



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



National Water & Sanitation Master Plan Valuing Water Dignifying Sanitation

**Presentation to Provincial Consultation Workshop: KZN
Preparation for the Water and Sanitation
Operation Phakisa**

18 March 2019

**Presented by: Tendani Nditwani
Project Manager: NW&SMP**

Purpose of Pre-lab Provincial Consultation

- To present the key issues and possible solutions as shown in the National Water and Sanitation Master Plan (latest documentation will be available on the DWS website
<http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/default.aspx>)
- To confirm issues for the province
- Present the framework of Operation Phakisa
- Set out preparatory work for provincial involvement on relevant workstreams & uniform framework
- Organize provincial support structure for Phakisa (@PJTC)



OBJECTIVE OF NW&SMP

- The Master Plan points out the priority actions required until 2030 and beyond to ensure the water security and equitable access to water and sanitation services for all in RSA.
- It was developed in partnership with all relevant organs of state and water sector stakeholders, to give effect to local, national, regional, continental and international water and sanitation delivery targets and commitments.
- Ensure integrated planning and development across the entire water value chain (**SONA**) (*support the recommendations from Cabinet Lekgotla on IMTT basic Services strategy: eg. Focus on misalignment where bulk infrastructure has been provided without provision made for reticulation, **LR4***).



Alignment to government priority initiatives

- Supports the President's Economic Stimulus and Recovery Plan (**ESRP**) and give priority to the 'Five broad parts' :
 - Implementation of growth enhancing economic reforms;
 - Reprioritisation of public spending to support job creation;
 - Establishment of an Infrastructure Fund.
 - Addressing urgent and pressing matters in education and health.
 - Investing in municipal social infrastructure improvement.



Alignment to government priority initiatives (2)

- Gives effect to various initiatives and programmes that were pronounced in the State of the Nation Address-2019 (**SONA**):
 - the 57 municipalities to be stabilised where over 10 000 municipal infrastructure projects are being implemented;
 - Spirit of Thuma Mina initiated Public-Private Growth initiative to facilitate focused investment plans of leading companies across 19 sectors of the economy;
 - Aligns land reform programmes and various policies and legislative interventions to ensure water access from growth in agriculture, industrial development and human settlements.
 - The Value Chain Pillar amongst other attributes addresses the Slow down infrastructure development and infrastructure provision fragmentation between the different spheres of government



Alignment to government priority initiatives (3)

- A workstream to strengthen the administration and technical capacity in government to ensure that projects move faster, – an action team that can make things happen faster on the ground.
- As a water scarce country, we are confronting water crises in many parts of the country. We are developing a comprehensive integrated national plan that addresses water shortages, ageing infrastructure and poor project implementation.
- We are urgently establishing an inter-governmental rapid response technical team, reinforced by specialist professionals, to intervene in areas which are experiencing severe water problems.
- The interventions supports the SAFE Initiative that was launched in August last year to replace all unsafe toilets in public schools.



Content of NW&SMP

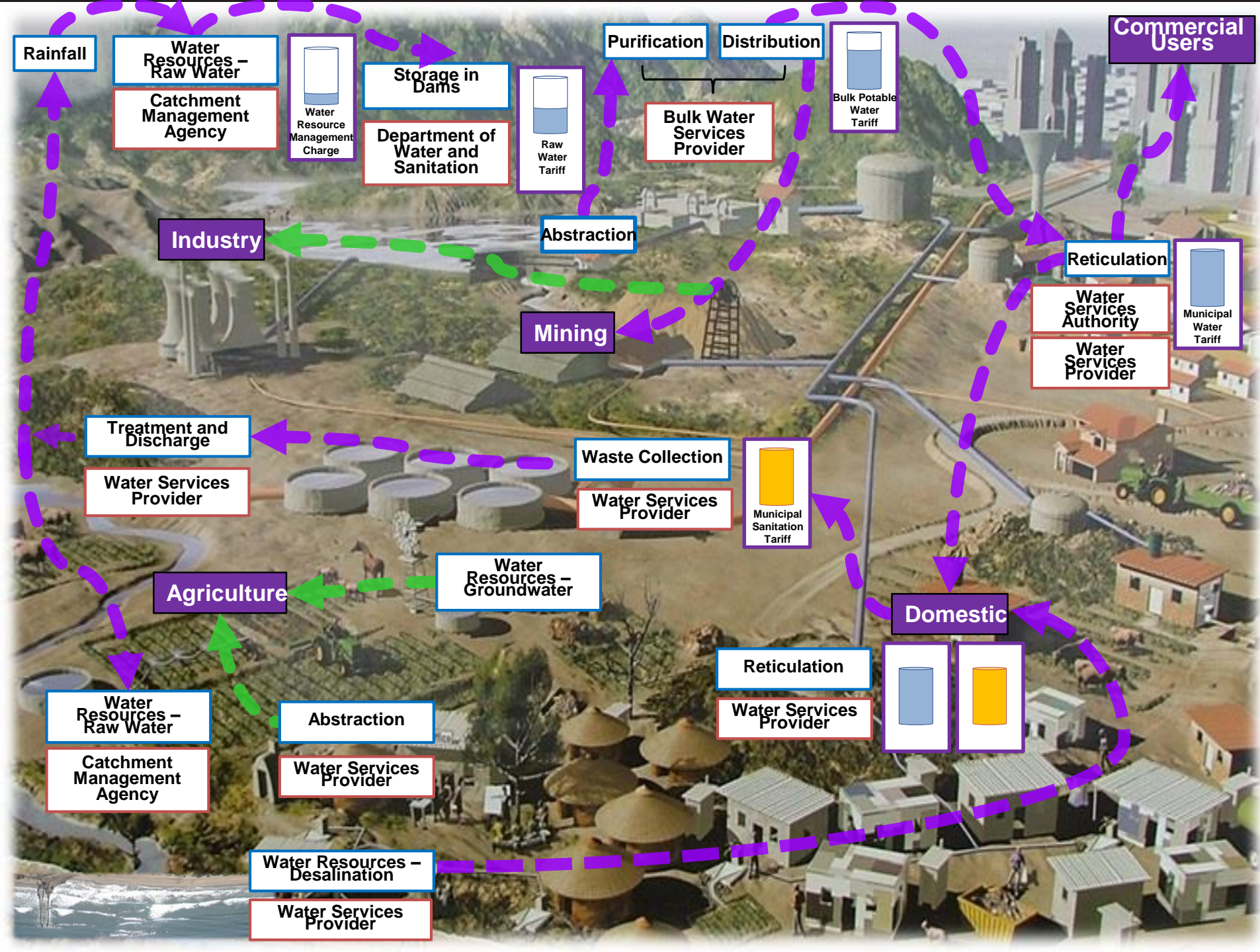
- The National Water and Sanitation Master Plan (NW&SMP) is a “Call to Action”. It seeks to rally all Water Sector Stakeholders in South Africa to work together to address the challenges confronting the Water and Sanitation Sector
- The Plan enable the achievement of the targets set out in the National Development Plan (NDP) Vision for 2030 and the Sustainable Development Goals (SDG Goal 6 2030), of affordable and reliable access to sufficient and safe water and hygienic sanitation for socio-economic growth and well-being, with due regard to the environment
- The Plan is also geared for the 5 key Strategic Pillars of the Department.
 - Pillar 1 National Water Resources and Services Authority
 - Pillar 2 National Water Resources and Services Regulator
 - Pillar 3 Water Resources and Services Value Chain
 - Pillar 4 Water Resources and Services Master Plan
 - Pillar 5 Institutional Rationalisation and Organisational Alignment 7



