheme development in the DM based on the availability of the water source and the number of households within a community. This resulted in basic scheme development cost per household as R10 000 for water and R9 500 for sanitation (sanitation capped by the subsidy amount).

This cost benchmark has assisted in determining the total funding allocation required to eradicate water services backlogs and whether the WSA will be able to meet the National water services targets of 2014 (for water supply) and 2014 (for sanitation provision). The amount required to eradicate the water supply backlog is approximately R385 million and for sanitation it is R291 million. The DM will definitely not meet the national millennium development targets of 2014 with the current funding allocations.. Further to this, the DWA: Directorate Planning and Information has developed a Regional Bulk Master Plan to provide a total perspective per WSA on their first order Regional Bulk Infrastructure requirements.

2.5 Operational Issues (service quality, water quality, etc.)

Each LM is their own WSA, who is responsible for the water services policy development and project implementation, planning, regulations and Water Services Provider arrangements. The current capacity within the WSA is quite limited that results in poor service quality and operation and maintenance of schemes. Improvements can be made, in areas such as skilled process controllers, monitoring programme and drinking water compliance.

There are still notable challenges being faced by the DM, including waste water quality compliance and monitoring programme.

The challenge is dilapidated infrastructure and lack of qualified artisan and process controllers. Another challenge is inadequate budget to match the age of the infrastructure. Expansions in the towns took place without any expansions to the treatment works. In general all the water and waste water treatment works are overloaded.

The solution is to access to refurbishment and extension budget, estimated at R361 million for the entire district, and to budget for the recruitment of qualified Artisans and Process Controllers.

2.5.1 Ability to Implement Capital Projects

Each LM within the DM receives the majority of their funding from the MIG and is implementing the programmes. Some management capacity to adequately monitor and manage the disbursement and implementation of this funding is lacking, but is not crippling the implementation process.

2.5.2 Ability to Operate and Maintain Schemes

Each LM WSA is currently understaffed and requires skilled personnel to successfully fulfil its water services provision function. A huge capacity problem exists within the DM with respect to staff, appropriate skills and processes. A Section 78 was conducted during 2004. It is however recommended that a WSA evaluates their current WSP arrangements in order to assess the current staffing gaps with respect to skills, resources and processes. This will assist the WSA to identify the mechanism that should be implemented to deliver an effective and efficient service. Alternatively support needs to be provided to each WSA within the DM to implement processes for planning and operational issues.

2.5.3 Ability to Ensure Effective Water Services are Progressively Provided in District Municipality

Each WSA within the DM is responsible for water services within their area of jurisdiction and is therefore required to prepare a Water Services Development Plan (WSDP) inclusive of a 5-year plan to eradicate water services backlogs. The WSA's needs to update the WSDP as there are still many gaps identified and planning is required to address these gaps. DWA is providing support to this process in terms of training, process facilitation, as well as monitoring and evaluation.

The overview assessment of the overall quantity (level of detail of the information) and quality (level of accuracy of information to meet the compliancy requirements) assessment of the current WSDP 2011 is illustrated overview Assessment for DM.

3. KEY ISSUES AND INTERVENTIONS

The main challenges that face DM in water services provision as per their IDP 2011/12 and confirmed not only in the overview provided above but also within their WSDP of 2011, are as follows:

- The settlements are spread over a vast geographical area which poses management and O&M difficulties,
- Water resources are limited and users aspired higher levels of services,
- High costs are involved to provide adequate water resources, bulk water distribution and water services infrastructure,
- Cost recovery systems are not in place, a culture of 'free water' is problematic in the District Municipality area,
- There are high levels of un-accounted-for water and illegal connections,
- Water Conservation and Demand Management systems are not in place,
- There is an extent of water services backlogs,
- Some infrastructure exceeded its design life,
- In cases infrastructure capacity does not meet the infrastructure demand due to rapid and unplanned growth
- Most schemes require refurbishment- and extension of infrastructure,
- WWTWs exceeding their design capacity and environmental pollution occurs,
- Levels of vandalism and cable/engine theft occurs,
- Shortage of skilled personnel that result on the poor maintenance of existing infrastructure,
- Low revenue generation that has an impact on the financial sustainability of the municipal water & sanitation service. The failure to impose cost recovery, together with poor cost recovery, have meant that the service is currently not generating sufficient revenue. This is also affected by inaccurate consumption data due to a lack of water meters, faulty meters and meters not being read in all areas.
- Many consumers are unemployed and dependent on government grants.

3.1 Access to Water and Sanitation

3.1.1 Water Supply

The WSA's have indicated in their Services Level Policy that all farming communities will be served at RDP standards and urban areas will receive higher levels of service. Based on the backlog study mentioned in paragraph 3.4, the cost to eradicate backlogs and provide water at RDP standards, is R385million. The expansion of regional scheme infrastructure is required to ensure sustainability of water resources.

3.1.2 Sanitation

The WSA's have indicated in their Services Level policy that all farming communities will be served at RDP standards and urban areas will receive waterborne sanitation. Based on the backlog study mentioned in paragraph 3.4, the cost to eradicate sanitation backlogs is R291 million.

3.2 Institutional Arrangements and Support

The lack of skilled staff also results in the provision of poor service quality. The WSA capacity Business Plan should be utilised to indicate which training and staff development programmes should be investigated to improve the capacity of the WSA. Specific support may relieve pressures on current limited and low experienced staff, but also improve on the operational and maintenance aspects of regional and rudimentary schemes. Long term financial sustainability of the proposed scheme is heavily dependent on adequate levels of revenue collection and cost recovery. To ensure the long term sustainability of the scheme, revenue collection must be extended to cover all those households that use more than the designated "free basic water" allocation of 6 kℓ per household per month. One of the challenges faced by the District Municipality is the control of water losses. The unaccounted for losses are high and are made up of:

- Losses through leakages in the old infrastructure
- Unauthorized connections

- Metered connections not being billed

3.3 Implementation of Effective Water Conservation and Demand Management (WC&DM) and Other Programmes

The DWA is also currently providing WSDP support to Local Government and is part of the current WSDP enhancement process. The Support Team will ensure that all the linkages with other related planning activities are established as well as building the capacity of the WSA officials and politicians.

4. WATER RESOURCES

4.1 Surface Water

One of the main challenges facing the supply of Surface Water will be to address the payment for services by end-users. There are a number of dams which do not supply their maximum allocated domestic yield yet, but require long pipeline extensions to the various remote communities.

4.2 Groundwater

The borehole yields in the District Municipality falls mostly within the 0 to 3.0 l/s range, and could supply quite a number of communities with safe potable water, provided that the water quality is within limits. The groundwater development should now concentrate on developing well fields instead of the closest potential borehole for individual village supply. Such an exploration programme could have a meaningful impact on the groundwater potential.

Groundwater should play a crucial role to augment surface water resources, especially during periods of drought, or as backup during periods of equipment failure or high demands on surface sources.

It is believed that an approach whereby surface and groundwater resource are planned and operated as a unit will ensure safe, potable and sustainable water supply to communities.

4.3 Irrigation

Most irrigation is done for commercial farming. The developed commercial schemes are not operating to their potential

TRANSFER AGREEMENT PROGRESS

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Signed	% Prog.	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div><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VALUE OF ASSETS TRANSFERRED: TA VALUE

WSA NAME	TA Prog.		ASSET VALUE (x R1,000)			TRANSFERRED ASSETS AS PER T.A. VALUES ³ (x R1,000)								
	Compl.	Signature Date	FA Baseline	RPMS ² Verified	TA Value ¹	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	Total Value
15 Kopanong	■	11-Jul-06	8,695	8,695	8,695					8,695				8,695

VALUE OF ASSETS TRANSFERRED: FUNCTIONAL ASSESSMENT VALUE

WSA NAME	TA Prog.		ASSET VALUE			TRANSFERRED ASSETS AS PER VERIFIED FA BASELINE ³								
	Compl.	Signature Date	(x R1,000)			(x R1,000)								
			FA Baseline	RPMS ² Verified	TA Value ¹	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	Total Value
15 Kopanong	■	11-Jul-06	8,695	8,695	8,695					8,695				8,695

REPLACEMENT VALUE OF ASSETS TRANSFERRED: TA VALUE

WSA NAME	TA Prog.		REPLACE COST (x R1,000)			TRANSFERRED ASSETS AS PER T.A. VALUES ² (x R1,000)							
	Compl.	Signature Date	FA	RPMS	TA	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Total Value
			Baseline	Verified	Value ¹								
15 Kopanong	■	11-Jul-06	11,939							11,939			11,939

NUMBER OF SCHEMES TRANSFERRED: TA VALUE

WSA NAME	TA Prog.		SCHEMES											SCHEMES TRANSFERRED					
	Compl.	Signature Date	FA Baseline ¹	FA Baseline				RPMS Verified ¹				TA Number of Schemes			FA BASE PLUS ADDITIONAL				
				Schemes	Rud.	Projects	Total	Schemes	Rud.	Projects	Total	FA based	Additional	Total	2002/03	2003/04	2004/05	2005/06	2006/07
15 Kopanong		11-Jul-06	1	1			1	1			1	1		1					1

STAFF TRANSFERRED AND SECONDED

WSA NAME	Compl.	TA Prog.	STAFF VALUES					STAFF TRANSFERRED										
		Staff Transfer Date	PLANNED		ACTUAL			2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	TOTAL
			FA Baseline	TA Revision	Actual Total	Staff Seconded	Remain DWAF											
15 Kopanong	<input type="checkbox"/>	n/a	0	0	0													

REFURBISHMENT SCHEDULE

WSA NAME	REFURBISHMENT						DoRA ALLOCATIONS - REFURBISHMENT ONLY										FUNDING REQUIREMENTS		
	(x R1,000)						(x R1,000)										To Budget in DoRA	Addition al Needed	Addition al Needed
	FA Baseline ¹	RPMS Verified	Budget	Est. per Exec Summ	Est. per RPMS	TA Figures ²	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12			
15 Kopanong	427	427	2,144	2,144	2,144	1,080					536	544	1,064						

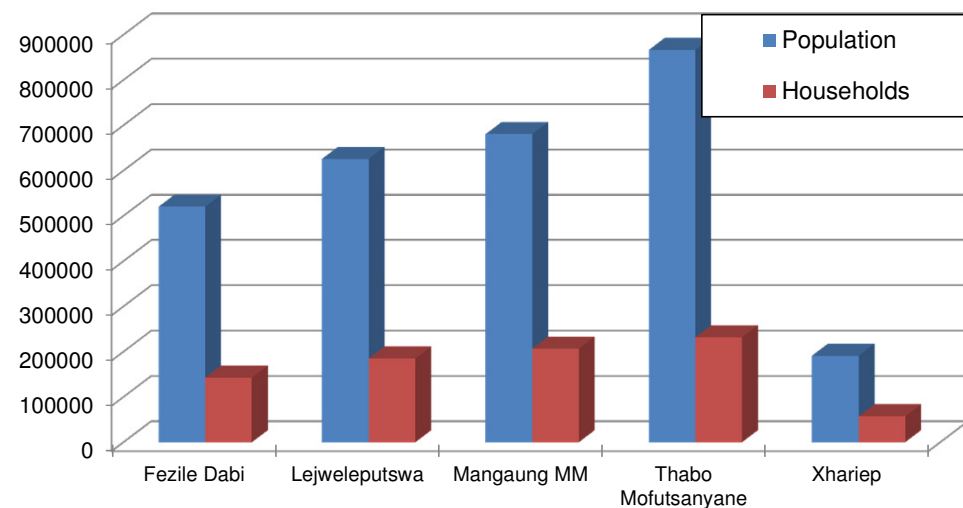
SECTION 2 STATUS QUO SITUATION

EXISTING DEMOGRAPHICS

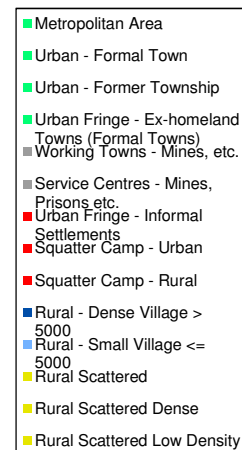
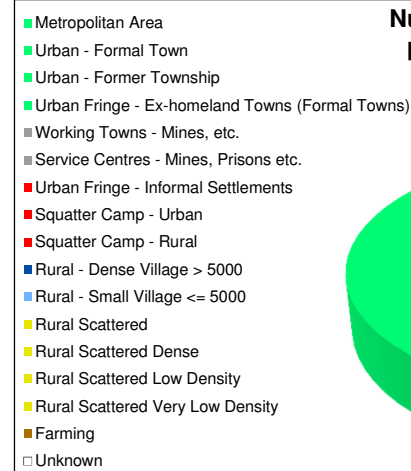
Settlement Based

SETTLEMENT DEMOGRAPHICS (December 2011)				
DM / MM	LM	Settlements	Population	Households
Fezile Dabi	Mafube Local Municipality	9	68656	18519
Fezile Dabi	Metsimaholo Local Municipality	8	150132	43767
Fezile Dabi	Moqhaka Local Municipality	7	170601	43015
Fezile Dabi	Ngwathe Local Municipality	14	130737	37632
Lejweleputswa	Masilonyana Local Municipality	13	69531	19909
Lejweleputswa	Matjhabeng Local Municipality	17	349987	109371
Lejweleputswa	Nala Local Municipality	5	106981	29234
Lejweleputswa	Tokologo Local Municipality	9	40475	11605
Lejweleputswa	Tswelopele Local Municipality	6	58935	14904
Mangaung MM	Mangaung Metropolitan Municipality	59	680441	206832
Thabo Mofutsanyane	Dihlabeng Local Municipality	15	126787	34101
Thabo Mofutsanyane	Maluti a Phofung Local Municipality	49	422500	111038
Thabo Mofutsanyane	Mantsopa Local Municipality	12	56128	15135
Thabo Mofutsanyane	Nketoana Local Municipality	9	70837	18988
Thabo Mofutsanyane	Phumelela Local Municipality	8	56596	15426
Thabo Mofutsanyane	Setsotho Local Municipality	10	133690	37240
Xhariep	Kopanong Local Municipality	26	58693	18801
Xhariep	Letsemeng Local Municipality	13	50774	15045
Xhariep	Mohokare Local Municipality	7	49081	13265
Xhariep	Naledi Local Municipality	9	32679	9972

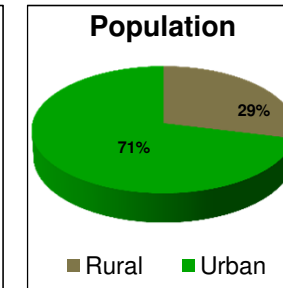
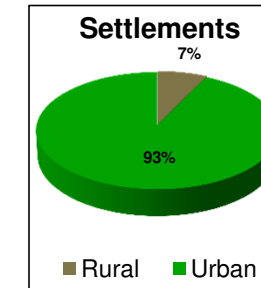
DM SUMMARY				
DM / MM	Settlements	Population	Households	
Fezile Dabi	38	520126	142933	
Lejweleputswa	50	625909	185023	
Mangaung MM	59	680441	206832	
Thabo Mofutsanyane	103	866538	231928	
Xhariep	55	191227	57083	
Total	305	2 884 241	823 799	



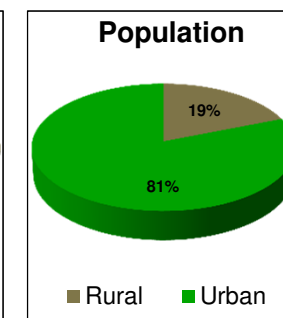
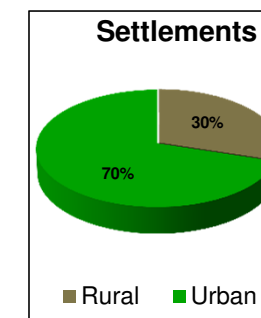
KHARIEP DM SETTLEMENT TYPE DISTRIBUTION (December 2011)			
Settlement Type	Settlements	Population	Households
Metropolitan Area	0	0	0
Urban - Formal Town	20	25734	7864
Urban - Former Township	31	110413	33054
Urban Fringe - Ex-homeland Towns (Formal Towns)	0	0	0
Working Towns - Mines, etc.	0	0	0
Service Centres - Mines, Prisons etc.	0	0	0
Urban Fringe - Informal Settlements	0	0	0
Squatter Camp - Urban	0	0	0
Squatter Camp - Rural	0	0	0
Rural - Dense Village > 5000	0	0	0
Rural - Small Village <= 5000	0	0	0
Rural Scattered	0	0	0
Rural Scattered Dense	0	0	0
Rural Scattered Low Density	0	0	0
Rural Scattered Very Low Density	0	0	0
Farming	4	55080	16165
Unknown	0	0	0



