



The Department of Water Affairs and Forestry



Mpumalanga Provincial Government



# MPUMALANGA PROVINCIAL WATER SECTOR PLAN

## STRATEGIC OUTLINE

DECEMBER 2006

**FOREWARD BY THE PREMIER**

## EXECUTIVE SUMMARY

Water summit resolved the a PWSP be compiled to set out what the Mpumalanga water sector hopes to achieve in the next 5 years and how it will do it.

### VISION

**Water for sustainable growth and development for all in Mpumalanga.**

### MISSION

**We will ensure that the water resources of Mpumalanga sustainably applied and managed to the socio-economic benefit of all people in the province who will also have access to safe water services.**

The strategic issues and challenges that were raised during the water summit, highlighted in the district blueprints and provincial growth and development strategy were identified, refined and prioritised and grouped into Strategic Goals as follows:

Strategic Goal 1: Apply integrated planning to address the PDGS and provincial socio-economic needs and poverty alleviation.

Strategic Goal 2: Develop the sector-wide approach by ensuring greater participation and effective collaboration of all sector partners.

Strategic Goal 3: Ensure the long-term operational sustainability of water provision, develop institutions and skills.

Strategic goal 4: Ensure Water Resource Allocation, Management and Development to meet the needs of the province.

Strategic Goal 5: Project delivery to overcome the water services backlogs and higher levels of services needs in Mpumalanga.

These objectives have been further translated into a schedule of interventions for the next 5 years (2007 – 2012) which will contribute to the attainment of objectives of the Mpumalanga Growth and Development Strategy, the National Water Resources Strategy and the Strategic Framework for Water Services. Each intervention has been prioritised and allocated to a responsible stakeholder. Furthermore the financial requirements, issues, challenges and risks have been listed.

**1. PURPOSE**

The purpose of this PWSP is to set out what the Mpumalanga water sector hopes to achieve in the next 5 years and how it will do it.

**2. BACKGROUND**

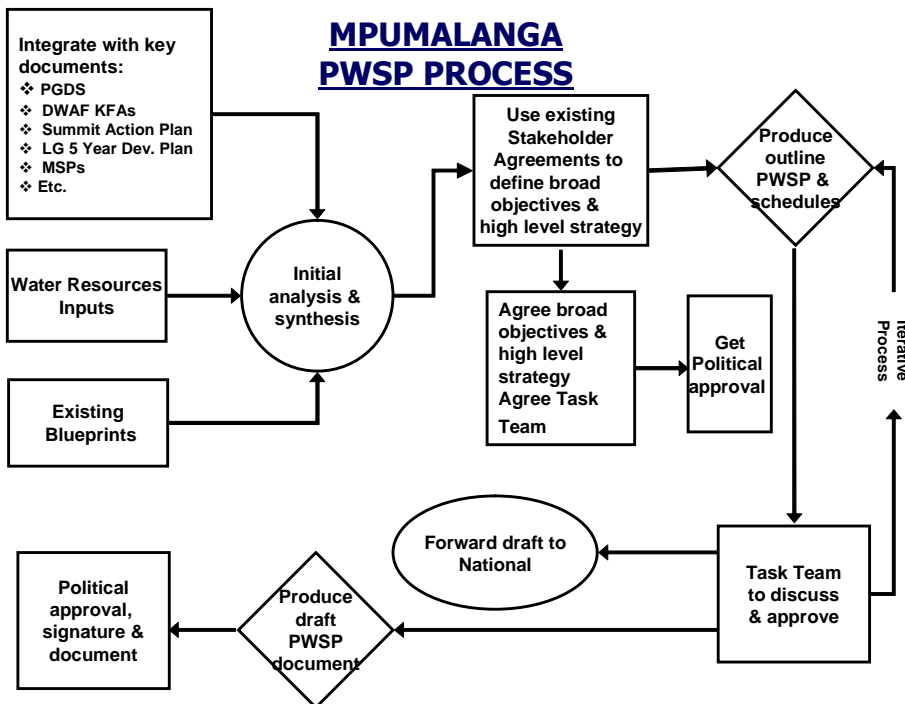
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**3. PROCESS**

The collaboration and water strategy and planning development processes in Mpumalanga have been underway for some time now. This PWSP is yet another milestone in that overall process. Flowchart to show:

- Strategic Review of Water Services Mpumalanga, Emnotweni Arena Conference Centre 27<sup>th</sup> January 2003
- Badplaas etc
- Collaborative planning – District blueprints, DM collaborative forums
- M-PJRT
- Water Summit: resolved to compile a PWSP
- PWSP
- Task team
- Premier’s Co-ordinating Forum

The task team consisting of representatives of SALGA Mpumalanga, Department of Local Government and Housing, the 3 District Municipalities and Department of Water Affairs and Forestry with the sector strategy consultants was convened to prepare the draft PWSP.