History and current status

- National Dialogue (5/2017) and open development process
- NW&SMP was delivered in time 31 March 2018
- Minister Nkwinti included NW&SMP in his 5 Pillars strategy
- Cabinet Committee noted NW&SMP at 27 June 2018 and agreed to implement NW&SMP by Operation Phakisa methodology; confirmed by Cabinet on 4 July 2018
- NW&SMP aligns with international and SA government priority initiatives; SDG, African Union Agenda 2063, NDP, President's ESRP, Cabinet Lekgotla on IMTT basic services strategy, **SONA**
- Minister signed formal letter to DPME requesting guidance and support for Operation Phakisa "Valuing Water Dignifying Sanitation"
- Urgency and importance of implementation NW&SMP is widely recognized and expressed





NW&SMP PHILOSOPHY

INSTRUMENTS

- ✓ National Water and Sanitation Bill
- ✓ National Water and Sanitation Master Plan
- ✓ National Water and Sanitation Resources Strategy
- ✓ Water Security Framework



Affordable and reliable access to sufficient and safe water and hygienic sanitation for socio-economic well-being with due regards to the environment



Without sufficient revenue from transfers and tariffs, the sector will be unsustainable

DRIVERS

Sustainable Development Goals

National Development Plan (SONA)

National Water Resource Strategy
ESRP: LR Lekgotla Res

National Water & Sanitation Strategy

National Water & Sanitation Bill

Climate Change

African Union Agenda 2063

Resilient and fit for use water supply

Universal water and sanitation provision

Equitable sharing and allocation of water resources

Effective infrastructure management, operation and maintenance and waste water treatment

Reduction in future water demand

KEY OBJECTIVES - NEW NORMAL



Ready for the future, ahead of the curve

Consolidate and Prioritise Schedule of Actions

Interaction of twelve elements



Structure of NW&SMP



Volume 1: Call to Action briefly outlines the milestone challenges and the recommended actions

Volume 2: Plan to Action provides detailed account and analysis of the rationale for challenges and actions, and addresses future inter-governmental collaboration, M&E protocols and continuous stakeholder engagement during implementation.

Volume 3: Schedule of Actions provides a detailed consolidated and prioritised implementation plan with costs covering all the actions required across the sector to achieve the objectives of the plan.

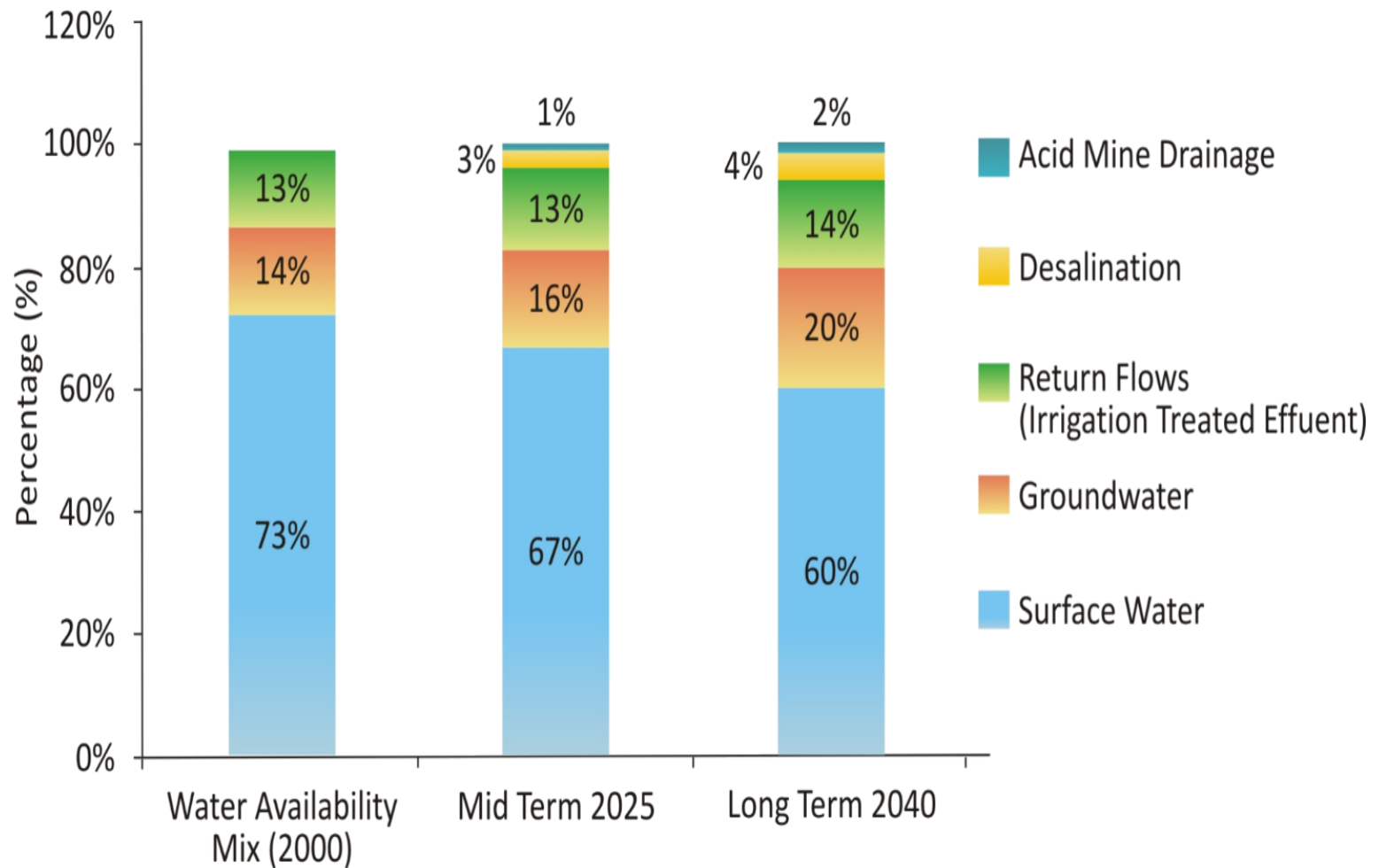


Problem statement/Key challenges (1)

- *Without intervention*, national water deficit will be around 17% by 2030 (deficit could be between 2 700 and 3 800 million m³/a).
- Water availability could deteriorate as supply contracts and demand escalates due to growth, urbanization, inefficient use, degradation of wetlands, water losses and the negative impacts of climate change.
- IPAP sets out the intentions of South Africa in terms of expanding the manufacturing sector, which must drive innovation and which will in turn increase water demand but has the potential to increase water pollution if not appropriately regulated
- The agricultural sector, the largest employer in the rural areas of the country, uses the most water (approximately 61%) and benefits from a large subsidy on the price of water (structure of the water pricing strategy), need for greater efficiency in water use.
- There is currently a heavily reliance on surface water (73% of total available yield). Not sufficiently diversified water Mix.