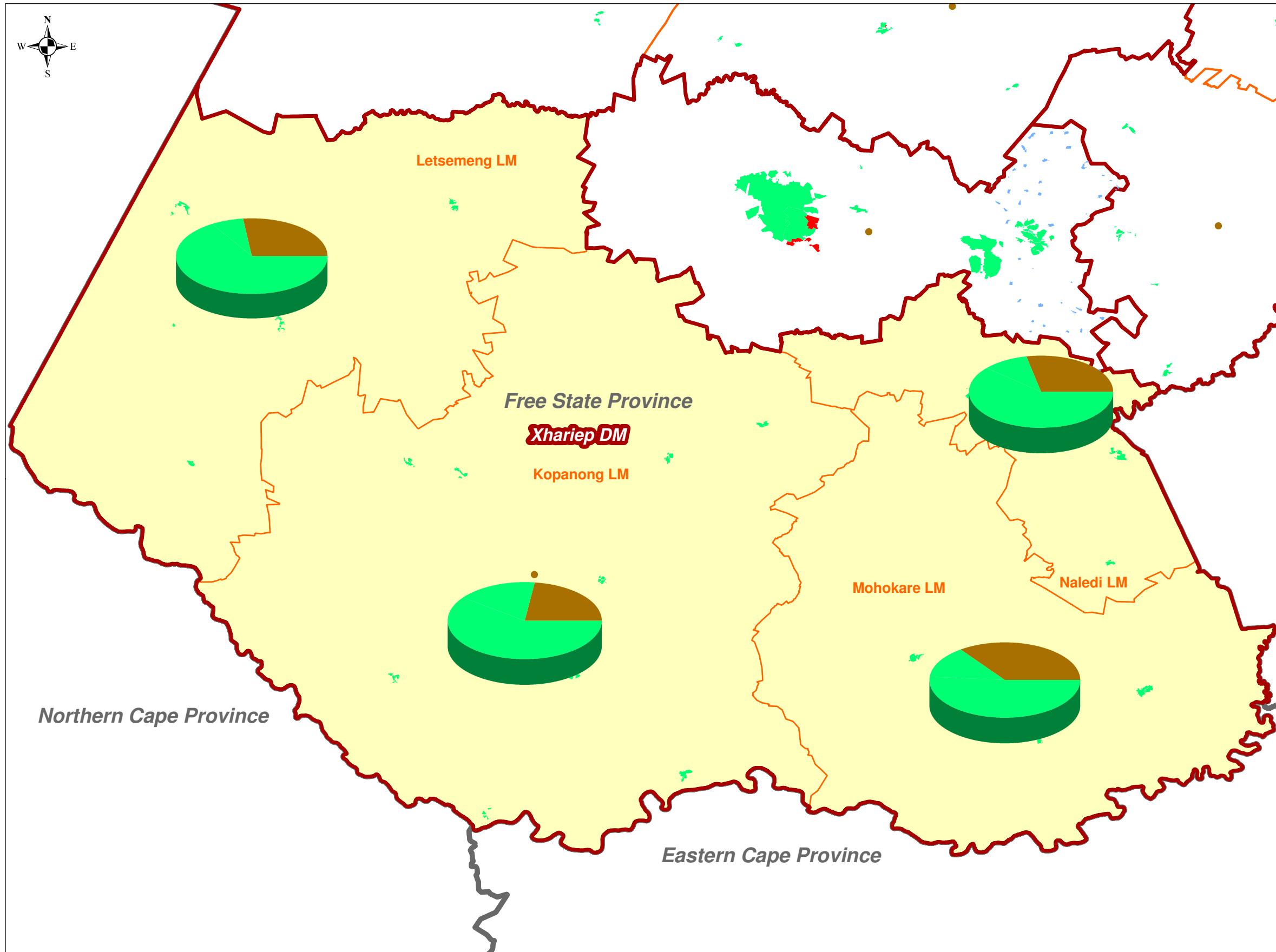
KHARIEP DM SUMMARY			
Main Type	Settlements	Population	Households
Rural	4	55080	16165
Urban	51	136147	40918
Total	55	191 227	57 083



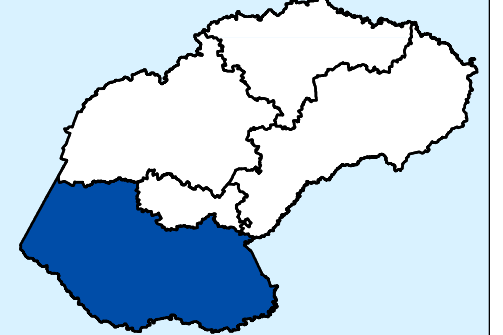
PROVINCIAL SUMMARY			
Main Type	Settlements	Population	Households
Rural	91	548440	152555
Urban	214	2335801	671244
Total	305	2 884 241	823 799



NOTES: Information derived from Reference Framework geodatabase (feature class Settlements).



LOCALITY MAP



EXISTING DEMOGRAPHICS Settlement Based

Settlement Types

- Metropolitan Area
Formal Town
Former Township
Ex-homeland Towns
- Working Towns (Mines etc.)
Service Centres (Prisons etc.)
- Informal Settlements
(Urban Fringe)
Squatter Camp (Urban & Rural)
- Rural - Dense Village
(Population > 5000)
- Rural - Small Village
(Population <= 5000)
- Rural Scattered
- Dense
- Low Density
- Very Low Density
- Farming

NOTES:
Pie chart based on population and
sized according to total population

BASEMAP LEGEND:

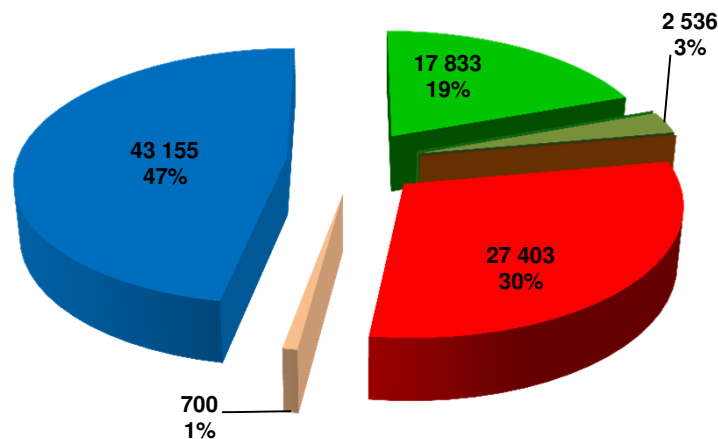
- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

0 5 10 20 30 40
Km

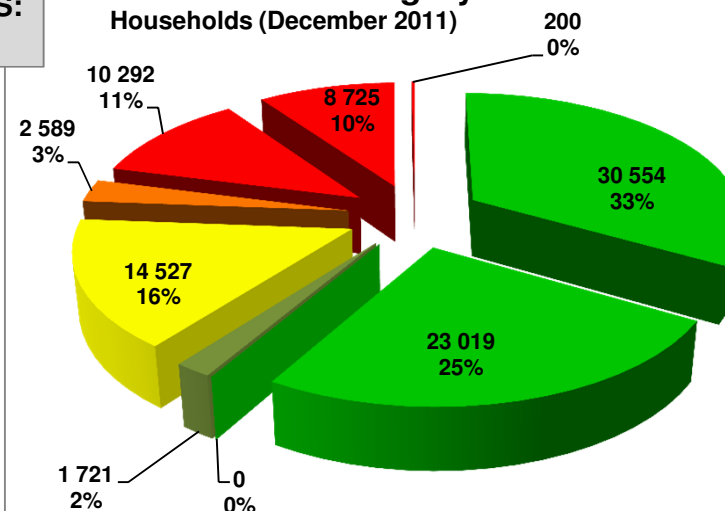


FREE STATE PROVINCE: XHARIEP DM

Water Categorisation	FORMAL																				INFORMAL			
	Adequate								Water Resources Needs		O&M Needs		Infrastructure Needs						No Services		Adequate		No Services	
	House Connections		Yard Connections		Stand Pipes		Shared Services						Upgrades		Extensions		Refurbishment							
	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
1	10 585	59	7 248	41	0	0																		
2																								
3	1 233	49	1 228	48	0	0	75	3																
4																								
5																								
6																								
7	10 146	37	8 325	30	0	0	1 577	6					2 908	11	4 447	16	0	0						
8	350	50	0	0	0	0	0	0			150	21	0	0	0	0	200	29						
9	8 240	19	6 218	14	0	0	69	0	14 527	34	2 439	6	7 384	17	4 278	10	0	0						
10																								
Total per WSA	30 554		23 019		0		1 721		14 527		2 589		10 292		8 725		200		0		0		0	

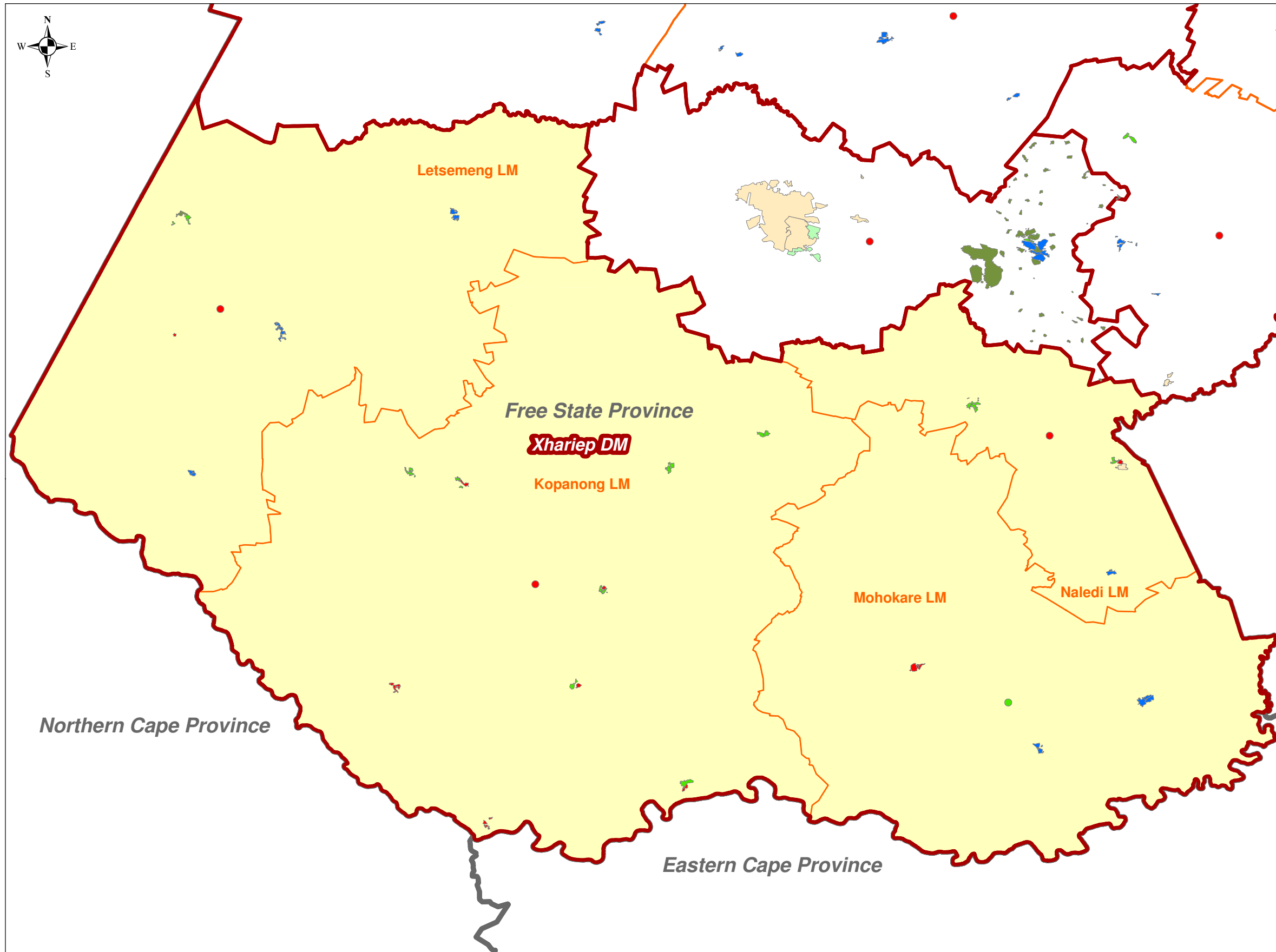
This presents the Water Services Level in relation to **settlement category totals**This presents the Water Services Level in relation to the **need category totals****Water Needs: Settlements**
Households (December 2011)

- 1) Adequate: Formal
- 2) Adequate: Informal
- 3) Adequate: Shared Services
- 4) No Services: Informal
- 5) Water Resource Needs
- 6) O&M Needs
- 7) Infrastructure Needs
- 8) Infrastructure & O&M Needs
- 9) Infrastructure, O&M & Resource Needs
- 10) No Services

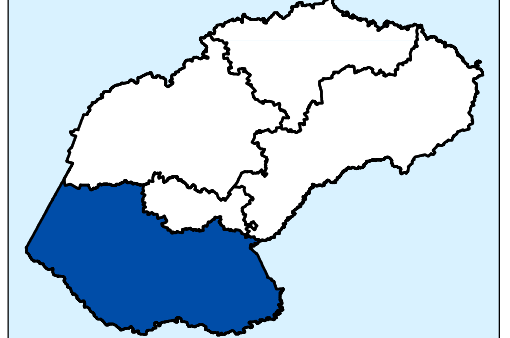
CHART VALUES:
(HH, %)**Water Needs: Category**
Households (December 2011)

- Adequate: House Connections
- Adequate: Yard Connections
- Adequate: Stand Pipes
- Adequate: Shared Services
- Water Resources Needs
- O&M Needs
- Infra Needs: Upgrade
- Infra Needs: Extensions
- Infra Needs: Refurbishment
- No Services
- Adequate: Informal
- No Services: Informal

1	Adequate	3	Adequate: Shared Services	5	Water Resources Needs	7	Infrastructure Needs	9	Infrastructure, O&M & Resource Needs
2	Adequate: Informal	4	No Services: Informal	6	O&M Needs	8	Infrastructure & O&M Needs	10	No Services



LOCALITY MAP



ACCESS TO WATER
Settlement Based

Settlement Categorisation

Formal

- 1) Adequate
- 3) Adequate: Shared Services
- 5) Water Resource Needs
- 6) O&M Needs
- 7) Infrastructure Needs
- 8) Infrastructure & O&M Needs
- 9) Infrastructure, O&M & Resource Needs
- 10) No Services

Informal

- 2) Adequate
- 4) No Services

BASEMAP LEGEND:

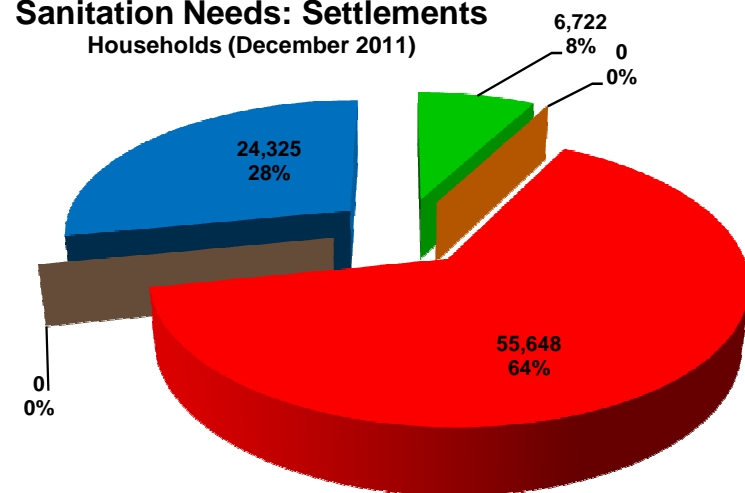
- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

0 4.5 9 18 27 36
Km

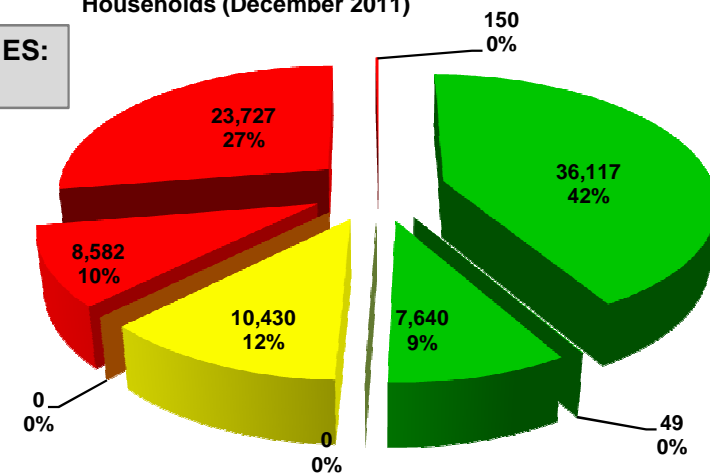


FREE STATE PROVINCE: KHARIEP DM

Sanitation Categorisation	FORMAL																						INFORMAL			
	Adequate										Water Resources Needs		O&M Needs		Infrastructure Needs						No Services		Adequate		No Services	
	Waterborne		Waterborne Low Flush		Septic Tanks		Non Waterborne		Shared Services						Upgrades		Extensions		Refurbishment							
	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
1	6,523	97	0	0	29	0	170	3																		
2																										
3																										
4																										
5																										
6																										
7	21,540	39	0	0	2	0	5,133	9	0	0					8,561	15	20,262	36	150	1						
8																										
9	8,054	33	0	0	18	0	2,337	10	0	0	10,430	43	0	0	21	0	3,465	14	0	0						
10																										
Total per DM	36,117		0		49		7,640		0		10,430		0		8,582		23,727		150		0		0		0	

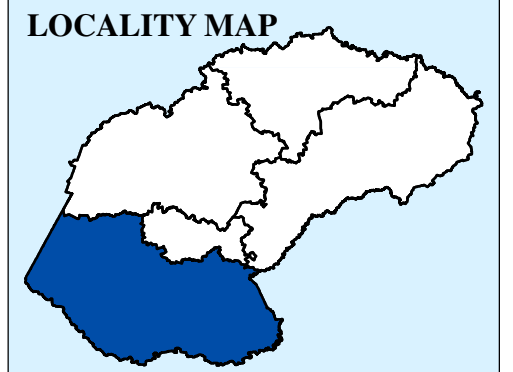
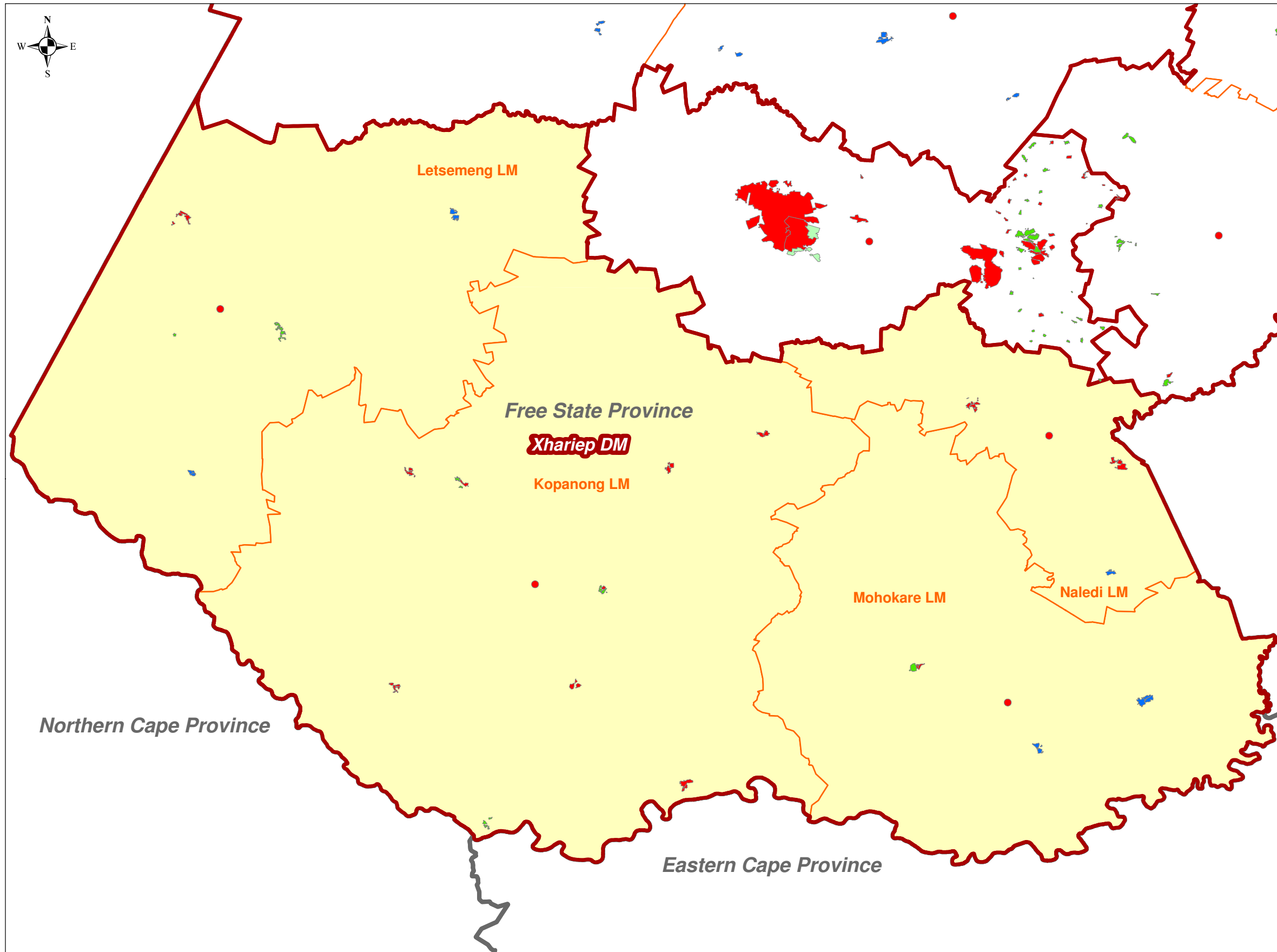
This presents the Sanitation Services Level in relation to **settlement category totals**This presents the Sanitation Services Level in relation to the **need category totals**
Sanitation Needs: Settlements
Households (December 2011)


- 1) Adequate: Formal
- 2) Adequate: Informal
- 3) Adequate: Shared Services
- 4) No Services: Informal
- 5) Water Resource Needs
- 6) O&M Needs
- 7) Infrastructure Needs
- 8) Infrastructure & O&M Needs
- 9) Infrastructure, O&M & Resource Needs
- 10) No Services

CHART VALUES:
(HH, %)
Sanitation Needs: Category
Households (December 2011)


- Adequate: Waterborne
- Adequate: Waterborne Low Flush
- Adequate: Septic Tanks
- Adequate: Non Waterborne
- Adequate: Shared Services
- Water Resources Needs
- O&M Needs
- Infra Needs: Upgrade
- Infra Needs: Extensions
- Infra Needs: Refurbishment
- No Services
- Adequate: Informal
- No Services: Informal

1	Adequate	3	Adequate: Shared Services	5	Water Resources Needs	7	Infrastructure Needs	9	Infrastructure, O&M & Resource Needs
2	Adequate: Informal	4	No Services: Informal	6	O&M Needs	8	Infrastructure & O&M Needs	10	No Services



ACCESS TO SANITATION
Settlement Based

Settlement Categorisation

Formal

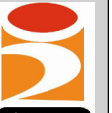
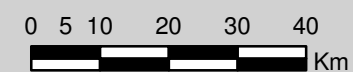
- 1) Adequate
- 3) Adequate: Shared Services
- 5) Water Resource Needs
- 6) O&M Needs
- 7) Infrastructure Needs
- 8) Infrastructure & O&M Needs
- 9) Infrastructure, O&M & Resource Needs
- 10) No Services

Informal

- 2) Adequate
- 4) No Services

BASEMAP LEGEND:

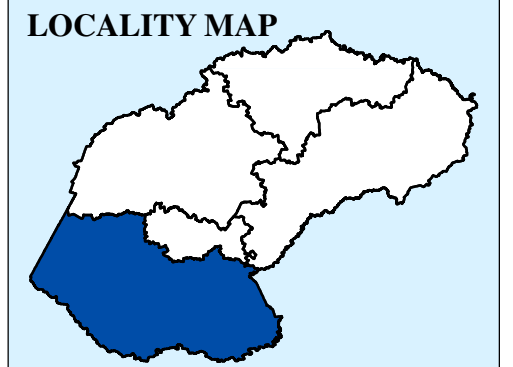
- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries



MM/DM	LM	REGIONAL BULK								INTERNAL BULK								RETICULATION				
		Number of Schemes	Total Number of Components						Pipe Length (km)	Number of Schemes	Total Number of Components						Pipe Length (km)	Number of Schemes	Total Number of Components			Pipe Length (km)
			Pump Stations	Reser-voirs	WTW	WWTW	Boreholes	Abstractions Works			Pump Stations	Reser-voirs	WTW	WWTW	Boreholes	Abstraction Works			Street Taps	Erf Connections	House Connections	
Fezile Dabi	Mafube	0	0	0	0	0	0	0	0	4	6	7	4	6	0	0	25	0	0	0	0	0
Fezile Dabi	Metsimaholo	0	0	0	0	0	0	0	0	3	21	12	3	7	0	0	47	0	0	0	0	0
Fezile Dabi	Moghaka	0	0	0	0	0	0	0	0	34	36	17	3	5	0	0	94	0	0	0	0	0
Fezile Dabi	Ngwathe	0	0	0	0	0	0	0	0	5	19	19	4	5	0	0	66	0	0	0	0	0
Lejweleputswa	Masilonyana	0	0	0	0	0	0	0	0	53	12	14	4	7	4	0	48	0	0	0	0	0
Lejweleputswa	Matjhabeng	0	0	0	0	0	0	0	0	61	28	18	0	13	1	0	99	0	0	0	0	0
Lejweleputswa	Nala	0	0	0	0	0	0	0	0	2	9	15	0	2	0	0	27	0	0	0	0	0
Lejweleputswa	Tokologo	0	0	0	0	0	0	0	0	3	13	15	0	4	25	0	36	0	0	0	0	0
Lejweleputswa	Tswelopele	0	0	0	0	0	0	0	0	2	10	6	2	2	0	0	58	0	0	0	0	0
Mangaung Metropolitan Municipality	Mangaung	0	0	0	0	0	0	0	0	7	19	40	3	9	0	0	292	0	0	0	0	3198
Thabo Mofutsanyane	Dihlabeng	0	0	0	0	0	0	0	0	8	28	26	6	6	0	0	54	0	0	0	0	0
Thabo Mofutsanyane	Maluti a Phofung	0	0	0	0	0	0	0	0	22	58	65	5	7	0	0	238	0	0	0	0	0
Thabo Mofutsanyane	Mantsopa	0	0	0	0	0	0	0	0	19	13	19	5	6	12	0	61	0	0	0	0	0
Thabo Mofutsanyane	Nketoana	0	0	0	0	0	0	0	0	26	4	10	5	4	0	0	24	0	0	0	0	0
Thabo Mofutsanyane	Phumelela	0	0	0	0	0	0	0	0	3	15	6	3	4	1	0	20	0	0	0	0	0
Thabo Mofutsanyane	Setsoto	0	0	0	0	0	0	0	0	64	23	13	6	5	2	0	51	0	0	0	0	0
Xhariep	Kopanong	0	0	0	0	0	0	0	0	64	9	22	49	4	12	0	97	0	0	0	0	0
Xhariep	Letsemeng	0	0	0	0	0	0	0	0	5	7	21	4	6	0	0	20	0	0	0	0	0
Xhariep	Mohokare	0	0	0	0	0	0	0	0	86	3	7	11	2	3	0	26	0	0	0	0	0
Xhariep	Naledi	0	0	0	0	0	0	0	0	3	9	6	1	3	12	0	22	0	0	0	0	0
Total for Province		0	0	0	0	0	0	0	454	80	365	389	64	116	57	0	1405	0	0	0	0	3198

NOTES:

1) Information derived from Reference Framework geodatabase (table XT01).



EXISTING WATER INFRASTRUCTURE
Scheme Based

Scheme Classification

- Regional Bulk
- Internal Bulk
- Reticulation

Settlement Water Categorisation

Formal

- 1) Adequate
- 3) Adequate: Shared Services
- 5) Water Resource Needs
- 6) O&M Needs
- 7) Infrastructure Needs
- 8) Infrastructure & O&M Needs
- 9) Infrastructure, O&M & Resource Needs
- 10) No Services

Informal

- 2) Adequate
- 4) No Services

BASEMAP LEGEND:

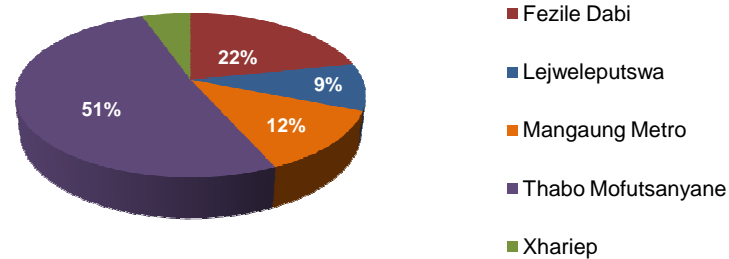
- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

0 4.5 9 18 27 36
Km

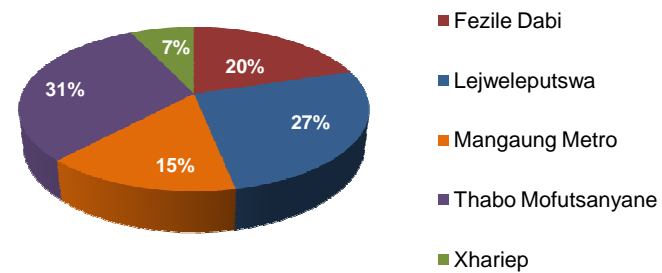


DEMOGRAPHICS (December 2011)				BASIC SERVICES REQUIREMENTS									
MM/DM	LM	Total Population	Total Households	Affected Population	Affected Households	Potential Cost (R)	Number of Schemes with Required Water Infrastructure						
							Upgrade	Refurbishment	O & M	Replace	Resource	Combination	None
Fezile Dabi	Mafube	68,656	18,519	92,529	24,609	315,642,596	1					3	
Fezile Dabi	Metsimaholo	150,132	43,767	60,444	15,823	149,633,425						1	2
Fezile Dabi	Moghaka	170,601	43,015	199,374	47,470	180,382,468				1		2	
Fezile Dabi	Ngwathe	131,437	37,632	133,725	43,817	395,243,286						5	
Lejweleputswa	Masilonyana	69,532	19,909	76,052	25,693	190,572,621					3	2	
Lejweleputswa	Matjhabeng	349,987	109,371	68,259	21,331	898,397,907						3	3
Lejweleputswa	Nala	106,981	29,234	3,612	931	50,386,314						1	1
Lejweleputswa	Tokologo	40,476	11,605	23,077	8,013	136,761,141					1	2	
Lejweleputswa	Tswelopele	58,935	14,904	36,164	9,854	82,161,795	1				1		
Mangaung Metro	Mangaung Metro	680,385	206,820	275,793	87,001	776,299,022						3	
Thabo Mofutsanyane	Dihlabeng	126,788	34,101	125,711	33,345	388,394,536						5	
Thabo Mofutsanyane	Maluti a Phofung	422,502	111,038	715,015	171,477	569,941,024					2	1	
Thabo Mofutsanyane	Mantsopa	56,181	15,148	77,784	23,013	213,792,424						4	2
Thabo Mofutsanyane	Nketoana	70,837	18,988	14,237	4,563	101,190,725						2	2
Thabo Mofutsanyane	Phumelela	56,598	15,426	36,237	12,539	96,178,538						1	2
Thabo Mofutsanyane	Setsoto	133,692	37,240	179,066	49,879	214,512,082						3	1
Xhariep	Kopanong	58,694	18,801	7,260	2,129	54,348,428	1			5		1	2
Xhariep	Letsemeng	51,183	15,148	49,729	15,024	204,011,222	1				1	2	1
Xhariep	Naledi	32,679	9,972	5,569	1,814	24,073,779					1	1	1
Xhariep	Mohokare	49,081	13,265	56,808	16,807	79,095,989	1					2	
Total for Province		2,885,355	823,903	2,236,446	615,132	R 5,121,019,322	5	0	0	6	9	44	17