#### **4. STRATEGIC CONTEXT**

- Water services backlogs
- Access to bulk water infrastructure
- Accelerate WS investments by mobilising extra resources
- Enhanced WSA capacity to deal with backlogs
- Effective institutional reform and co-operative governance to ensure delivery
- Integrated planning and management of water catchment strategies
- Managing shared resources across international boundaries

##### **4.1 Introduction**

LMs as WSAs, with EDM for Bushbuckridge recently.

## 4.2 Mpumalanga Growth and Development Strategy (LGDS)

### Key priority areas for the PG&DS

- Bridge the 1<sup>st</sup> and 2<sup>nd</sup> economies
- Development infrastructure
- Social development
- Sustainable environmental development
- HR development to support economic growth and service delivery
- Good governance

### Economic development and impact on water

- WC and DM
- Effective and sustainable WRM
- Maximise agricultural potential
  - Farmer support programmes
  - Irrigation infra
  - Small scale farmers
  - Water demand
  - Secondary industries in the agriculture chain
- Commercial forestry
  - 38.3% of land for this
  - Downstream value add
  - Impact on stream flows
- Mining and electricity generation
  - Eskom developments
  - Spin-offs for jobs and poverty alleviation
- Manufacturing
  - Benefication in petro-chemicals and stainless steel industries
  - Impact on WR
  - Industrial discharges impact on aquatic systems

### Social transformation and impact on water

- Improved service delivery
- Bulk water
- Sanitation
- Bucket eradication
- Water
- Housing demands on water

### Sustainable environmental development

- Conserve water as a scarce resource
- Waste management
- Capacity for environmental monitoring
- Protection of water ecosystems

### Good Governance

- WC and DM
- CMAs
- WSAs
- Community participation
- Planning alignment: WSDPs/IDPs/PGDS

### 4.3 The National Water Resource Strategy (NWRS)

#### Role of DWAF in WRM

- Water will be regarded as an indivisible national asset. National government (Minister) will act as the custodian of the nation's water resources and its powers in this regard will be exercised as a public trust.
- Water management institutions (CMAs and WUAs) oversight and support

#### National Water Resource Strategy

- Millenium Development Goals
- NEPAD
- SADC initiatives
- IWRM

Government policy since 1994 has focused strongly on equitable and sustainable social and economic development for the benefit of all South Africa's people. The National Water Policy to manage the quantity, quality and reliability of the Nation's water resources is to achieve optimum, long-term, environmentally sustainable social and economic benefit for society from their use.

Three fundamental objectives for managing South Africa's water resources are:

- **To achieve equitable access to water**, that is, equity of access to water services, to the use of water resources, and to the benefits from the use of water resources.
- **To achieve sustainable use of water** by making progressive adjustments to water use with the objective of striking a balance between water availability and legitimate water requirements, and by implementing measures to protect water resources.
- **To achieve efficient and effective water use** for optimum social and economic benefit.

#### The purposes of the National Water Resource Strategy:

- **The national framework for managing water resources**
- **The framework for the preparation of catchment management strategies**
- **Provision of information**
- **Identification of development opportunities and constraints**

#### 4.4 Strategic Framework for Water Services (SFfWS)

**Sector vision: Water is life, sanitation is dignity<sup>1</sup>**

**All people living in South Africa have access to adequate, safe, appropriate and affordable water and sanitation services use water wisely and practice safe sanitation.**

**Water supply and sanitation services are provided by effective, efficient and sustainable institutions that are accountable and responsive to those whom they serve. Water services institutions reflect the cultural, gender and racial diversity in South Africa.**

**Water is used effectively, efficiently and sustainably in order to reduce poverty, improve human health and promote economic development. Water and wastewater are managed in an environmentally responsible and sustainable manner.**