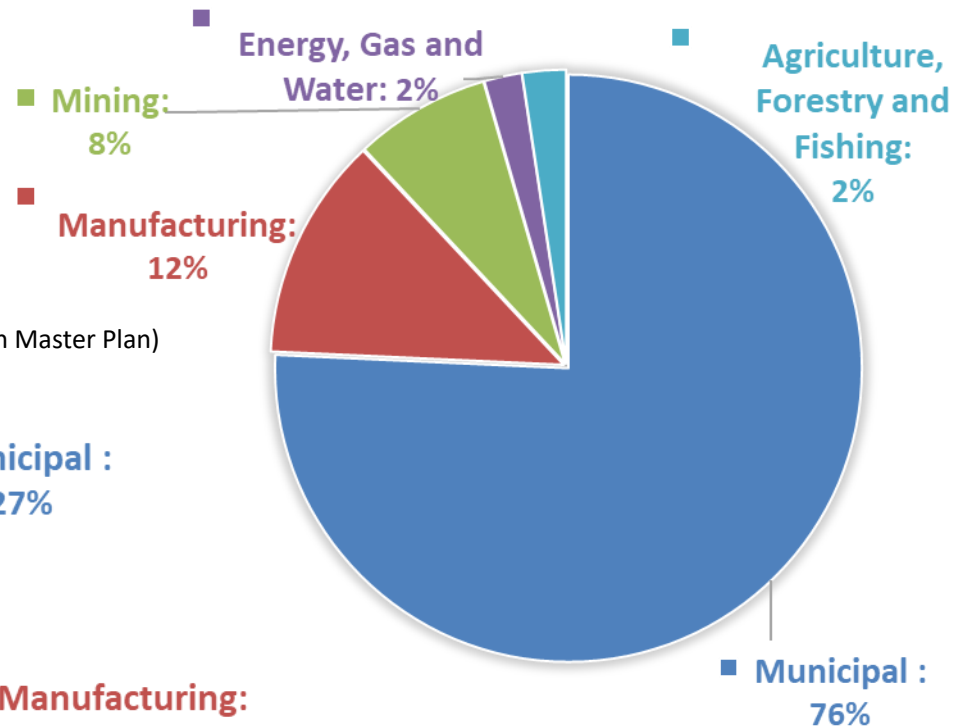


Being ready for the future means making a diversified water mix a reality in South Africa

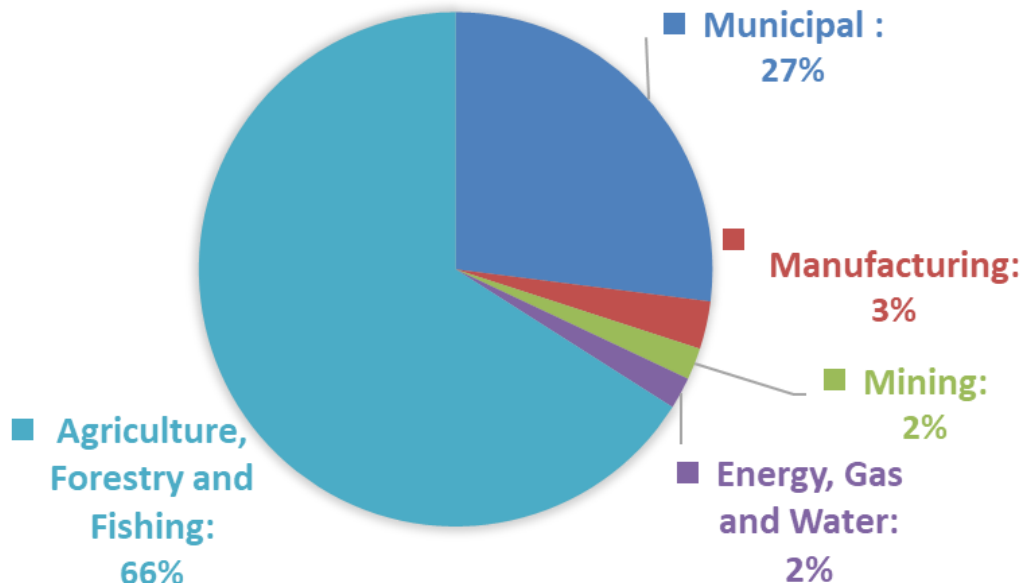


GDP Contribution per Sector versus Water Use per Sector

- GDP Contribution (Stats SA PO441)



- Water Use (DWS Water & San Master Plan)



Note that the level of assurance at which agricultural water is supplied is lower than that of other sectors.

Problem statement/Key challenges (2)

- About 50% of South Africa's water resources originate from 10% of the country's land, but many of these "water factories" are under threat.
- Between 1999 and 2011 the extent of main rivers in South Africa classified as having a poor ecological condition increased by 500%, with some rivers pushed beyond the point of recovery.
- South Africa has lost over 50% of its wetlands, and of the remaining 3.2 million hectares (approximately 30%) are already in a poor condition.
- Approximately 56% municipal wastewater treatment works and approximately 44% water treatment works in the country are in a poor/critical condition and need urgent rehabilitation, with some 11% completely dysfunctional which is having a significantly detrimental impact on the environment and driving up the cost of water treatment.