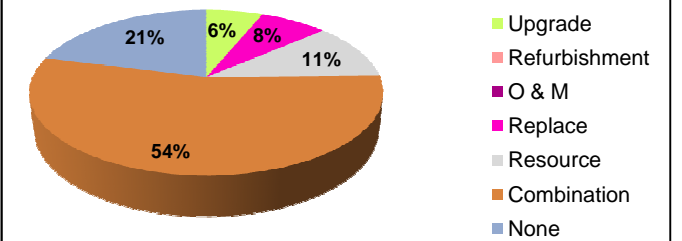
Affected Population



Potential Cost (R)

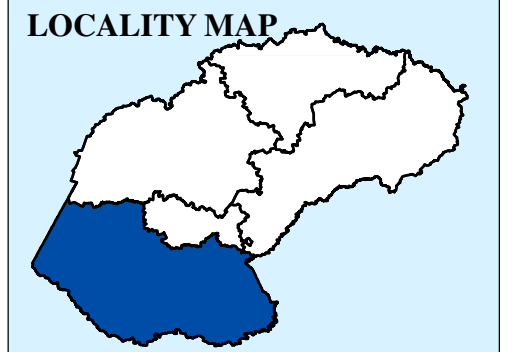


Percentage of Schemes with Required Water Infrastructure



NOTES:

1) Information derived from Reference Framework geodatabase (table XT02).



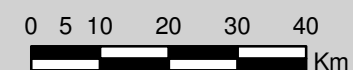
EXISTING WATER INFRASTRUCTURE REQUIREMENTS Scheme Based

- Scheme Requirements**
- Upgrade
 - Refurbishment
 - O & M
 - Replace
 - Resource
 - Combination
 - None

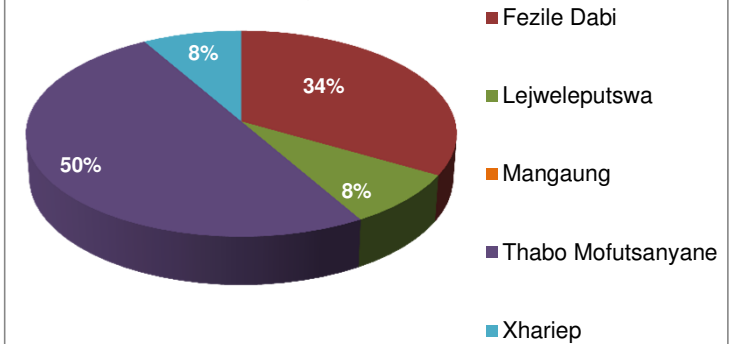
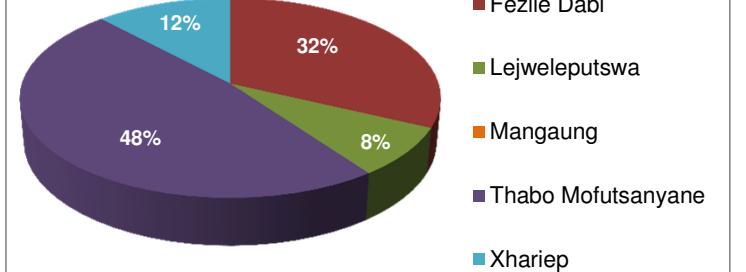
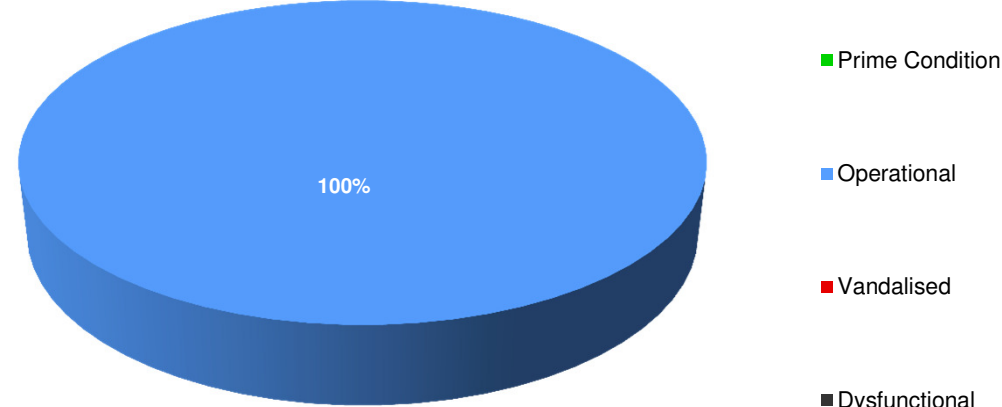
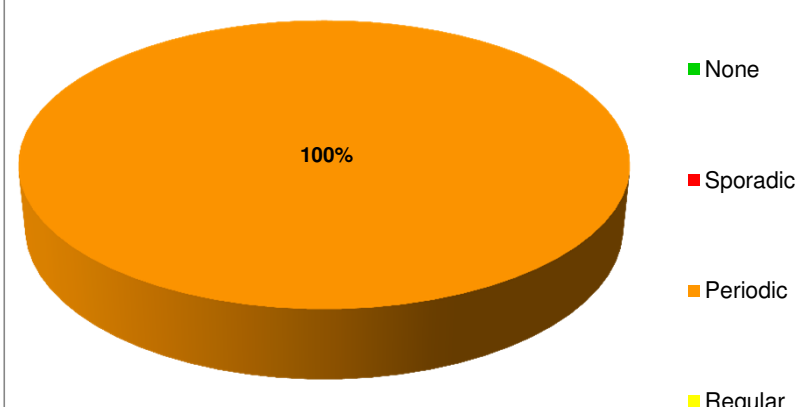
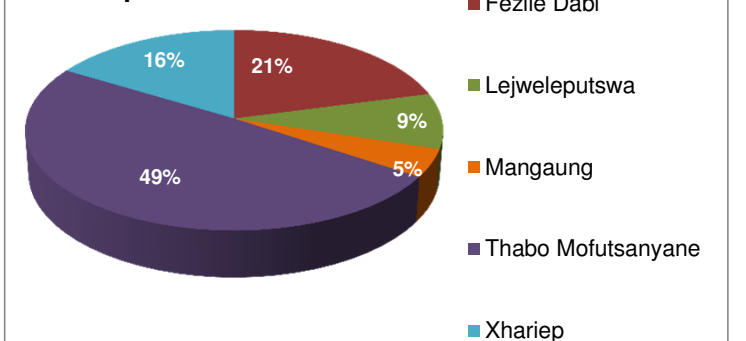
- Settlement Water Categorisation**
- Formal**
- + 1) Adequate
 - + 3) Adequate: Shared Services
 - + 5) Water Resource Needs
 - + 6) O&M Needs
 - + 7) Infrastructure Needs
 - + 8) Infrastructure & O&M Needs
 - + 9) Infrastructure, O&M & Resource Needs
 - + 10) No Services
- Informal**
- + 2) Adequate
 - + 4) No Services

BASEMAP LEGEND:

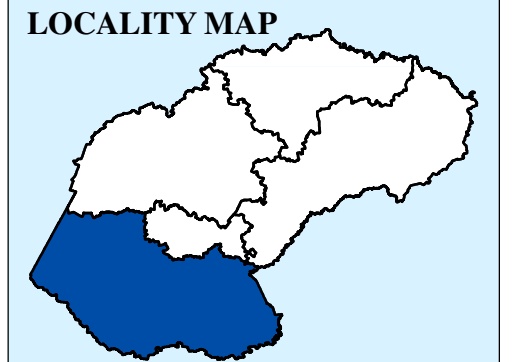
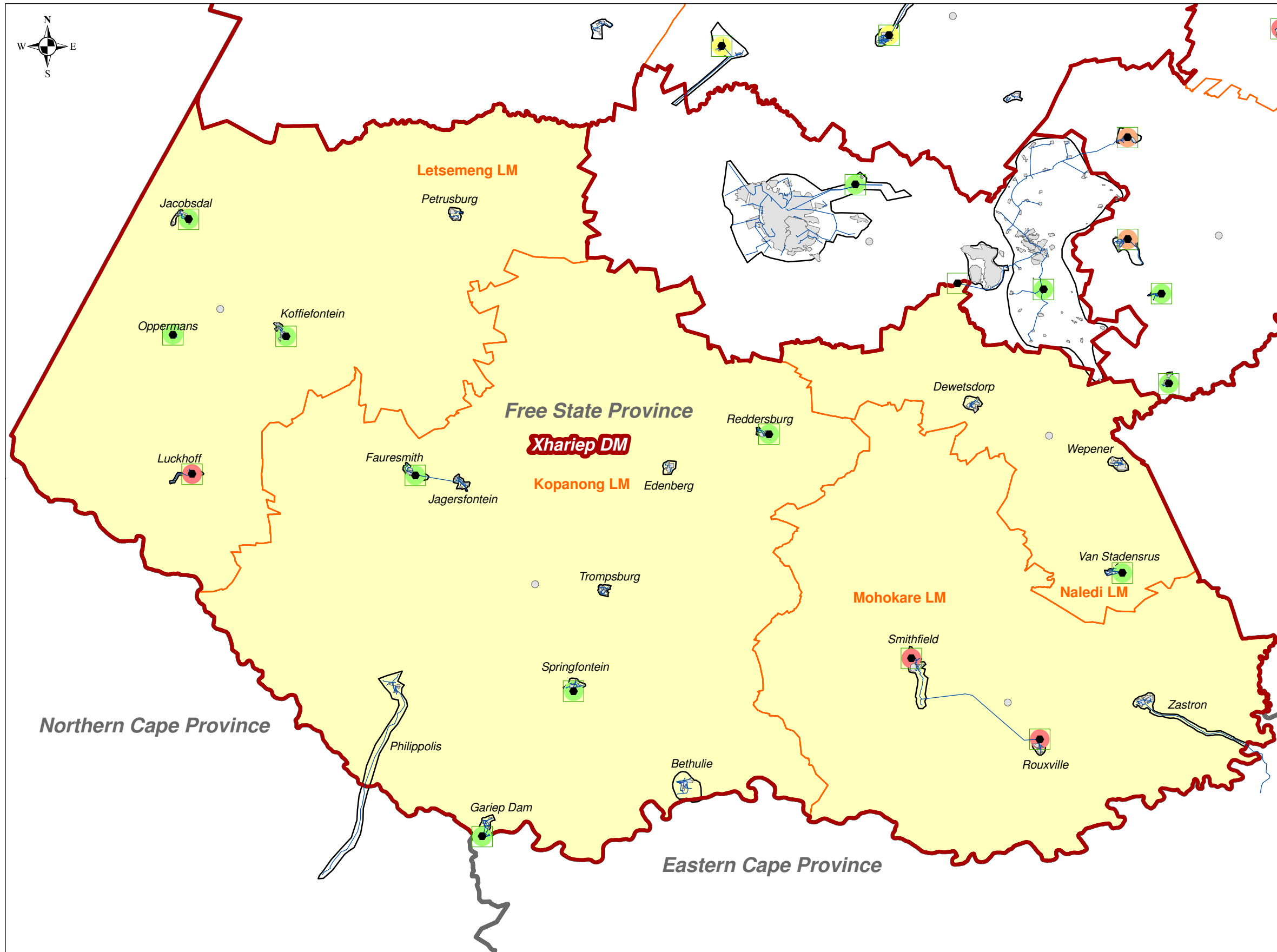
- Provincial Boundaries
- District Municipal Boundaries
- Information not submitted
- Xhariep DM
- Local Municipal Boundaries



MM/DM	LM	Number of WTW's	Total Capacity ML/day	Number of WTW's with Insufficient Capacity	Number of WTW's in need of Refurbishment
Fezile Dabi	Mafube	4	23.16	3	3
Fezile Dabi	Metsimaholo	3	55.614	1	1
Fezile Dabi	Moqhaka	3	71.64	1	1
Fezile Dabi	Ngwathe	4	23.72	3	3
Lejweleputswa	Masilonyana	4	18.12	2	2
Lejweleputswa	Tswelopele	2	12.8	0	0
Mangaung Metropolitan Municipality	Mangaung	3	318	0	0
Thabo Mofutsanyane	Dihlabeng	6	45.1	3	3
Thabo Mofutsanyane	Maluti a Phofung	5	34.6	0	0
Thabo Mofutsanyane	Mantsopa	5	14.552	2	2
Thabo Mofutsanyane	Nketoana	5	16.25	3	3
Thabo Mofutsanyane	Phumelela	3	12.79	2	2
Thabo Mofutsanyane	Setsoto	6	41.562	2	2
Xhariep	Kopanong	4	18.62	0	0
Xhariep	Letsemeng	4	7.664	1	1
Xhariep	Mohokare	2	2.75	1	2
Xhariep	Naledi	1	0.1	0	0
Total for Province		64	717.04	24	25

Percentage of WTW's with Insufficient Capacity

Percentage of WTW's in Need of Refurbishment

Observation

Incidents

Asset Management Required

NOTES:

- 1) Information concerning capacity of WTW and Number of Staff on Site is completed as available.
- 2) Information derived from Reference Framework geodatabase (feature class WTW).