The SFfWS Strategic has set out the following targets to be achieved:

Target		Responsibility
<b>Access to services</b>		
1	All people in South Africa have access to a functioning basic water supply facility by 2008	Water services authorities supported by DWAF
2	All people in South Africa have access to a functioning basic sanitation facility by 2010	Water services authorities supported by DWAF and the NSTT
3	All schools have adequate and safe water supply and sanitation services by 2005	Provincial Education Dept Supported by National Dept Education and Public Works
4	All clinics have adequate and safe water supply and sanitation services by 2007	Provincial Health Dept Supported by National Dept Health and Public Works
5	All bucket systems are eradicated by 2006	WSAs supported by DWAF
6	Investment in water services infrastructure totals at least 0.75% of GDP	National Treasury
<b>Education and health</b>		
7	Hygiene education and the wise use of water are taught in all schools by 2005	National Education Department
8	70% of households with access to at least a basic sanitation facility know how to practice safe sanitation by 2005 (100% by 2010)	WSAs supported by DWAF
<b>Free basic services</b>		
9	Free basic water policy implemented in all WSAs by 2005	WSAs
10	Free basic sanitation policy is implemented in all WSAs by 2010	Water services authorities
<b>Institutional development and performance</b>		
11	By-laws are promulgated in every WSA area by 2005	Water services authorities
12	All WSAs report annually on progress against their WSDPs by 2005	Water services authorities
13	All WSAs have adopted a set of key performance indicators by 2005 and report on these annually	WSAs

<sup>1</sup> Strategic Framework for Water Services

#### **4.5 Inter-governmental Relations Framework Act 2005 (IGR)**

Noting that, in terms of the constitution, national, provincial and local spheres of government are distinctive, interdependent and interrelated the IGR establishes a framework for these spheres of government in order to promote and facilitate intergovernmental relations, including the settlement of disputes.

As a developmental state it is required of all the spheres of government to provide effective, efficient, transparent, accountable and coherent government to secure the well being of the people and to redress poverty, underdevelopment and marginalisation of communities. These challenges can best be addressed through all spheres working together and integrating activities in the provision of services, poverty alleviation and development.

The IGR calls for cooperative government to achieve:

- Coherent government,
- Effective provision of services,
- Monitoring implementation of policy and legislation, and
- Realisation of national priorities.

The IGR allows for provincial intergovernmental structures to be created by the Premier in which participation, consultation and cooperation by all governments is required.

#### **4.6 Mpumalanga Water Summit**

Mpumalanga Water Summit held at the it was resolved that focussed attention is given to:

- Capacity building
- Compile PWSP
- Integrated planning and co-ordination/implementation: common standards
- Water losses
- Spatial development planning: migration and settlement of people
- Optimal use of ground water
- WS backlogs: apply MIG strongly
- Rural housing services
- Implement PGDS
- Inaccurate backlog statistics: definitions/numbers/single agreement
- Impact of 2010 on WS
- Municipal O&M funding and actions
- Appropriate technology: life cycle costing

- Performance management of providers
- “Marketing” of sanitation
- Appropriate technical skills: mentorship and long term
- Municipal technical staffing and transformation issues: policy alignment
- Agricultural water efficiency and allocation: poverty alleviation
- WRM institutional clarity
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The detailed resolutions of the summit have been included into this strategy and the interventions described in the 5-year implementation plan.

## 5. STATUS OF THE SECTOR IN MPUMALANGA

### 5.1 Population Spread and Socio-economic Status

The following categories of information have been assembled to convey the status quo regarding the environment in which water resource management and water services delivery occur in Mpumalanga as well as specific water related data.

This table has been produced purely to indicate clearly the relative population size in the 3 DMs. This is useful in identifying potential focus areas for further analysis, prioritization and support.

DM Name	Total Population
Ehlanzeni DM	1 144 784
Nkangala DM	1 030 000
Gert Sibande DM	1 080 914
<b>Total</b>	<b>3 255 698</b>

\*These figures are indicative, extracted from the census, DWAF Reference Framework and other sources and are currently subject to a process of agreement between each WSA and DWAF to arrive at a single agreed total for planning purposes.