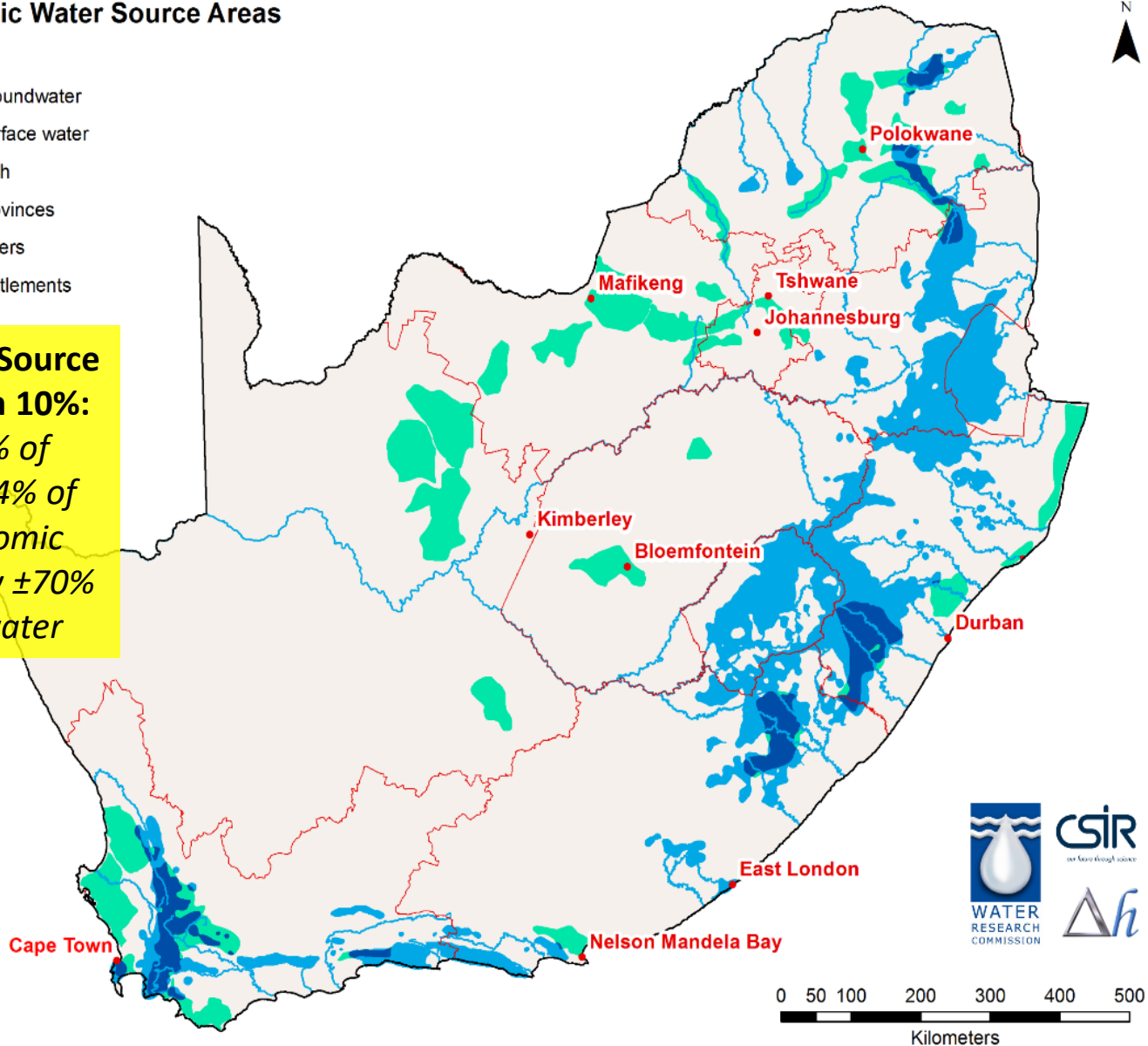
Map of Strategic Water Source

Strategic Water Source Areas

Type

- Groundwater
- Surface water
- Both
- Provinces
- Rivers
- Settlements

Strategic Water Source Areas-50% from 10%:
Support >50% of population, >64% of national economic activity & supply \pm 70% of irrigation water



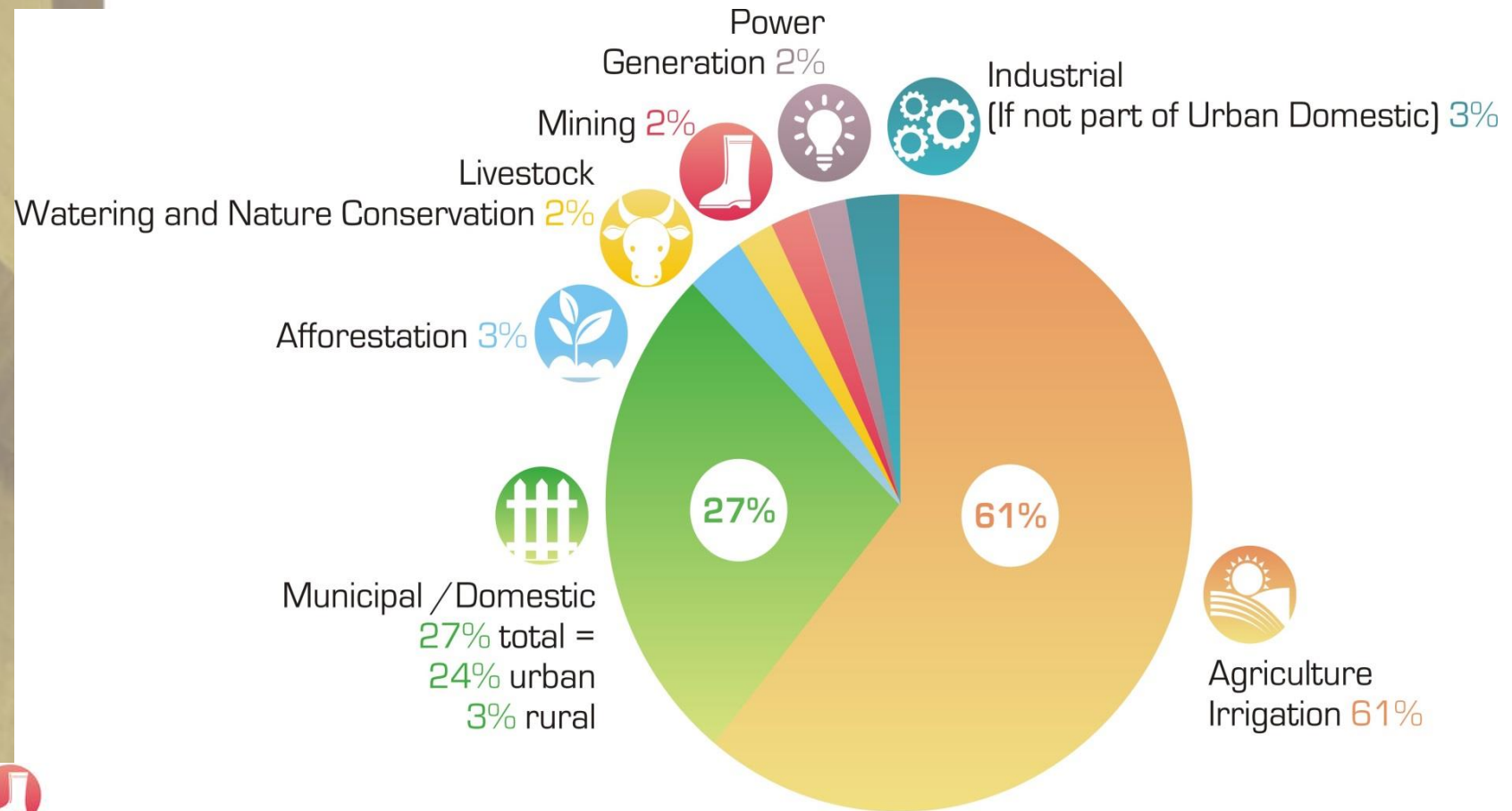
Problem statement/Key challenges (1)

Why this Call to Action?