EXISTING WATER INFRASTRUCTURE: WTW
Component Based

Blue Drop Status

(data still in process)

- Yes (0)
- No (0)
- Unknown (11)

Refurbishment Need: WTW

- High
- Medium
- Low
- None

Observation: WTW

- Prime Condition
- Operational
- Vandalised
- Dysfunctional

— Bulk Pipelines

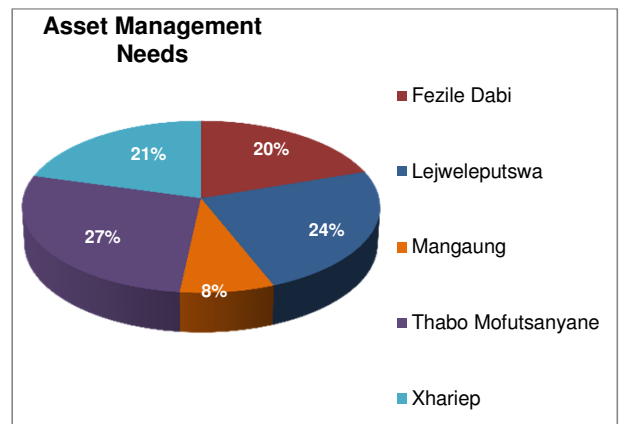
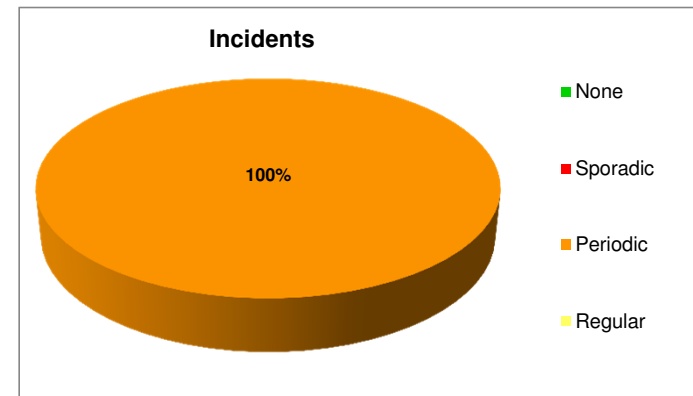
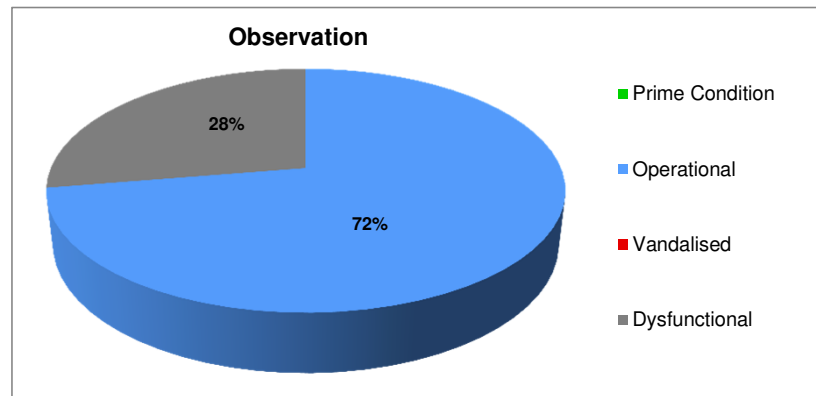
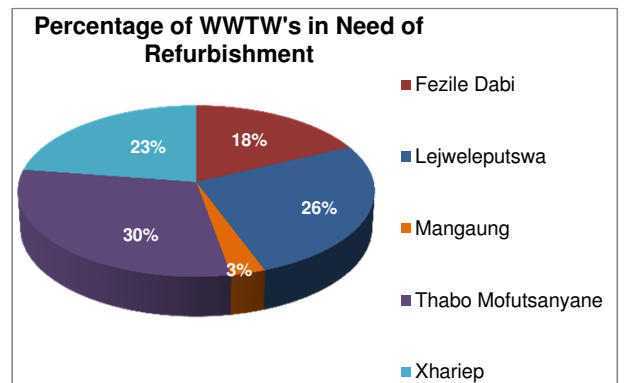
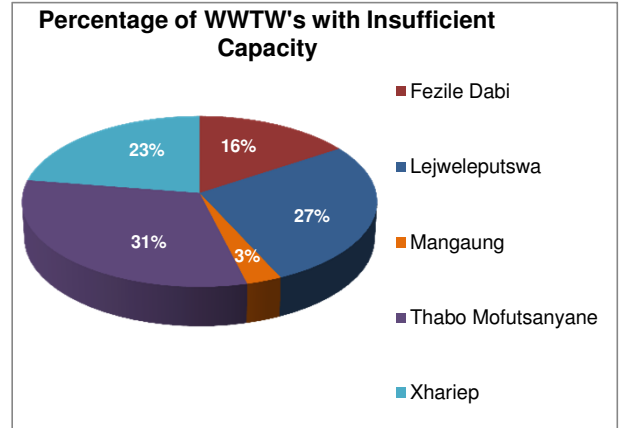
BASEMAP LEGEND:

- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

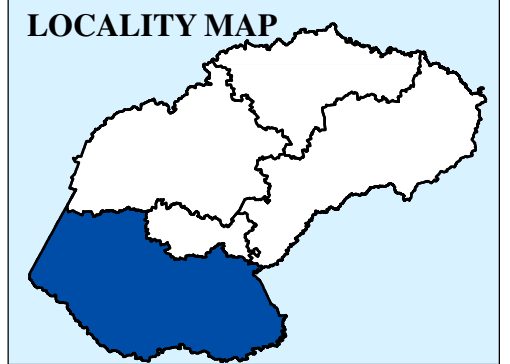
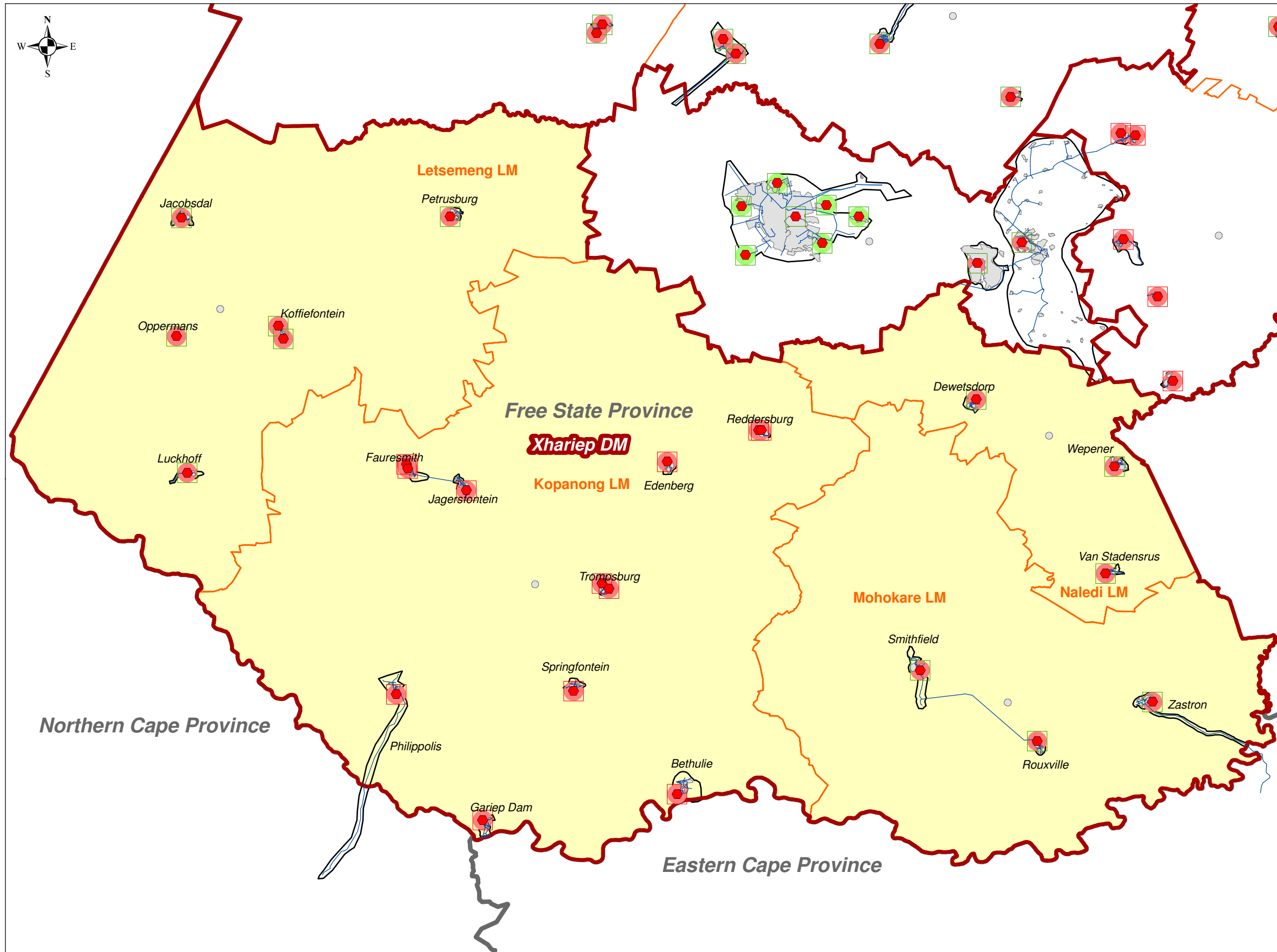
0 4.5 9 18 27 36
Km



MM/DM	LM	Number of WWTW's	Capacity MI/day: Average Wet Weather Capacity	Operation Capacity MI/day: Average Dry Weather Capacity (Based on organic load)	Hydraulic Capacity MI/day (Based on 24hr flow)	Number of WWTW's with Insufficient Capacity	Number of WWTW's in need of Refurbishment	Number of Staff on Site
Fezile Dabi	Mafube	6	11.411	8.08	10.861	6	6	0
Fezile Dabi	Metsimaholo	7	39.558	39.56	39.56	3	4	0
Fezile Dabi	Moqhaka	5	18	24.8	18	2	4	0
Fezile Dabi	Ngwathe	5	13.65	20.6	13.65	5	5	0
Lejweleputswa	Masilonyana	7	8.354	8.552	8.1	7	7	0
Lejweleputswa	Matjhabeng	13	106.47	109.8	104.47	13	13	0
Lejweleputswa	Nala	2	6.2	9.7	6.2	2	2	0
Lejweleputswa	Tokologo	4	1.7	1.7	2.4	4	4	0
Lejweleputswa	Tswelopele	2	3.2	4.1	3.2	2	2	0
Mangaung Metropolitan Municipality	Mangaung	9	149.75	125.85	129.75	3	3	0
Thabo Mofutsanyane	Dihlabeng	6	29.63	25.93	28.68	6	6	0
Thabo Mofutsanyane	Maluti a Phofung	7	34.2	23.6	34.2	7	7	0
Thabo Mofutsanyane	Mantsopa	6	4.2	19	4.2	6	6	0
Thabo Mofutsanyane	Nketoana	4	12.16	12.16	12.16	4	4	0
Thabo Mofutsanyane	Phumelela	4	3.252	9.152	3.25	4	4	0
Thabo Mofutsanyane	Setsoto	5	11.57	31.4	17.26	5	5	0
Xhariep	Kopanong	12	6.051	10.026	6.051	11	12	0
Xhariep	Letsemeng	6	4.93	4.93	4.93	6	6	0
Xhariep	Mohokare	3	1.523	3	1.523	3	3	0
Xhariep	Naledi	3	10	10	10	3	3	0
Total for Province		116	475.81	502	458	102	106	0



NOTES:1) Information concerning capacity of WWTW and Number of Staff on Site is completed as available.2) Information derived from Reference Framework geodatabase feature class WWTW



EXISTING WATER INFRASTRUCTURE: WWTW
Component Based

Green Drop Certification Status

- Yes (0)
- No (24)
- Unknown (0)

Refurbishment Need: WWTW

- Yes
- No

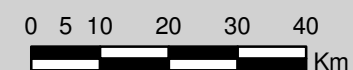
Observation: WWTW

- Prime Condition
- Operational
- Vandalised
- Dysfunctional

Bulk Pipelines

BASEMAP LEGEND:

- ▬ Provincial Boundaries
- ▬ District Municipal Boundaries
- ▬ Xhariep DM
- ▬ Local Municipal Boundaries

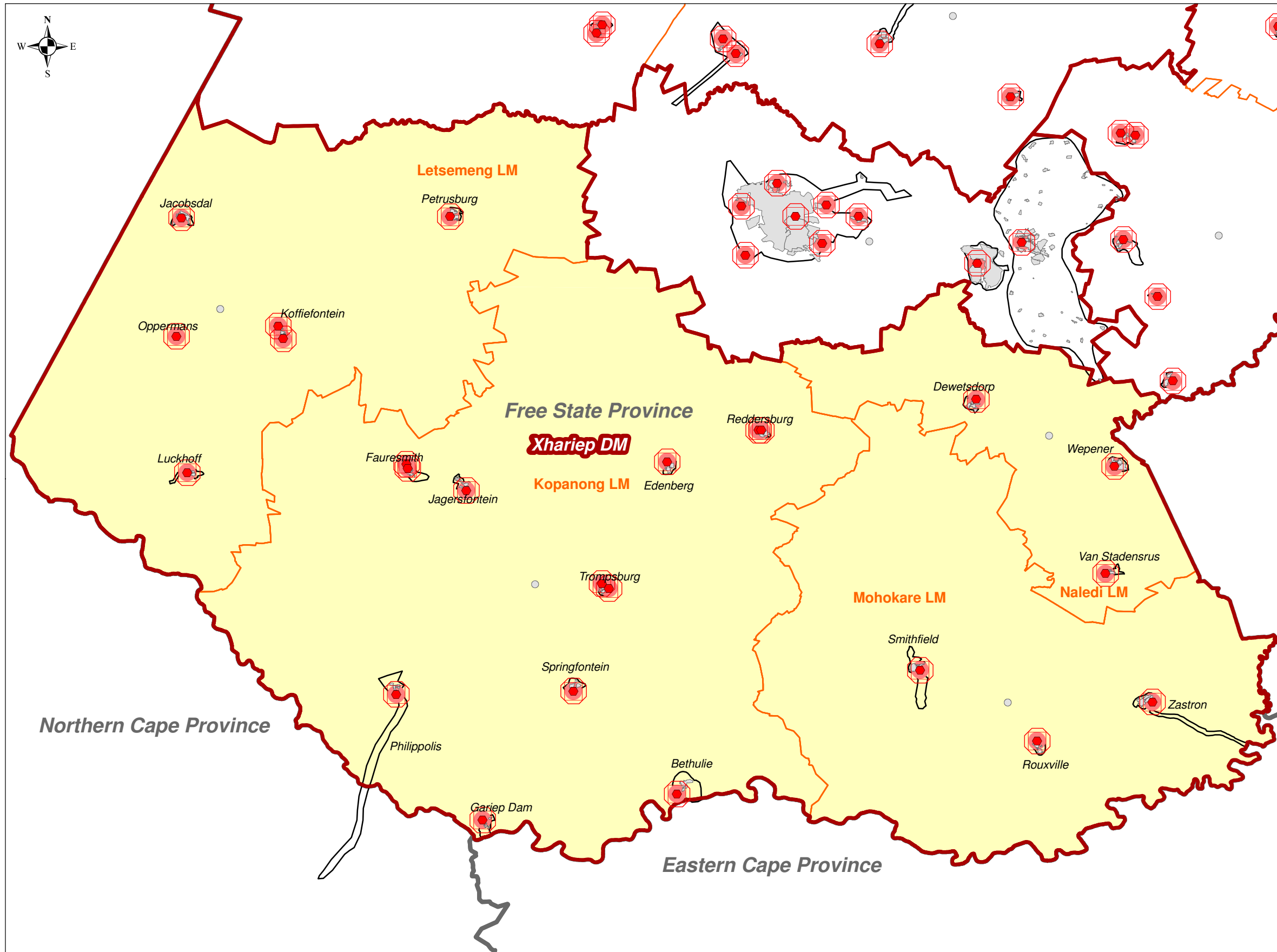


MM/DM	LM	Number of WWTW's	Number of Staff on Site (Permanently)	COMPLIANCE TO:								
				Supervisory Staff Requirements			Process Controller Staff Requirements			O&M Staff Requirements		
				No	Yes	Unknown	No	Yes	Unknown	No	Yes	Unknown
Fezile Dabi	Mafube	6	0	6			6			6		
Fezile Dabi	Metsimaholo	7	0	7			7			7		
Fezile Dabi	Moqhaka	5	0	4	1		5			5		
Fezile Dabi	Ngwathe	5	0	5			5			5		
Lejweleputswa	Masilonyana	7	0	7			7			7		
Lejweleputswa	Matjhabeng	13	0	13			13			13		
Lejweleputswa	Nala	2	0	2			2			2		
Lejweleputswa	Tokologo	4	0	4			4			4		
Lejweleputswa	Tswelopele	2	0	1	1		2			2		
Mangaung Metropolitan Municipality	Mangaung	9	0	9			9			9		
Thabo Mofutsanyane	Dihlabeng	6	0	6			6			6		
Thabo Mofutsanyane	Maluti a Phofung	7	0	6	1		7			7		
Thabo Mofutsanyane	Mantsopa	6	0	6			6			6		
Thabo Mofutsanyane	Nketoana	4	0	4			4			4		
Thabo Mofutsanyane	Phumelela	4	0	4			4			4		
Thabo Mofutsanyane	Setsoto	5	0	5			5			5		
Xhariep	Kopanong	12	0	12			12			12		
Xhariep	Letsemeng	6	0	6			6			6		
Xhariep	Mohokare	3	0	3			3			3		
Xhariep	Naledi	3	0	3			3			3		
Total for Province		116	0									

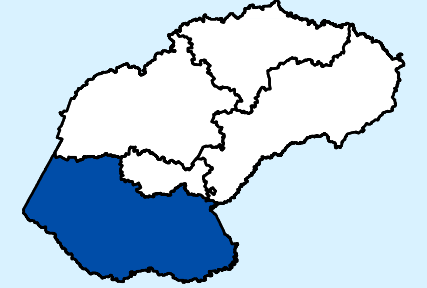
NOTES:

1) Information concerning Number of Staff on Site and Staff Requirements is completed as available.