### Socio-economic

### Employment

## **5.2 A broad perspective on the Mpumalanga water situation**

- Reasonably well watered
- Highly developed areas large towns
- Large rural population and poverty
- Mining and power generation on the highveld
- Sugar production in the Onderberg
- Forestry on the escarpment
- Pollution: Olifants and upper Vaal
- Share with neighbouring states
- Limited potential for WR development
- Flooding in Lekwa and Thaba Chweu

### **Future water requirements**

The PGDS has identified a number of priority developments – all of which require enhanced water provision. Water resource management interventions are urgently required to provide these plans.

- Domestic growth in Mbombela, Emalahleni, Steve Tshwete
- Growth in industry and service standards
- Emerging farmers
- Mining
- International obligations
- Irrigation and assurance of supply
- Ecological requirements not always met

### 5.3 Water Services

#### Free Basic Water

The free basic water provision situation as at November 2006 is as follows:

WSA Name	% Total Population Served	% Poor Population Served
Albert Luthuli LM	88.4%	86.8%
Delmas LM	96.6%	79.5%
Dipaleseng LM	98.0%	97.9%
Dr JS Moroka LM	0%	0%
Ehlanzeni DM	92.3%	92.5%
Emakhazeni LM	50.6%	85.2%
Emalahleni LM	100%	100%
Govan Mbeki LM	99.7%	99.8%
Lekwa LM	99.0%	99.2%
Mbombela LM	62.9%	62.1%
Mkondo LM	74.4%	79.1%
Msukaligwa LM	99.8%	100%
Nkomazi LM	0%	0%
Pixley Ka Seme LM	87.0%	30.9%
Steve Tshwete LM	77.2%	76.2%
Thaba Chweu LM	63.8%	0%
Thembisile LM	0%	0%
Umjindi LM	98.5%	100%
<b>Total</b>	<b>59.2%</b>	<b>52.3%</b>

## Water Services Backlogs

The SFfWS targets to address the backlogs in water services provision have been determined and approved by cabinet. The current levels of funding, delivery and capacity to implement projects indicates that **the targets in the SFfWS are unlikely to be met in Mpumalanga** unless significant new delivery methodologies are urgently applied.

### Water Services (Data not agreed)

WSA Name	Population	Water backlog	Sanitation Backlog
Albert Luthuli LM	199 067	55 413	109 404
Delmas LM	60 000	8 100	15 000
Dipaleseng LM	47 124	4 901	15 485
Dr JS Moroka LM	250 000	88 750	202 500
Ehlanzeni DM			
Emakhazeni LM	40 000	5 200	8 400
Emalahleni LM	280 000	37 800	67 200
Govan Mbeki LM	311 252	25 934	73 548
Lekwa LM	129 150	13 145	45 567
Mbombela LM	518 006	167 316	329 452
Mkondo LM	148 883	65 124	81 675
Msukaligwa LM	153 090	7 353	17 577
Nkomazi LM	495 000	173 250	336 600
Pixley Ka Seme LM	92 349	19 287	28 431
Steve Tshwete LM	140 000	19 600	19 600
Thaba Chweu LM	78 035	27 312	39 018
Thembisile LM	260 000	48 100	221 000
Umjindi LM	53 743	27 312	39 018
<b>Total</b>	<b>3 255 698</b>	<b>785 394</b>	<b>1 633 965</b>

### Cost to eradicate backlogs:

Water: 785 394 people at R1 200/person is R 942.5m  
 Sanitation: 1 633 565 people at R 3 000/household is R 1 116.3m  
 Total cost: R 2. 059b

**Transfers and s78s**

All transfer agreements have been signed and infrastructure has been transferred. HR secondments in place and these need to now take place in terms of the recently signed SALGA/DWAF Memorandum of Agreement.

S78s are considerably behind schedule with no assessments fully complete and implemented.

A regional approach for the Western Highveld is currently under investigation along with the WSA s78.3 assessments.

## 6. PROPOSED STRATEGIES

The strategic issues and challenges that were raised during the water summit, district workshops and provincial stakeholders meetings were, identified refined and prioritised and grouped into Strategic Goals as follows.

Strategic Goal 1: Apply integrated planning to address the PDGS and provincial socio-economic needs and poverty alleviation.

Strategic Goal 2: Develop the sector-wide approach by ensuring greater participation and effective collaboration of all sector partners.