- Over 3 million people still do not have access to a basic water supply service and 14.1 million people do not have access to safe sanitation.
- Past 20 years, the sector has not made sufficient progress on its mandate for water allocation reform (reallocation to address racial and gender discrimination).
- DAFF Irrigation Strategy (2013): very little areas left with irrigable soils that can be put under irrigation
- Some 77% of rural households are indigent and therefore entitled to free basic water which is placing a significant strain on municipalities with a low revenue base.
- Municipalities have made little progress towards meeting water conservation targets set by the NDP with average municipal water use currently around 237 litres per person per day compared to the world average of 173 litres per person per day.



Current water use by sector



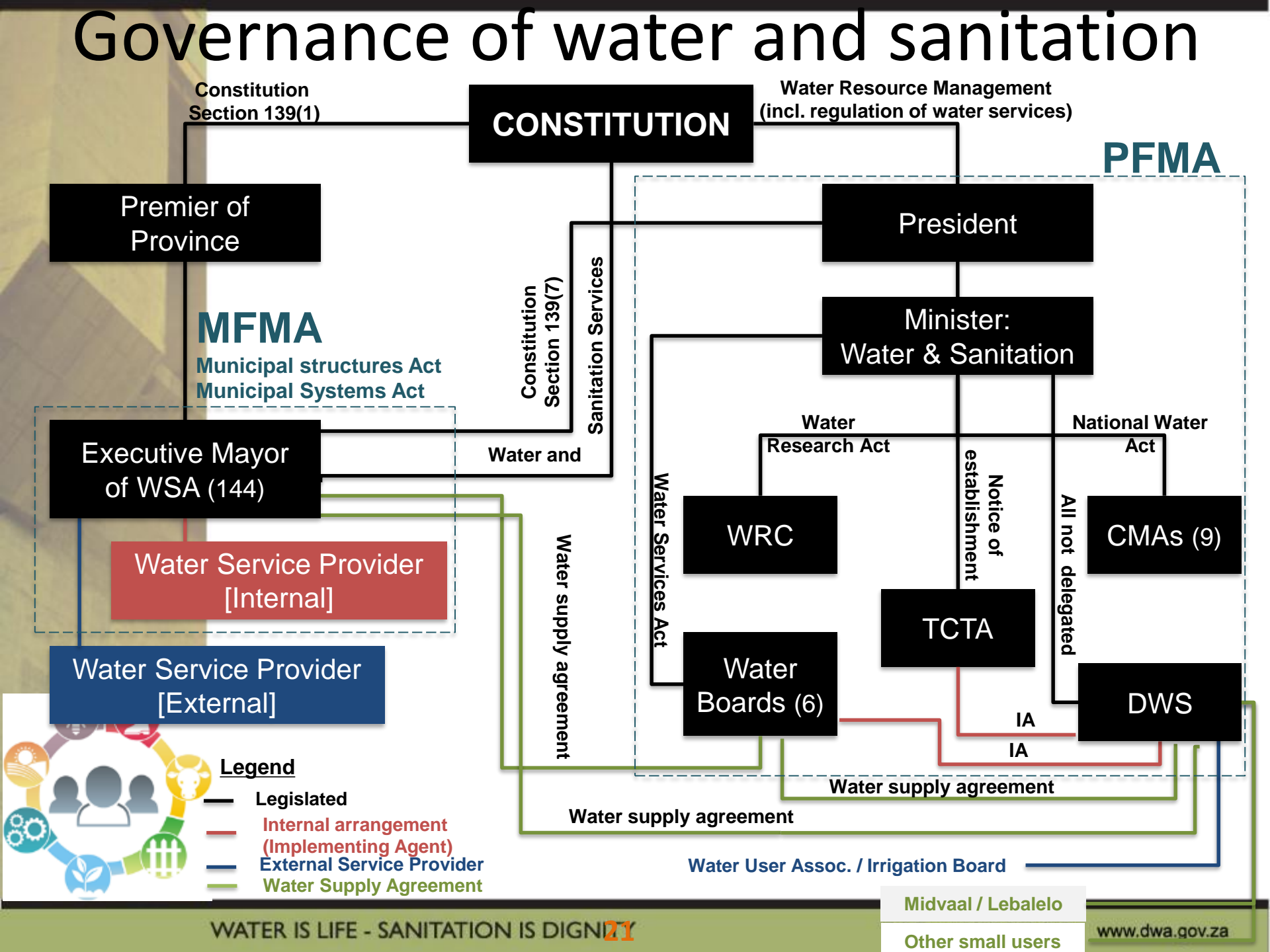
How we use our water resources in South Africa



Problem statement/Key challenges (3)

- Responsibility for water supply and sanitation (constitutionally) lies with 144 municipalities that are Water Services Authorities (WSAs). At least a third of these are regarded as dysfunctional and more than 50% have no, or very limited, technical staff. Twenty-seven priority districts have been identified as being particularly dysfunctional and requiring specific intervention (though not all are WSAs).
- The reliability of services that have been provided since the advent of democracy is declining, with only 64 % of households having access to a reliable water supply service (StatsSA General Household Survey).
- The institutional landscape of the water sector is also overly complex and not sufficiently transformed, which is impacting the value chain.
- **Note:** *since the preparation of the Master Plan the IMTT on Basic Services has identified 57 Municipalities which account for over 87% of all households living in informal settlements or backyard dwellings, constitute over 50% of all backlogs and are the epicentre of recorded public service delivery protests.*



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Problem statement/Key challenges (4)

- Current pricing strategy does not adequately make provision to: reward users who conserve water and penalise consumers that ignore consumption caps .
- Waterborne sanitation is unsustainable, need to adopt “water-less” sanitation technology. Pragmatic management of the Free Basic Water policy is required.
- Non-Revenue Water in municipalities is estimated at 41%, losing some R 9.9 billion of potential revenue per year. Need to deal with non-payment for services, and enforce cost-recovery.
- The water sector is not financially sustainable, Pricing Strategy will have to be reviewed to address the historic undervaluation of water and sanitation services.
- High levels of debt at municipal level reverberate up the value chain, impacting on the financial sustainability.
- South Africa invests R 42 billion per year into water infrastructure, and R13 billion into sanitation. The estimated capital investment requirement is R90 billion per year over the next ten years, which is R 33 billion per annum more than the current investment.



Selected Proposed Actions (1)

The master plan highlights the key challenges in the water sector. The master plan place emphasis on the country and communities to plan for droughts and floods.