2) Information derived from Reference Framework geodatabase feature class WWTW



LOCALITY MAP



O&M - STAFF CAPACITY:
WWTW
Component Based

Green Drop Certification Status

- Yes (0)
- No (24)
- Unknown (0)

WWTW - COMPLIANCE TO:

Supervisory Staff Requirements

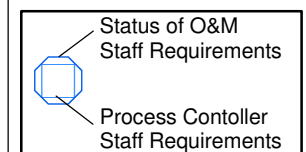
- No
- Yes
- Unknown

Process Controller Staff Requirements

- No
- Yes
- Unknown

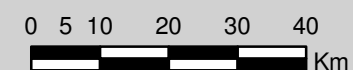
O&M Staff Requirements

- No
- Yes
- Unknown

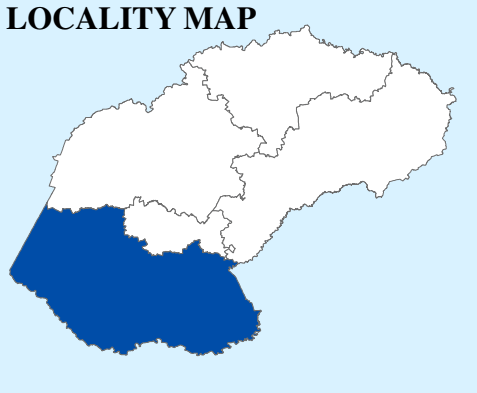


BASEMAP LEGEND:

- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries



NAME	RIVER	OWNER	WMA	LIVE CAPACITY	1:50 YEAR YIELD	DESIGN CAPACITY	UTILISATION GRADE	TYPE OF WATER USE	TOTAL WATER ALLOCATION	TOTAL ANNUAL YIELD
#015:75248	#001:84894						No Data			
Bethulie Dam	Bethulie Spruit	Municipality	Upper Orange	5			No Data			
Blaauwboschfontein Weir	Riet River					1.5	3-moderate use	irrigation(high value)		0.1276
Egmont Dam	Wit Spruit	DWA	Upper Orange	9		9.25	3-moderate use	irrigation(high value)		1
Fouriespruitdam	Fourie Spruit						No Data			
Gariep Dam	Orange River	DWA	Upper Orange	5,341		5343	4-approaching design capacity	irrigation(high value)/Hydropower		4093
Hartebeestfontein Dam	Rietkuilspruit						No Data			
K***r Rivier							No Data			
Kalkfontein dam	Riet River	DWA	Upper Orange	319		318	3-moderate use	domestic/iirigation		1
Kanowna Dam	Knapsak River						No Data			
Kloof Dam	Sand Spruit Tr.						No Data			
Knellpoort Dam	Riet Spruit	DWA	Upper Orange	130		136.94	4-approaching design capacity	domestic		40.49
Koppieskraal Dam	Vinkelspruit						No Data			
Montague Dam	Gryskop Spruit						No Data			
Olievenfontein Dam	Kromme Spruit Tr.						No Data			
Rietwater Dam	Fouriespruit						No Data			
Rusfontein dam	Modder River	DWA	Upper Orange	72		72.05	4-approaching design capacity	domestic/industry		14.64
Schoonbeekfontein Dam	Schoonbeekfontein						No Data			
Smithfield Dam	Groen Spruit						No Data			
Strydompoortdam	Sanddrifspruit						No Data			
The Wool Wash	#001:84884						No Data			
Vaalbankspoort Dam	Nuwejaars Spruit Tr.						No Data			
Van Stadensrus Dorp Dam	Wit Spruit						No Data			
Vanderkloof Dam	Orange River					3255	4-approaching design capacity	domestic/industry/hydropower		360
Welbedacht Dam	Caledon River	DWA	Upper Orange	42		11.661	5-exceeding capacity (stressed)	domestic/industry		31.62



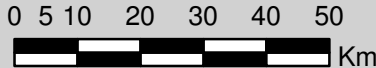
EXISTING
SURFACE WATER
RESOURCES

- Dams - Utilisation Grade**
- 2-under-utilized
 - 3-moderate use
 - 4-approaching design capacity
 - 5-exceeding capacity (stressed)
 - No Data

- Settlements Water Needs
Categorisation**
- Formal**
- 1) Adequate
 - 3) Adequate: Sahred Services
 - 5) Water Resource Needs
 - 6) O&M Needs
 - 7) Infrastructure Needs
 - 8) Infrastructure & O&M Needs
 - 9) Infrastructure, O&M & Resource Needs
 - 10) No Services
- Informal**
- 2) Adequate
 - 4) No Services

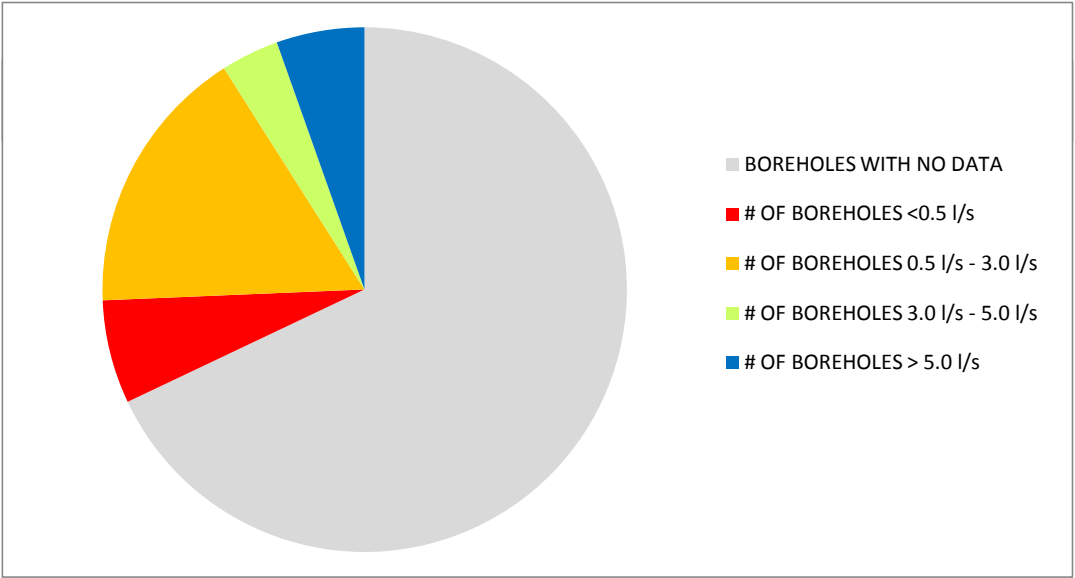
BASEMAP LEGEND:

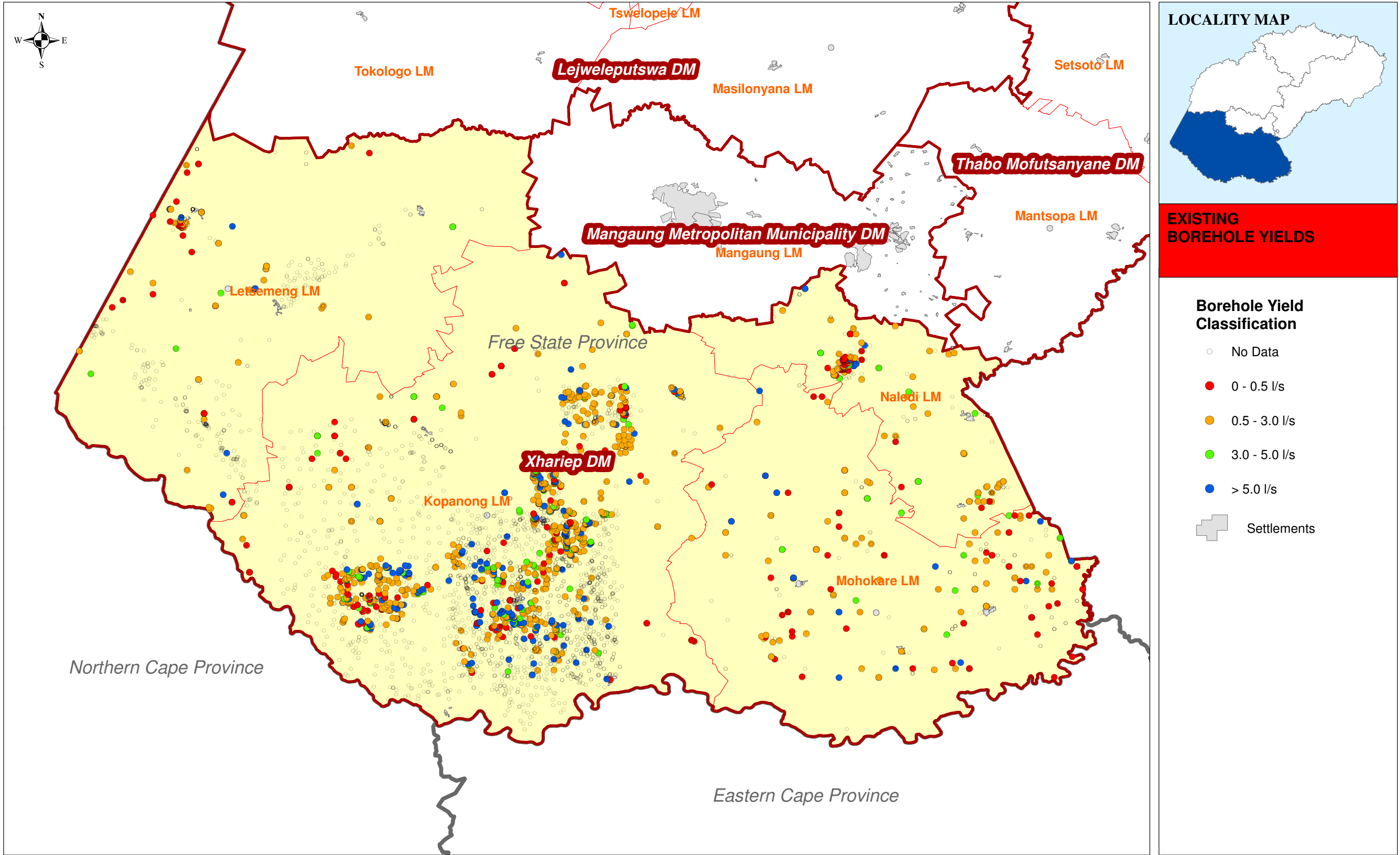
- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries



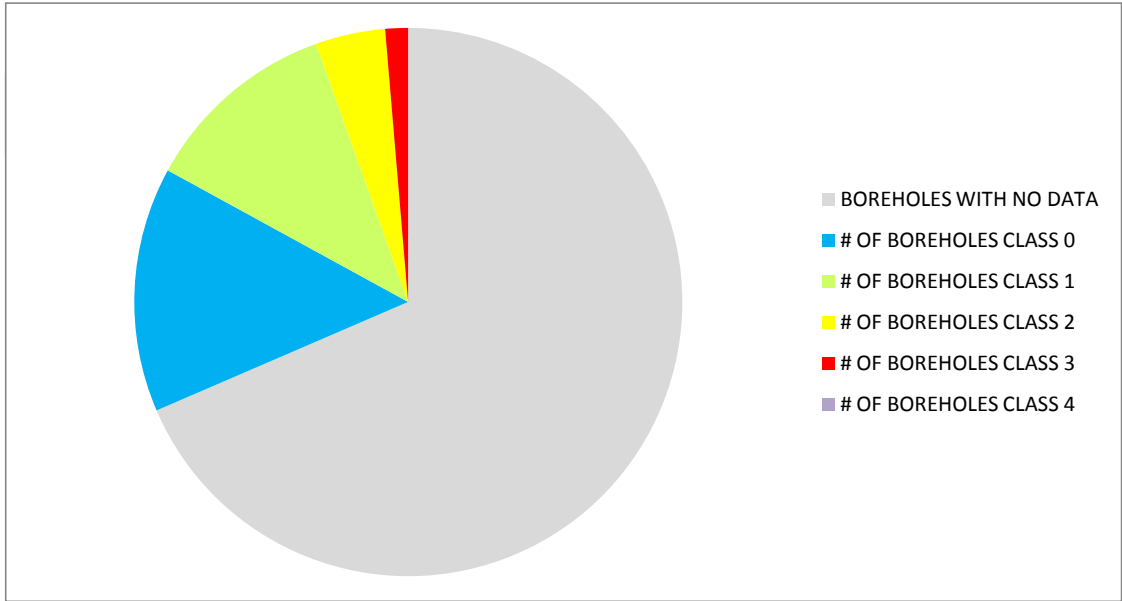
TOTAL NR OF BOREHOLES	BOREHOLES WITH NO DATA	# OF BOREHOLES <0.5 l/s	# OF BOREHOLES 0.5 l/s - 3.0 l/s	# OF BOREHOLES 3.0 l/s - 5.0 l/s	# OF BOREHOLES > 5.0 l/s
4 879	3316	311	812	175	265

AVERAGE BOREHOLE YIELD
2.93 l/s





TOTAL NR OF BOREHOLES	BOREHOLES WITH NO DATA	# OF BOREHOLES CLASS 0	# OF BOREHOLES CLASS 1	# OF BOREHOLES CLASS 2	# OF BOREHOLES CLASS 3	# OF BOREHOLES CLASS 4
4 879	3 344	704	564	201	66	0