Strategic Goal 3: Ensure the long-term operational sustainability of water provision, develop institutions and skills.

Strategic goal 4: Ensure Water Resource Allocation, Management and Development to meet the needs of the province.

Strategic Goal 5: Project delivery to overcome the water services backlogs and higher levels of services needs in Mpumalanga.

### **6.1 Strategic Goal 1: Apply integrated planning to address the PDGS and provincial socio-economic needs and poverty alleviation.**

The provincial growth and development strategy calls for Integrated Planning.

- Strategy and PWSP
- Annual Implementation Plans
- M&E
- WSDPs

**6.2 Strategic Goal 2: Develop the sector-wide approach by ensuring greater participation and effective collaboration of all sector partners.**

Although collaborative for a have been established at DM level a provincial structure is necessary to:

- (i) To ensure effective formal communication and liaison between the Department of Water Affairs and Forestry, various appropriate Provincial Departments and organised Local Government.
  - (ii) To ensure the integration of water sector activities within provincial and local government development policies and programmes.
  - (iii) To reach agreement at the official's level on priorities and matters of concern to provincial and local government related to water affairs and forestry.
  - (iv) To identify and refer matters that require political involvement to the MEC.
- Continue with the DM structures
  - Link into a provincial structure
  - Lesson learning, communication activities required.

**Strategic Goal 3: Ensure the long-term operational sustainability of water provision, develop institutions and skills.**

**Water management institutions**

DWAF is in the process of establishing catchment management agencies, each operating in a defined water management area, to manage water resources at a regional level. These agencies will be responsible, among other things, for ensuring that there is consonance between their water-related plans and programmes and the plans and programmes of all other role players in the catchments they manage. The agencies will therefore have to establish co-operative relationships with a range of stakeholders, including other water management institutions, water services institutions, provincial and local government authorities, communities, water users ranging from large industries to individual irrigators, and other interested parties.

These institutions include Catchment Management Agencies (CMAs), Water User Associations (WUAs) etc.

Nkomazi CMA first in SA. Established. CMA strategy PSPs being procured.

**Water services institutions**

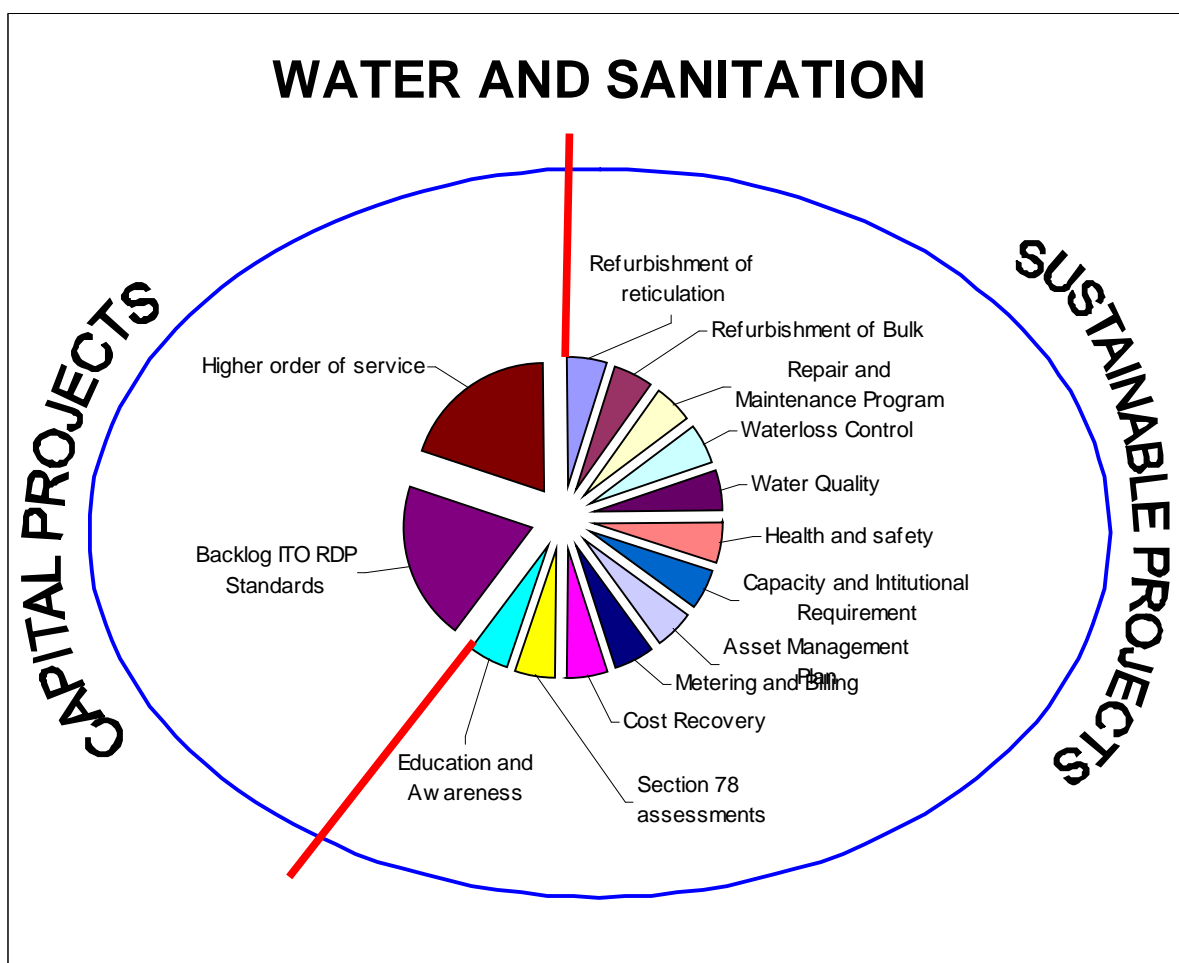
These consist of:

- Water Supply Authority (WSA)
- Water Services Provider (WSP)

**WSA Institutional Capacity**

Although many capital investment projects are annually identified and implemented through the MIG processes to overcome the backlog in service delivery, until the issues mentioned in the report are adequately addressed and resolved, communities are likely to continue to regard services delivery as poor unacceptable and inadequate.

The crucial aspect that was overlooked by all the WSDP's was the focus and requirements on operations and Maintenance tasks. Operations and Maintenance should not be regarded as something that just happens, it should be planned for as one of the most crucial items in service delivery.



**Sustainability Projects**

This section of projects is focused on the Operation and Maintenance responsibilities of the water and sanitation function of each of the municipalities.

**REFURBISHMENT PROJECTS**

- Refurbish bulk services
- Refurbish reticulation

**REPLACEMENT PROJECTS (REPAIR AND MAINTENANCE PROGRAMME)**

- Replace bulk services
- Replace reticulation

## **Water Services Provider (WSP) Arrangements and Institutional Capacity**

The WSP arrangements must be created through the s78 Assessments. Not all WSAs have completed these. Priority must be given to their completion and implementation. The Institutional Reform process should later follow to look at sub-regional efficiencies and economies of scale with regard to water services provision arrangements.

## **Municipal Capacity Building and Project Consolidate**

The key mandate of the Provincial Department of Local Government and Housing is the establishment, capacitating and monitoring of the third sphere of government. The Department should develop appropriate strategies, and co-ordinate all efforts aimed at achieving optimal performance of local government.

All municipalities are faced with the following challenges:

- The need to deliver services.
- The need to extend services to new areas.
- The need to perform new functions which were previously not theirs.

To address current deficiencies within municipalities, a comprehensive strategy to expedite capacity development, has therefore been developed.

## **Project Consolidate**

Project Consolidate is a “hands-on local government engagement programme” and is as a result of “the urgent need to refine the system of governance and address immediate challenges of service delivery and local government transformation”. The need is to optimise the impact of the new local government system, implement the local government transformation phases simultaneously and refine the governance systems. The implementation of the National Capacity Building Framework cannot progress as “business as usual” and must directly support all areas of project consolidate with provincial capacity building initiatives aligned to provincial Project Consolidate programmes of action

To achieve these aims the following should occur:

- National and provincial spheres to identify and implement immediate and ongoing support to local government where required.
- Intervene in an activist manner in engagement with local government.
- Establish trouble-shooting capacity to identify and unblock bottlenecks in local government service delivery and transformation.
- Give targeted support to areas neglected by apartheid.
- Interact directly with municipalities, communities and key local stakeholders.
- Support the Office of the Premiers as “coordinating centres of development.
- Forge a common vision regarding the role of local government in service delivery.