- Through drought, the disaster management approach has moved to building resilience, which includes the entire Water and Sanitation value chain.
- Tactics to reduce the risk of floods include
 - Building dams, control river flow and engineering schemes to divert water ways away from urban areas,
 - Creating reservoirs that can hold excess water during heavy rainfall, and
 - Raising the height of land alongside rivers to make them less likely to flood.
 - Natural vegetation such as wetlands can also help to control the flow of flood water and reduce the damage they can inflict.
- Reduce risk from drought on a household scale include rainwater harvesting and water recycling

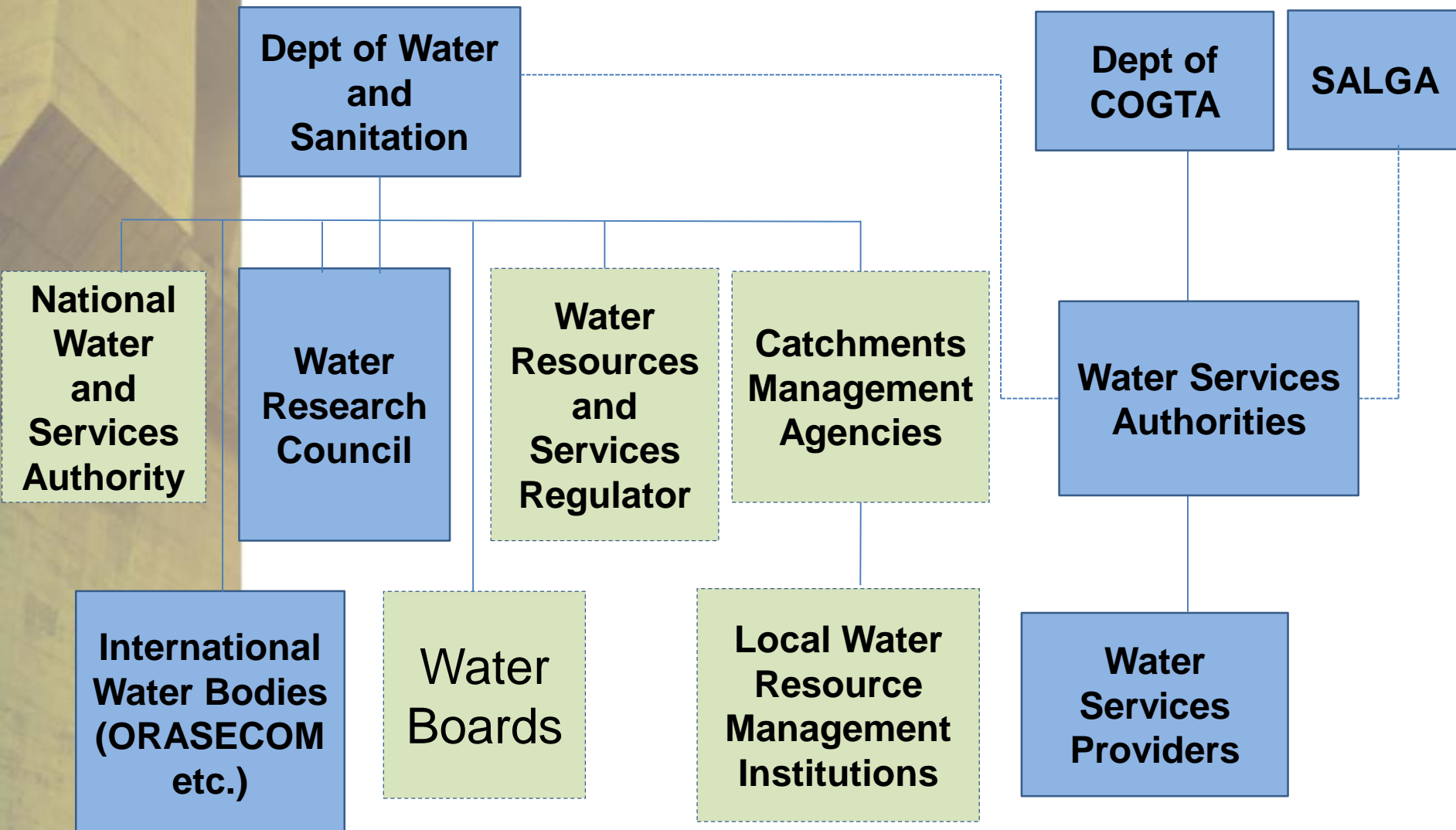


Selected Proposed Actions (2)

- Develop a business case for streamlined institutional rationalisation and organisational alignment in the water sector . This will include Disaster Management Components and committees at all levels of government and relevant institutions.
- DWS is also required to be represented on a very wide spread of joint disaster management committees.
- Establish financially sustainable CMAs across the country.
- Establish the National Water Resources and Services Authority
- Establish the National Water Resources and Service Regulator
- Redefine the configuration of Water boards to manage regional bulk water supply; assist municipalities to perform their primary water services mandate where necessary, manage regional water resources infrastructure, manage regional bulk WWTW



PLANNED INSTITUTIONAL ARRANGEMENTS FOR THE WATER SECTOR



Selected Proposed Actions (3)

- DWS will form part of the Co-ordinated Inter-Departmental and Inter-Governmental approach to planning, budgeting and implementation for Social Infrastructure and Services in the 57 Identified Prioritised Municipalities (**LR1, ESRP**)
- The Co-ordinated Service Delivery approach in the 57 Identified Priority Municipalities (8 Metros, 43 Locals and 6 Districts) must reach the greatest number of households still requiring basic services: (**LR2, ESRP**) (eg WCWDM)
- DWS will establish a specialised municipal intervention unit for water and sanitation (MIUWS) to drive the national programme of interventions, which includes the reintroduction of a Sector-Wide Approach (SWAP)
- A national programme, driven by the MIUWS, to support the adoption of alternative water sources such as desalination and water re-use (including a programme to determine the costs and benefits of new technologies).
- DWS will form part of Joint team to work on all areas in which improved bulk and reticulation infrastructure alignment - including the seven pilot Water Services Authorities. (**LR3**)
- A national programme is proposed to drive the reduction of non-revenue water levels to meet national and catchment targets.
- Address financial sustainability issues across the sector to turn around the currently poor levels of maintenance and refurbishment that are contributing to the decline in reliability of services and the high levels of wastage of water through leaks.
- Water Conservation and Demand Management (WC/WDM) targets will be set for all municipalities.