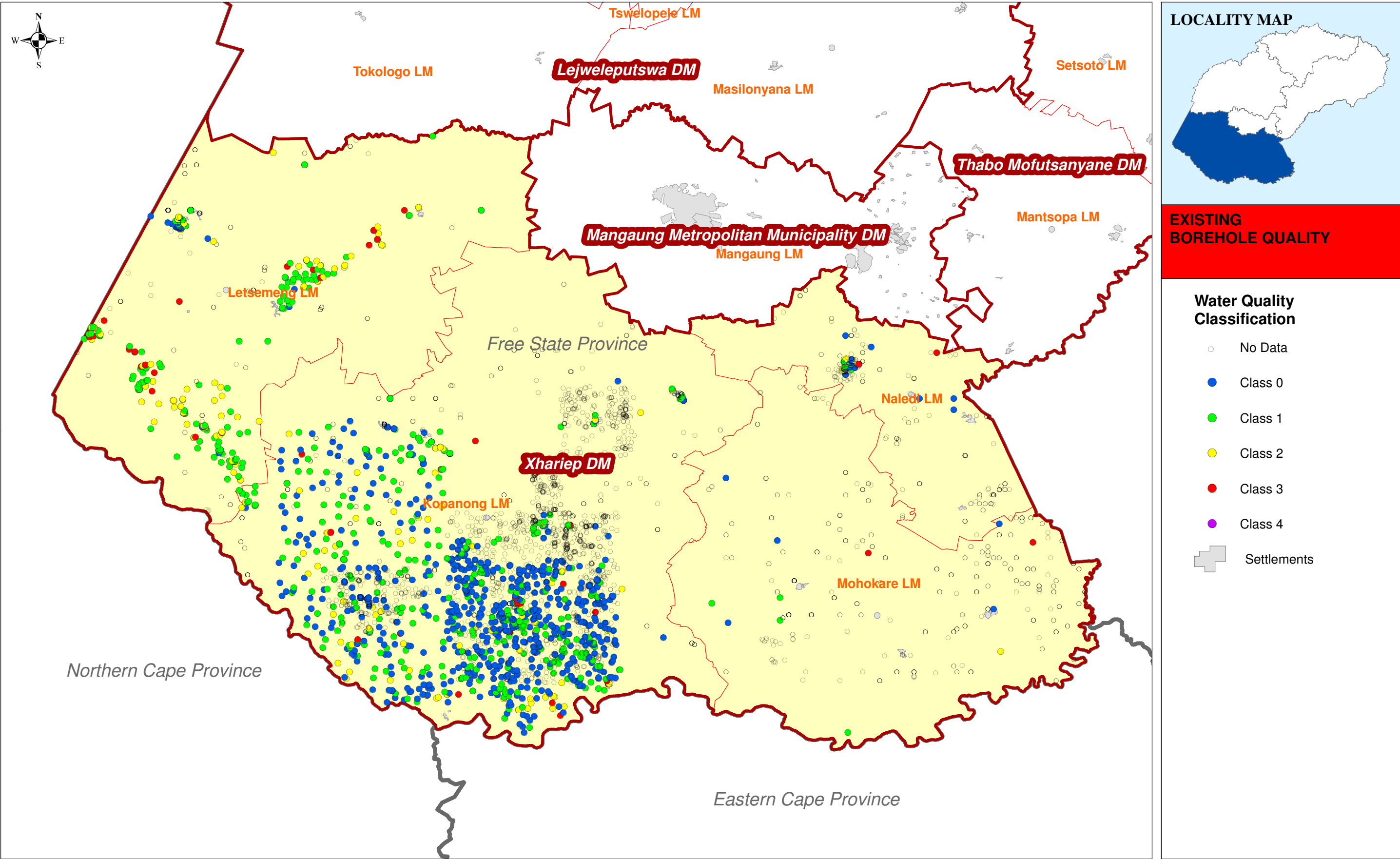
WATER QUALITY CLASSIFICATION FOR HUMAN CONSUMPTION

BLUE	Class 0	Ideal water quality - suitable for life time use
GREEN	Class 1	Good water quality - suitable for use with rare instances of negative effects
YELLOW	Class 2	Marginal water quality - conditionally acceptable, negative effects may occur in sensitive groups
RED	Class 3	Poor water quality - unsuitable for use without water treatment, chronic health effects may occur
PURPLE	Class 4	Dangerous water quality - totally unsafe for use, acute health effects may occur

Negative effects can be:

Health effects	Illnes
Aesthetic effects	Changes in water colour, taste or odour, staining of laundry or household fixtures
Economic effects	Increased soap consumption, and scaling and corrosion of household pipes

CLASSIFIACION BASED ON: "QUALITY OF DOMESTIC WATER SUPPLIES PUBLISHED JOINTLY BY DEPTS. OF WATER AFFAIRS, HEALTH AND THE WATER RESEARCH COMMISSION"



BASEMAP LEGEND:

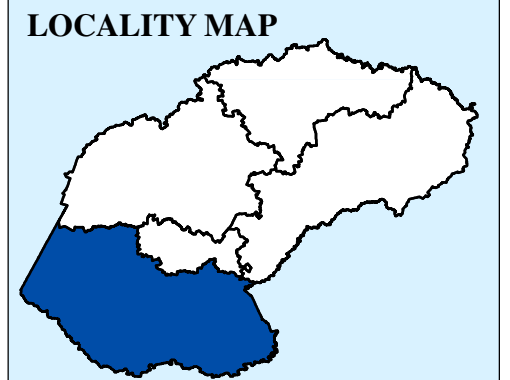
- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

0 5 10 20 30 40 50
Km



MM/DM	LM	Number of Schemes with O&M Needs			
		None	High	Medium	Low
Fezile Dabi	Mafube	Not available	Not available	Not available	Not available
Fezile Dabi	Metsimaholo	Not available	Not available	Not available	Not available
Fezile Dabi	Moqhaka	Not available	Not available	Not available	Not available
Fezile Dabi	Ngwathe	Not available	Not available	Not available	Not available
Lejweleputswa	Masilonyana	Not available	Not available	Not available	Not available
Lejweleputswa	Matjhabeng	Not available	Not available	Not available	Not available
Lejweleputswa	Nala	Not available	Not available	Not available	Not available
Lejweleputswa	Tokologo	Not available	Not available	Not available	Not available
Lejweleputswa	Tswelopele	Not available	Not available	Not available	Not available
Mangaung Metropolitan Municipality	Mangaung	Not available	Not available	Not available	Not available
Thabo Mofutsanyane	Dihlabeng	Not available	Not available	Not available	Not available
Thabo Mofutsanyane	Maluti a Phofung	Not available	Not available	Not available	Not available
Thabo Mofutsanyane	Mantsopa	Not available	Not available	Not available	Not available
Thabo Mofutsanyane	Nketoana	Not available	Not available	Not available	Not available
Thabo Mofutsanyane	Phumelela	Not available	Not available	Not available	Not available
Thabo Mofutsanyane	Setsoto	Not available	Not available	Not available	Not available
Xhariep	Kopanong	Not available	Not available	Not available	Not available
Xhariep	Letsemeng	Not available	Not available	Not available	Not available
Xhariep	Mohokare	Not available	Not available	Not available	Not available
Xhariep	Naledi	Not available	Not available	Not available	Not available
Total for Province		0	0	0	0





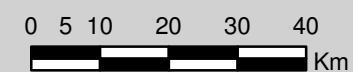
O&M NEEDS
Scheme Based

Total O&M Needs

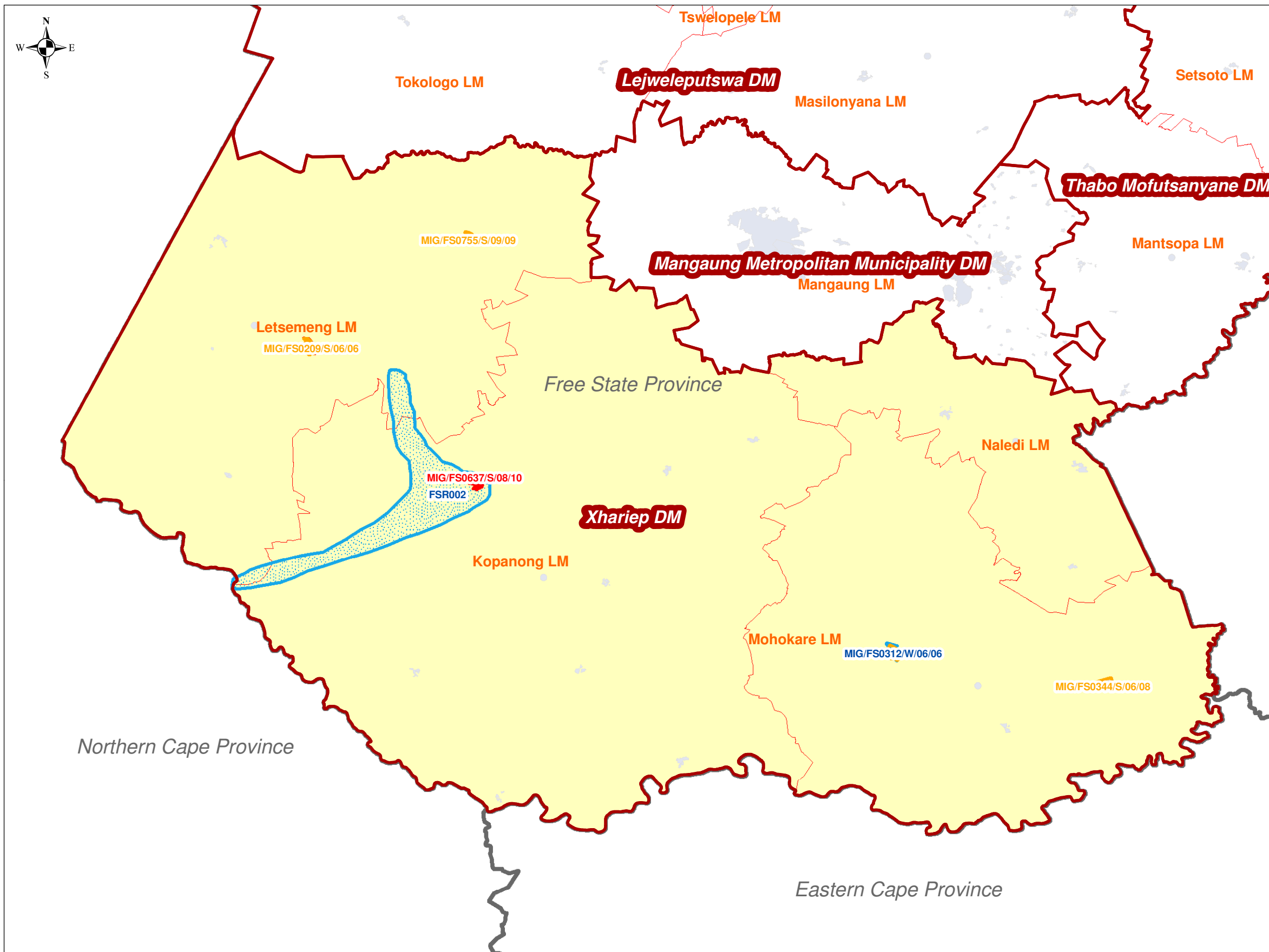
- None
- High
- Medium
- Low

BASEMAP LEGEND:

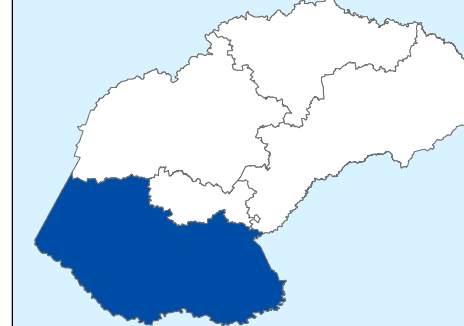
- Provincial Boundaries
- District Municipal Boundaries
- Information not submitted
- Xhariep DM
- Local Municipal Boundaries



DISTRICT MUNICIPALITY	LOCAL MUNICIPALITY	PROJECT NUMBER	PROJECT NAME	PROJECT CATEGORY	COMPONENT	PROJECT TYPE	PROJECT STATUS	OWN FUNDING 2011/12	MIG FUNDING 2011/12	RBIG FUNDING 2011/12	DROUGHT RELIEF FUNDING 2011/12	ACIP FUNDING 2011/12	MUNICIPAL INTERVENTION FUNDING 2011/12	OTHER FUNDING 2011/12	TOTAL ALLOCATION (2011/12)	TOTAL FUNDING UP TO 2014/15
Xhariep District Municipality	Letsemeng Local Municipality	C/FS0323/W/03/04 (MIPFS202/58)	Koffiefontein: Upgrading of water purification works-2	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Construction	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	FSR002	Jagersfontein /Fauresmith Bulk Water Supply Phase 1 & 2	Water Regional Bulk	Water Pipeline	Water Infrastructure New	Construction	0	0	18000000	0	0	0	0	28000000	167372109
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0209/S/06/06	Koffiefontein: Upgrading of sewer purification works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Construction	0	0	0	0	0	0	0	0	686962
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0221/S/06/06	Luckhof (Relebohile): Bucket eradication for 400 stands	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Completed	0	0	0	0	0	0	0	0	1612541
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0276/S/06/08	and pumpstation, 0.45km main outflow lines	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Construction	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0291/S/06/08	7.1km main outflow lines	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Construction	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	MIG/FS0312/W/06/06	Smithfield	Water Regional Bulk	Water Pipeline	Water Infrastructure Upgrade	Construction	0	189411	0	0	0	0	0	189411	5181320
Xhariep District Municipality	Mohokare Local Municipality	MIG/FS0344/S/06/08	Zastron: Upgrading of sewerage treatment works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Construction	0	621529	0	0	0	0	0	621529	11845191
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0413/S/07/08	structures	Internal Sanitation	Sanitation Water Borne	Sanitation Infrastructure Extension	Completed	0	0	0	0	0	0	0	0	240090
Xhariep District Municipality	Mohokare Local Municipality	MIG/FS0440/S/06/08	Smithfield: Upgrading of oxidation ponds	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Construction	0	641918	0	0	0	0	0	641918	7529484
Xhariep District Municipality	Mohokare Local Municipality	MIG/FS0565/S/07/08	main outflow lines and pumpstation	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Construction	0	7078982	0	0	0	0	0	7078982	7479511
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0578/W/07/07	for 180 stands incl 1.67 pipeline ret	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Construction	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0581/S/07/07	main outflow lines	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Construction	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0637/S/08/10	Jagersfontein: Upgrading of treatment works	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Construction	0	0	0	0	0	0	0	0	6778000
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0755/S/09/09	(MIS-178299)	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Construction	0	0	0	0	0	0	0	0	8025600



LOCALITY MAP



CURRENT AND COMPLETED BULK PROJECTS

Projects Categorisation

Current Projects

- Water Regional Bulk
- Water Internal Bulk
- Sanitation Bulk
- Water Reticulation
- Water Treatment Works

Completed Projects

- Completed Projects
- Settlements

BASEMAP LEGEND:

- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

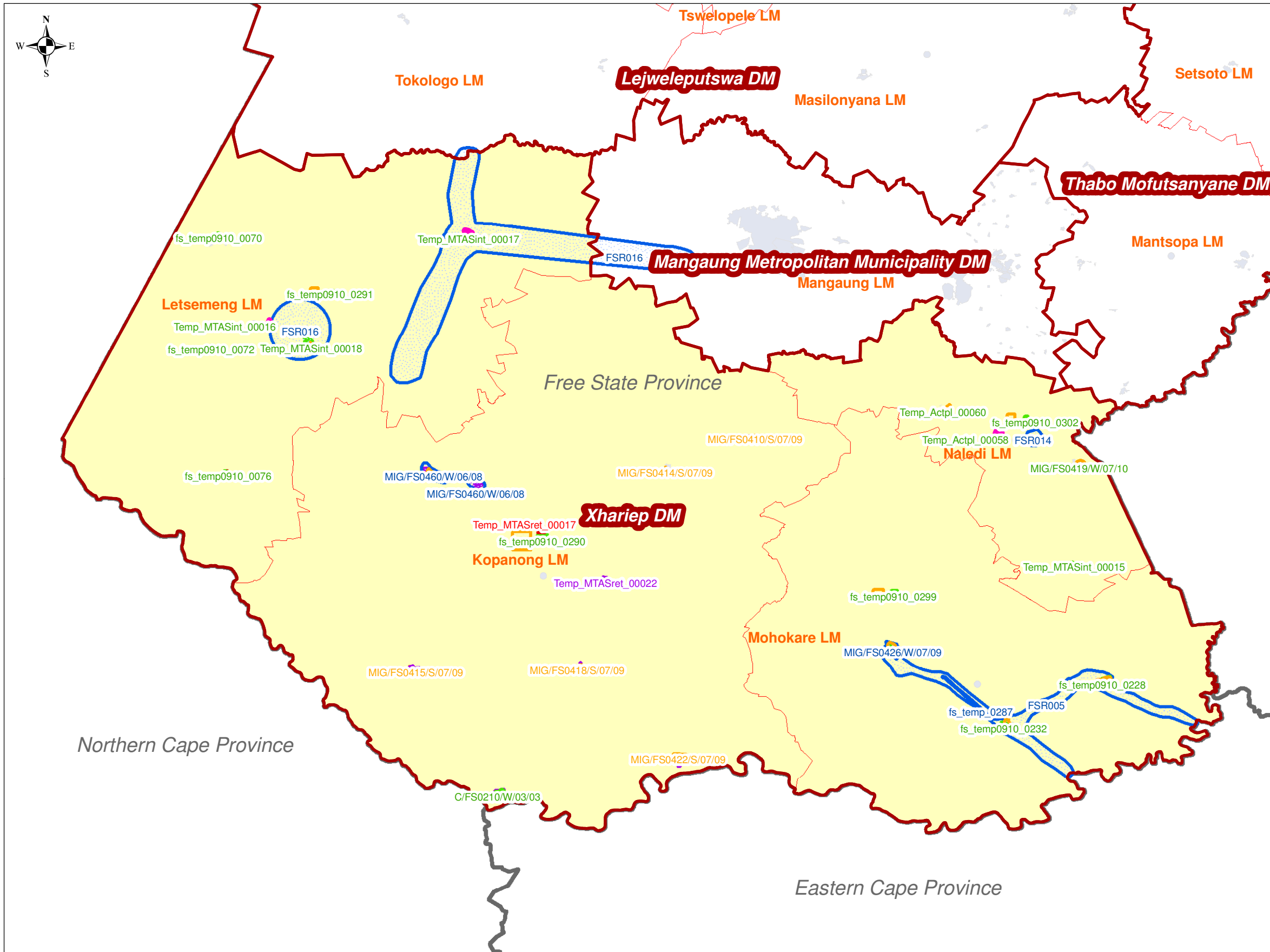
0 3 6 12 18 24 30
 Km

Assessment of each WSA as presented in the WSDP for all Water Services Planning
Enabling Factors, Compliancy Elements and Future Plans in relation to:

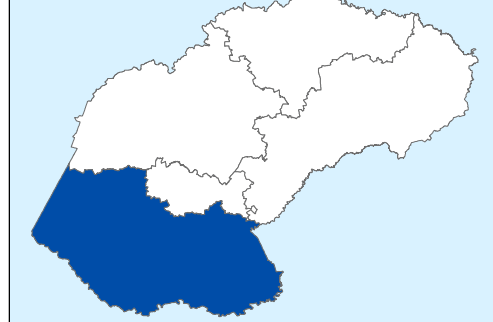
- Accuracy of Informed (Quality)
- Representation of Total Area (Quantity)
- Implementation Strategies

	<u>TOPIC</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
<i>Topics Assessed</i>	Topic 2	Demographics Profile	I
	Topic 3	Service Levels Profile	II
	Topic 4	Economic Background	III
	Topic 5	Water Services Infrastructure Profile	IV
	Topic 6	Operation & Maintenance	V
	Topic 7	Associated Services	VI
	Topic 8	Conservation & Demand Management	VII
	Topic 9	Water Resources	VIII
	Topic 10	Financial Report	IX
	Topic 11	Water Services Arrangement Profile	X
	Topic 12	Social & Customer Service Requirements	XI
	Overall Topic Assessment	WSDP Status Quo Knowledge Interpretation Report	XII

DISTRICT MUNICIPALITY	LOCAL MUNICIPALITY	PROJECT NUMBER	PROJECT NAME	PROJECT CATEGORY	COMPONENT	PROJECT TYPE	PROJECT STATUS	OWN FUNDING 2011/12	MIG FUNDING 2011/12	RBIG FUNDING 2011/12	DROUGHT RELIEF FUNDING 2011/12	ACIP FUNDING 2011/12	MUNICIPAL INTERVENTION FUNDING 2011/12	OTHER FUNDING 2011/12	TOTAL ALLOCATION (2011/12)	TOTAL FUNDING UP TO 2014/15
Xhariep District Municipality	Letsemeng Local Municipality	C/FS0144/W/00/00 (MIPFS202/13)	Luckhoff: New bulk water supply (616) - pumpstation and 6.5km pipeline ret	Water Internal Bulk	Water Pipeline	Water Resource Demand Management	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	C/FS0201/W/02/02 (MIPFS210/26)	Zastron: Upgrading of purification works (317)	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	C/FS0210/W/03/03	Gariapedam: Upgrading of water purification works (325)	Water Internal Bulk	Water Treatment Works	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	C/FS0210/W/03/03 (MIPFS201/56)	Gariapedam: Upgrading of water purification works (325) -treatment plant and 600m pipeline ret	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	C/FS0268/W/02/03	Zastron: Construction of reservoir and extension of pipes (377)	Water Internal Bulk	Water Reservoir	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	C/FS0268/W/02/03 (MIPFS210/30)	Zastron: Construction of reservoir and extension of pipes (377)	Water Internal Bulk	Water Reservoir	Water Resource Demand Management	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp. 0287	Rouxville bulk water supply scheme	Water Regional Bulk	Water Pipeline	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Naledi Local Municipality	fs. temp0910_0004	Refurbishment of existing pipelines as they are still using asbestos pipes	Water Internal Bulk	Water Pipeline	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0070	Jacobsdal Raw Water dam	Water Internal Bulk	Other	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0071	Koffiefontein Raw Water dam	Water Internal Bulk	Other	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0072	Oppermansgronde upgrade wtw	Water Internal Bulk	Water Treatment Works	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0075	Petrusburg Bulk Water Supply	Water Internal Bulk	Water Pipeline	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0076	Luckhoff Bulk water storage	Water Internal Bulk	Water Reservoir	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0077	Petrusburg Bulk Water Storage	Water Internal Bulk	Water Reservoir	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0079	Damanthoogte druktoring geen water druk	Water Internal Bulk	Water Reservoir	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0080	Koffiefontein upgrade of s/w	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0228	Water from Mohokare dam supply line upgrading to Zastron	Water Internal Bulk	Water Pipeline	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0229	Smithfield storage phase 2 (funding required)	Water Internal Bulk	Water Reservoir	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0232	WTW in Rouville upgrading	Water Internal Bulk	Water Treatment Works	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0235	Oxidation ponds upgrade upgrade (no finds)	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0236	Mofutlatshep & Smithfield outfall sewer (1.3-1.7km)	Internal Sanitation	Sanitation Water Borne	Sanitation Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	fs. temp0910_0269	Kopanong Municipality - Sanitation Internal Bulk Refurbishments (group est)	Sanitation Bulk	Sanitation Water Borne	Sanitation O&M Management: Refurbishment	Feasibility	0	0	0	0	0	0	0	5697400	28487000
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0270	Letsemeng Municipality - Sanitation Internal Bulk Refurbishments (group est)	Sanitation Bulk	Sanitation Water Borne	Sanitation O&M Management: Refurbishment	Feasibility	0	0	0	0	0	0	0	5354200	26771000
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0278	Mohokare Municipality - Sanitation Internal Bulk Refurbishments (group est)	Sanitation Bulk	Sanitation Water Borne	Sanitation O&M Management: Refurbishment	Feasibility	0	0	0	0	0	0	0	3044800	15224000
Xhariep District Municipality	Naledi Local Municipality	fs. temp0910_0281	Naledi Municipality - Sanitation Internal Bulk Refurbishments (group est)	Sanitation Bulk	Sanitation Water Borne	Sanitation O&M Management: Refurbishment	Feasibility	0	0	0	0	0	0	0	3486800	17340000
Xhariep District Municipality	Kopanong Local Municipality	fs. temp0910_0290	Kopanong Municipality - Water Internal Bulk Refurbishments (group est)	Water Internal Bulk	Water Reticulation	Water O&M Management: Refurbishment	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	fs. temp0910_0291	Letsemeng Municipality - Water Internal Bulk Refurbishments (group est)	Water Internal Bulk	Water Reticulation	Water O&M Management: Refurbishment	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	fs. temp0910_0299	Mohokare Municipality - Water Internal Bulk Refurbishments (group est)	Water Internal Bulk	Water Reticulation	Water O&M Management: Refurbishment	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Naledi Local Municipality	fs. temp0910_0302	Naledi Municipality - Water Internal Bulk Refurbishments (group est)	Water Internal Bulk	Water Reticulation	Water O&M Management: Refurbishment	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	FSR005	Rouxville/Smithfield/Zastron BWS	Water Regional Bulk	Water Pipeline	Feasibility Only	Feasibility	0	0	2613631	0	0	0	0	10594000	160000
Xhariep District Municipality	Naledi Local Municipality	FSR014	Naledi BWS	Water Regional Bulk	Water Pipeline	Feasibility	Feasibility	0	0	0	0	0	0	0	500000	0
Xhariep District Municipality	Letsemeng Local Municipality	FSR016	Letsemeng/Petrusburg/Koffiefontein	Water Regional Bulk	Water Pipeline	Feasibility Only	Feasibility	0	0	200000	0	0	0	0	600000	0
Xhariep District Municipality	Naledi Local Municipality	MIG/FS0071/S/05/06	Dewetsdorp (Morjaneng): Waterborne sanitation Ext 7-270 stands	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	1370509
Xhariep District Municipality	Mohokare Local Municipality	MIG/FS0074/W/05/06	Smithfield: Construction of a water reticulation network in Somido Park	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0229/S/06/06	Luckhof: Upgrading of sewerage outfall works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0230/S/06/07	Jacobsdal: Upgrading of sewer outfall works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0240/S/06/08	Fauresmith / Popping / Frayville: Provision of waterborne sanitation for 350 stands	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0243/S/06/08	Trompsburg: Provision of waterborne sanitation for 80 stands	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0244/S/06/08	Reddersburg (Matapone): Provision of waterborne sanitation for 107 stands	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0245/S/06/08	Springfontein: Provision of waterborne sanitation for 120 stands	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0264/S/06/08	Bethulle (Lephof): Bucket eradication for 185 even	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0265/S/06/08	Iumeleng: Bucket eradication for 379 even	Internal Sanitation	Sanitation Water Borne	Sanitation Replacement Buckets	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	MIG/FS0301/W/06/08	Jacobsdal/Saundershoogte: Construction of water reticulation for 50 erven	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Naledi Local Municipality	MIG/FS0321/S/07/09	Wepener (Obing & Riverside): Upgrading of waste water treatment works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0410/S/07/09	Reddersburg: Upgrading of waste water treatment works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0411/S/07/08	Bethulle/Lepoi: Waterborne sanitation and 300 toilet structures	Internal Sanitation	Sanitation Water Borne	Sanitation Infrastructure Extension	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0414/S/07/09	Edenburg: Upgrading of waste water treatment works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0415/S/07/09	Phillipolis: 9 Oxidation ponds	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Awaiting Funding	0	0	0	0	0	0	0	0	2743839
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0416/S/07/09	Fauresmith/Popping: Oxidation ponds	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0418/S/07/09	Springfontein: Upgrading of waste water treatment works	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Naledi Local Municipality	MIG/FS0419/W/07/10	Construction of 1.5 ML Reservoir in Obing Wepener	Water Internal Bulk	Water Reservoir	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0422/S/07/09	Bethulle: Oxidation ponds	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0424/S/07/08	Edenburg: Provision of waterborne sanitation 350 erven	Internal Sanitation	Sanitation Water Borne	Sanitation Infrastructure Extension	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	MIG/FS0426/W/07/09	Smithfield: Upgrading of the Caledon Water Scheme phase 2 - 14km supply lines	Water Regional Bulk	Water Pipeline	Water Infrastructure Upgrade	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0460/W/06/08	Jagersfontein / Fauresmith: Regional water supply scheme	Water Regional Bulk	Water Pipeline	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	MIG/FS0564/W/07/09	Hydropark/Gariep Dam: Provision of metered standpipes to 178 stands in new extensions incl 4.45km pipeline ret	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Awaiting Funding	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	Temp. Acptl_00046	Petrusburg elevated pressure water tank	Water Internal Bulk	Water Reservoir	Water Resource Demand Management	Awaiting Funding	0	1959912	0	0	0	0	0	1959912	3278334
Xhariep District Municipality	Letsemeng Local Municipality	Temp. Acptl_00047	Upgrading of Water Purification plant Luckhoff	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Awaiting Funding	0	2500000	0	0	0	0	0	2500000	4500000
Xhariep District Municipality	Naledi Local Municipality	Temp. Acptl_00058	Resuscitation of Boreholes	Water Internal Bulk	Water Groundwater	Water Infrastructure Upgrade	Awaiting Funding	0	0	0	0	0	0	0	0	567837
Xhariep District Municipality	Naledi Local Municipality	Temp. Acptl_00059	Upgrading of bulk sewerage oxidation ponds in Van Stadensrus	Sanitation Bulk	Waste Water Treatment Works	Sanitation Infrastructure Upgrade	Awaiting Funding	0	8000000	0	0	0	0	0	8000000	8000000
Xhariep District Municipality	Naledi Local Municipality	Temp. Acptl_00060	Pressure Tank in Dewetsdorp	Water Internal Bulk	Water Reservoir	Water Resource Demand Management	Awaiting Funding	0	3009768	0	0	0	0	0	3009768	3009768
Xhariep District Municipality	Naledi Local Municipality	Temp. Acptl_00061	Installation of 2 000 Water Meters in Dewetsdorp	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Awaiting Funding	0	5600000	0	0	0	0	0	5600000	5600000
Xhariep District Municipality	Naledi Local Municipality	Temp. MTASint_00015	Insufficient Bulk Water Supply to Van Stadensrus	Water Internal Bulk	Water Pipeline	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	8600000	0
Xhariep District Municipality	Letsemeng Local Municipality	Temp. MTASint_00016	Sufficient bulk water supply in all five towns for future expansions	Water Internal Bulk	Water Groundwater	Water Infrastructure New	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	Temp. MTASint_00017	Develop and implement O&M plan for the Petrusburg boreholes	Water Internal Bulk	Water Groundwater	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Letsemeng Local Municipality	Temp. MTASint_00018	No sufficient compliance with Water Quality Management Systems especially in Koffiefontein and Petrusburg	Water Internal Bulk	Water Treatment Works	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Mohokare Local Municipality	Temp. MTASint_00022	Upgrading of Water Treatment Plant - Smithfield	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Conceptual	0	0	0	0	0	0	0	3300000	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00011	Bethulle : Replacement of broken water meters and continuous monthly monitoring	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00012	Bethulle : Water and sewer network reticulation connections to all 304 households	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00013	Phillipolis : Water and sewer network reticulation connections to all 200 households	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00014	Reddersburg : Water and sewer network reticulation connections to all 132 households	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00015	Springfontein : Water and sewer network reticulation connections to all 450 households	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00016	Trompsburg : Water and sewer network reticulation connections to all 115 households	Water Reticulation	Water Reticulation	Water Infrastructure Extension	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00017	Improved water quality in Kopanong LM	Water Treatment Works	Water Treatment Works	Water Infrastructure Upgrade	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00018	Fauresmith : Replacement of broken water meters and continuous monthly monitoring	Water Reticulation	Water Reticulation	Water Infrastructure Upgrade	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00019	Jagersfontein : Replacement of broken water meters and continuous monthly monitoring	Water Reticulation	Water Reticulation	Water Infrastructure Upgrade	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00020	Phillipolis : Replacement of broken water meters and continuous monthly monitoring	Water Reticulation	Water Reticulation	Water Infrastructure Upgrade	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00021	Springfontein : Replacement of broken water meters and continuous monthly monitoring	Water Reticulation	Water Reticulation	Water Infrastructure Upgrade	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Kopanong Local Municipality	Temp. MTASret_00022	Trompsburg : Replacement of broken water meters and continuous monthly monitoring	Water Reticulation	Water Reticulation	Water Infrastructure Upgrade	Feasibility	0	0	0	0	0	0	0	0	0
Xhariep District Municipality	Naledi Local Municipality	Temp. MTASret_00038	Installation of water meters in Naledi LM. Auditing	Water Reticulation	Water Reticulation	Water Infrastructure Extension	A									



LOCALITY MAP



FUTURE BULK INFRASTRUCTURE PROJECTS

Project Category

- Water Regional Bulk
- Water Internal Bulk
- Sanitation Bulk
- Water Reticulation
- Water Treatment Works
- Future Resource Development Projects
- Settlements

BASEMAP LEGEND:

- Provincial Boundaries
- District Municipal Boundaries
- Xhariep DM
- Local Municipal Boundaries