As part of the lead up to implementing Project Consolidate 17 local municipalities have been identified by the province as requiring priority support/intervention.

## **5-Year Local Government Strategic Agenda**

As an initiative to follow-up Project Consolidate the 5-Year Local Government Strategic Agenda process has been developed to provide:

- a. Mainstreaming hands-on support to Local Government to improve municipal governance, performance and accountability;
- b. Addressing the structure and governance arrangements of the State in order to better strengthen, support and monitor Local Government; and
- c. Refining and strengthening the policy, regulatory and fiscal environment for Local Government and giving greater attention to the enforcement measures.

- **Department of Water Affairs & Forestry (DWAF)**

Responsibility for water management in South Africa has been placed within different government spheres to allow efficient and responsive attention to the issues at hand.

The management of the country's water resources lies with the national Department of Water Affairs and Forestry whilst the responsibility to ensure the delivery of water services, both water supply and sanitation, rests with local government or municipalities.

This places the following responsibilities on the Department of Water Affairs and Forestry:

- Water Resources: as custodian responsible for the management of South Africa's water resources, and
- Water Services: as sector leader to responsible to provide leadership, support and regulation to this sub-sector.

DWAF requires Technical Assistance support to deal with this transformation.

- **Cross cutting issues of appropriate technology, gender, the environment, civil society and HIV/AIDS**
  - Gender
  - Appropriate tech
  - Environment
  - CSOs
  - HIV/AIDS

### **Sector Skills Requirements**

- **Operation and Maintenance Funding.**

Current DWAF operational subsidies, refurbishment (expected to increase as the refurbishment studies by the WSAs revise these requirements) and equitable share allocations (of which approximately 36% is allocated for water services) are:

#### **6.4 Strategic goal 4: Ensure Water Resource Allocation, Management and Development to meet the needs of the province.**

Apart from the requirements for water in the established user sectors, which can be calculated with relative ease, the quantities of water required for redressing inequities and poverty eradication will depend strongly on the specific requirements of local and regional development strategies. Given the general trends in the province towards urbanisation and continued economic growth, future growth in water requirements is expected to occur in the economically more favourably located urban areas. Relatively strong growth is also foreseen in the mining sector, with water demand for mineral exploitation anticipated.

##### **Future options**

- Efficiency of use
- Control alien vegetation
- Ground Water
- Re-allocation
- Development of surface water resources
- Use of mine water

While issues of importance have been identified with respect to each of the water management areas, the following areas are of specific note from a provincial and national perspective:

- **Nkomazi water management area:** In deficit. Impacts on Swaziland and Mozambique will have to be managed.
- **Olifants water management area:** Deficits that will result from implementation of the Reserve and the provision of water supplies for future power generation and mining in the Limpopo/Sekhukhune area, and also to support mining in the Limpopo water management area, will have to be addressed. Possible impacts on Mozambique will have to be managed.

##### **Interventions for water resources management**

- Water conservation and water demand management
- Managing groundwater resources
- Re-use of water
- Control of invasive alien vegetation
- Re-allocation of water
- Development of surface water resources

Opportunities for increased water use other than those that arise from urban, industrial and mining growth are also addressed as part of the analysis of the

respective water management areas. Opportunities being pursued include the following -

- Western Highveld Augmentation Scheme – complete and in operation
- Vaal Augmentation Scheme – under construction R2.3b with water expected to flow in early 2008
- Mine water reclamation in the Upper Olifants Catchment (+-R450m) – feasibility stage
- New dam for Mbombela area – studies stage
- Inter-catchment transfers
- Water quality
- **Environmental considerations**

**6.5 Strategic Goal 5: Project delivery to overcome the water services backlogs and higher levels of services needs in Mpumalanga.**

**Water Services Backlog**

Water Services (Data not agreed)

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**Cost to eradicate backlogs:**

Water: 785 394 people at R1 200/person is R 942.5m

Sanitation: 1 633 565 people at R 3 000/household is R 1 116.3m

Total cost: R 2. 059b

Substantial increase in funding and delivery required.

**Higher Levels of Service**

Special purpose vehicles being considered: provincial need approx. R 2.7b

**5-YEAR PROVINCIAL WATER SECTOR PLAN (2007 – 2012)**

Attached