Selected Proposed Actions (4)

- DWS/DEA will identify and declare high yielding areas (“Water Factories”), critical groundwater recharge areas and aquatic ecosystems recognised as threatened or sensitive as protected areas
- DWS will work with government departments and other sector partners to formalise funding arrangements for the sector, in order to close the funding gap.
- DWS and DEA , will focus on enforcement (water use licence conditions for both abstraction and waste discharge and other illegal activities), and prosecution of high-impact non-compliant water users (“business unusual”)
- Re-focus the Water Allocation Reform (WAR) programme.
- Implement proposal to establish a water and agrarian reform programme (led by Department of Rural Development and Land Reform (DRDLR)) to ensure that the reallocation of both land and water are aligned and take place within a framework of agrarian reform and effective rural development (MOU between DWS and DRDLR is already in place)



Selected Proposed Actions (4)

- DWS support **LR 6** : Back-to-Basics Programme
- A national programme of refurbishing and turning around failing WWTWs to protect our natural resources and citizen health is non-negotiable.
- Re-introduce the Blue, Green and No Drop programmes.
- DWS support **LR 5**: Financial Management
- Metering of water use in the agricultural sector and the reconsideration of the subsidy on agricultural water charges to drive water conservation.
- The water sector research, development and innovation programme, driven by the DST and the WRC will support the implementation of the NW&SMP.
- Increase supply by: increasing surface water yield, increasing ground water use, desalination (including AMD), water re-use
- A Phakisa is proposed for 2019. The Phakisa Planning process for the water and sanitation sector will refine priorities, consolidate plans and actions, set time frames and allocate resources and responsibility to relevant departments, entities and institutions to ensure effective delivery and achievement of desired outcomes of the Master Plan.



Operation Phakisa (1)

- On 27 June 2018, Cabinet Committee noted the NW&SMP and supported a Phakisa for all stakeholders in the water sector with a view to refining and agreeing on the detailed implementation plan for the Master plan by the latter part of 2018. This was confirmed by Cabinet on 4 July 2018.
- Cabinet also supported a recommendation that the sector undertake a collaborative, embedded planning initiative utilising the Operation Phakisa methodology adopted by Government in 2013.
- The support of Cabinet for the mobilisation of a Operation Phakisa for Water and Sanitation is a game-changer for the DWS and the broader water sector.
- The Operation Phakisa on Water and Sanitation will see sector partners agree to the concrete actions, budgets and timeframes necessary to implement the Master Plan and ensure a water-secure future for the country, while also addressing the triple challenge confronting the country, namely poverty, unemployment and inequality.

It is the intention of the Department to mobilise the sector to undertake the Operation Phakisa by 2019. A planning period of 6-8 weeks is anticipated.



Operation Phakisa (2)

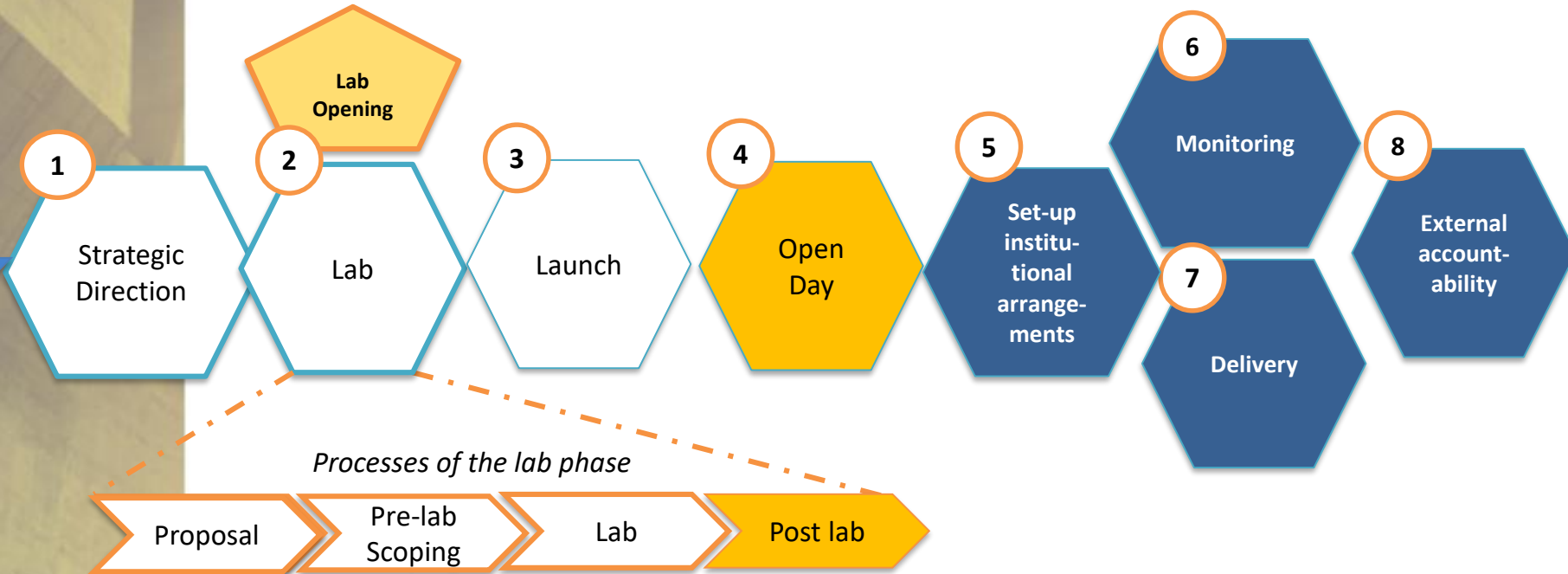
- Objective of Operation Phakisa
 - Is a results-driven approach, involving clear plans and targets, on-going monitoring of progress and making results available to the public
 - radical, practical and innovative and should deliver exceptional results.
 - Create an environment where Government implement priority programmes better, faster and more effectively
 - Mobilise sector partners to agree on the concrete actions, budgets and timeframes necessary to implement the Master Plan



Operation Phakisa Methodology

- 8-step approach

DWS – We are here

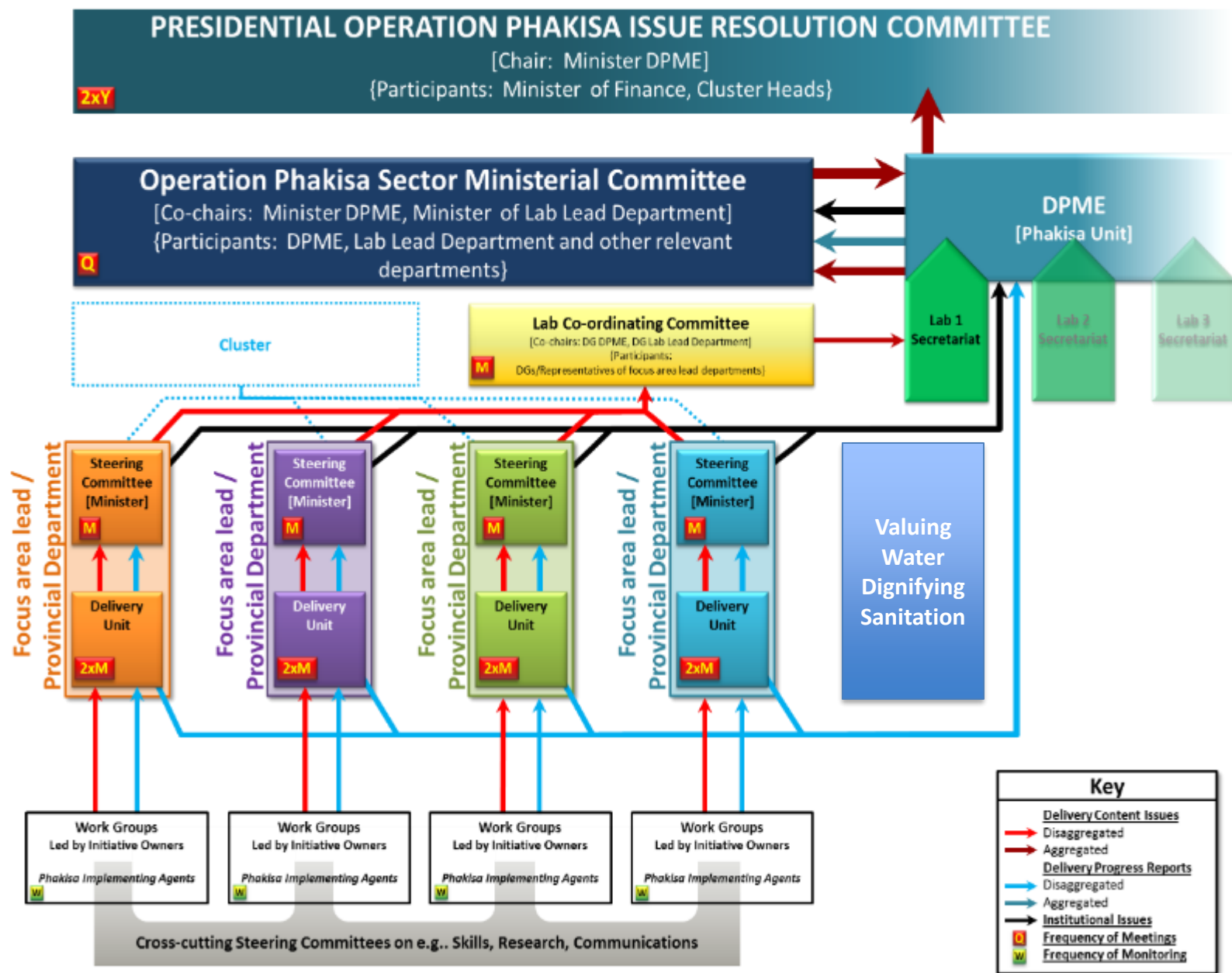


Governance Structure

- Run from the president's office by the Presidential Issue Resolution Committee (Chaired by Minister DPME and participants: Minister of Finance and Cluster Heads) supported by:
 - Inter-Ministerial Committee (Co- Chaired by Minister DPME and Minister DWS and Participants DPME, DWS and other relevant departments)
 - Lab Coordinating Committee (Co- Chaired by DG DPME and DG DWS and Participants DPME, DWS and other relevant departments)
 - Secretariat (Co- Chaired by DG DPME and DG DWS and Participants DPME, DWS and other relevant departments)
 - Steering Committees (Chaired by Minister by Minister of relevant focus Participants DPME, DWS and other relevant departments)
 - Delivery Units (DU) (per focus group), and
 - Working Groups(per workstream).



Governance Structures



Lab Design

- Extensive problem solving environment that leads to emergence of initiatives – solutions
- Strategic guidance - technical and political leadership
- “SMART” deliverables with intensive progress monitoring
- Change of departmental KPAs – Future ready!
- Validate, Verify, Align
- Full-time for a specific 6 – 8 week period
- Intense open debates and continuously, dedicated approach
- Emergence of implementation plans – 3-feet action plans
- Development of performance indicators
- Political and leadership sign-off of Lab output



Service Delivery Unit (SDU)

- A key requirement of the Phakisa process from the department is to establish a Service Delivery Unit (SDU) that will be:
 - the “engine room of implementation”;
 - operational until **2030 and beyond**;
 - drive, guide and manage the process, partner with (political) sponsors and stakeholders, track performance, adjust, resolve obstacles and bottlenecks, etc
- The SDU will be comprise of an experienced, skilled, ‘outstanding’ programme director who has the ability to and are allowed fast and financial decision making to act within its mandate, scope and budget and give directions to the workstream leaders
- DWS staff and other water sector partners will be **co-opted** to the programme to establish working groups, smaller delivery units and escalating mechanism up to ministerial / presidential level if required.



**Workstream 1:
Municipal Water
and Sanitation
Services**

- 1.1 Reduce Demand and Increase Supply
- 1.2. Redistribution for Transformation
- 1.3 Managing effective water services and sanitation

**Workstream 2:
Water for
Agriculture**

- 1.1 Reduce Demand and Increase Supply
- 1.2 Redistribution for Transformation

**Workstream 3:
Water for Industry**

- 1.5 Improving raw water quality
- 1.6 Protecting and restoring ecological infrastructure

**Workstream 4:
National Water
Mix**

- 1.1 Reduce Demand and Increase Supply
- 1.2 Redistribution for Transformation

**Workstream 5:
Regulating and
Legislation**

- 1.4 Regulating water and sanitation
- 2.1 Creating Effective Institutions
- 2.3 Building Capacity for action
- 2.4 Ensuring Financial sustainability
- 2.5 Legislation

**Workstream 6:
Deployment of
Research,
Development and
Innovation**

- 2.2 Managing Data and information
- 2.6 Enhancing Research, Development
- 2.13 Monitoring and Evaluation

Cross cutting theme:
Climate Change, Minister's five Pillars, President's Economic Stimulus and Recovery Plan (ESRP)

Phakisa Pre-lab Preparation Programme

DPME Prescribed proses	Description	Start	Delivery
Labs preparation			
DPME support acceptance letter	A letter in which DPME agree to support DWS in undertaking the Operation Phakisa	15 February 2019	22 March 2019
DWS to Confirm and Commit resources	As first step DWS should confirm and committed funds and human resources for this process.	15 February 2019	30 March 2019
Pre-lab Provincial Consultation	The PJTC are identified as forum to host Pre-lab Provincial consultation.	18 March 2019	8 April 2019
KZN, Durban	<p>The PJTC chairperson will receive discussion documentation to be utilised and a report template to provide feedback of discussions. The parties to be invited to the Provincial workshop include PJTC members and at least the following groups (not the general public):</p> <ul style="list-style-type: none"> • Government departments and municipalities at Metro, District and Local levels • User associations, business groups and associations • Major individual users • NGO's, civil society organisations, etc. 	18 March 2019	
Gauteng, Pta		20 March 2019	
Eastern Cape, King Williams Town		25 March 2019	
Western Cape, CT		27 Mach 2019	
Northern Cape, Kimberley		29 March 2019	
Free state, Bloemfontein		1 April 2019	
North West, Rustenburg		3 April 2019	
Limpopo, Polokwane		5 April 2019	
Mpumalanga, Nelspruit		8 April 2019	



NGIYATHOKOZA DANKIE **KE A LEBOGA**
NGIYABONGA
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INKOMU **NDI KHOU**
LIVHUHA

Thank you

