



# COMMISSION 6: PREVENTING AND MANAGING POLLUTION

WATER & SANITATION  
SUMMIT  
18 – 19 FEBRUARY 2022

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Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA

# Content

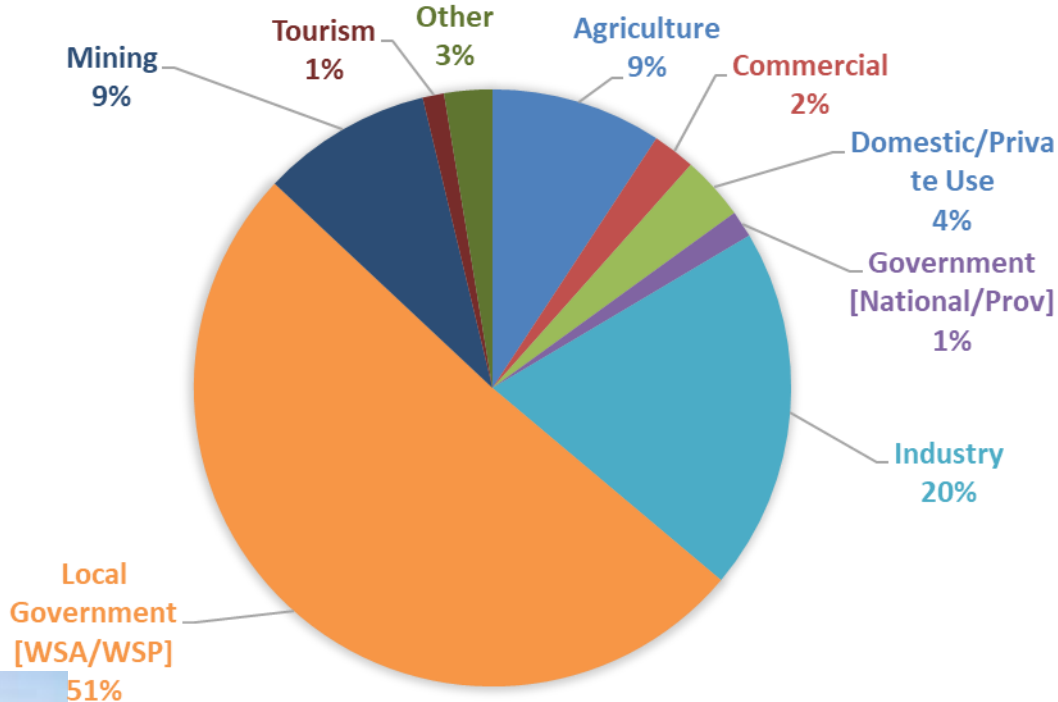
1. Problem Statement
2. Legislative Framework
3. Current Measures to prevent and mitigate pollution
4. Way forward

## Water pollution

Means the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it less fit for any beneficial purpose for which it may reasonably be expected to be used or harmful or potentially harmful to the welfare, health or safety of human beings, to any aquatic or non-aquatic organisms, to the resource quality or to property.

# Problem Statement

% OF POLLUTION CASES REPORTED PER SECTOR



Reports of water quality issues and concerns are also appearing in the media with increasing frequency

- Over the past couple of years the Department has been under public scrutiny in the way it has been dealing with pollution
- Incidents such as the Emfuleni pollution, Hartebeespoort Dam, Mining Pollution and AMD, Alexandra Shutdown, etc.
- Out of 186 monitored rivers, their ecological health condition varies from (a) 1.6%, (natural), (b) 26.6%, (good), (c) 42.8% (fair) and (d) 29% (poor).
- More than 50% of large dams in SA are seriously impacted by eutrophication, monitored currently in 17 WMA's
- Sporadic outbreaks of water related illnesses due to Water Quality challenges



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## Constitution of RSA, a108 -96

S10 Human Dignity

S24 Everyone has the right to have the environment protected, for the benefit of present and future generations through Reasonable legislative and other measures

S27 Access to sufficient food and water

S139 Provincial Interventions in local Government

## CONSTITUTIONAL IMPERATIVE

### Schedules 4 and 5

- **Exclusive National** Competence
- **Exclusive Provincial** Competence
- **Concurrent** National and Provincial Competence
- Local Authority – Executive and Administrative Competence
  
- **Executive competence** (including the **implementation** of legislation) generally follows the allocation of legislative competence
  
- **Overlapping** areas (**Environment** and **Pollution Control** is concurrent national and provincial vs. Air/Noise Pollution and control of public nuisances)

## Water Services Act, a108 -97

### Section 62 Monitoring of WSIs

- Obligation on DWS and Province to Monitor performance and compliance to N&S (under s9 and 10), Development plans
- Obligation of WSI to provide required information

### Section 63 Interventions

- Minister in Consultation with COGTA request relevant Province to Intervene into S139 of the Constitution
- If the Province fails to intervene or intervention fails Minister may assume responsibility of the function to the extent necessary

### Municipal Structures Act\*

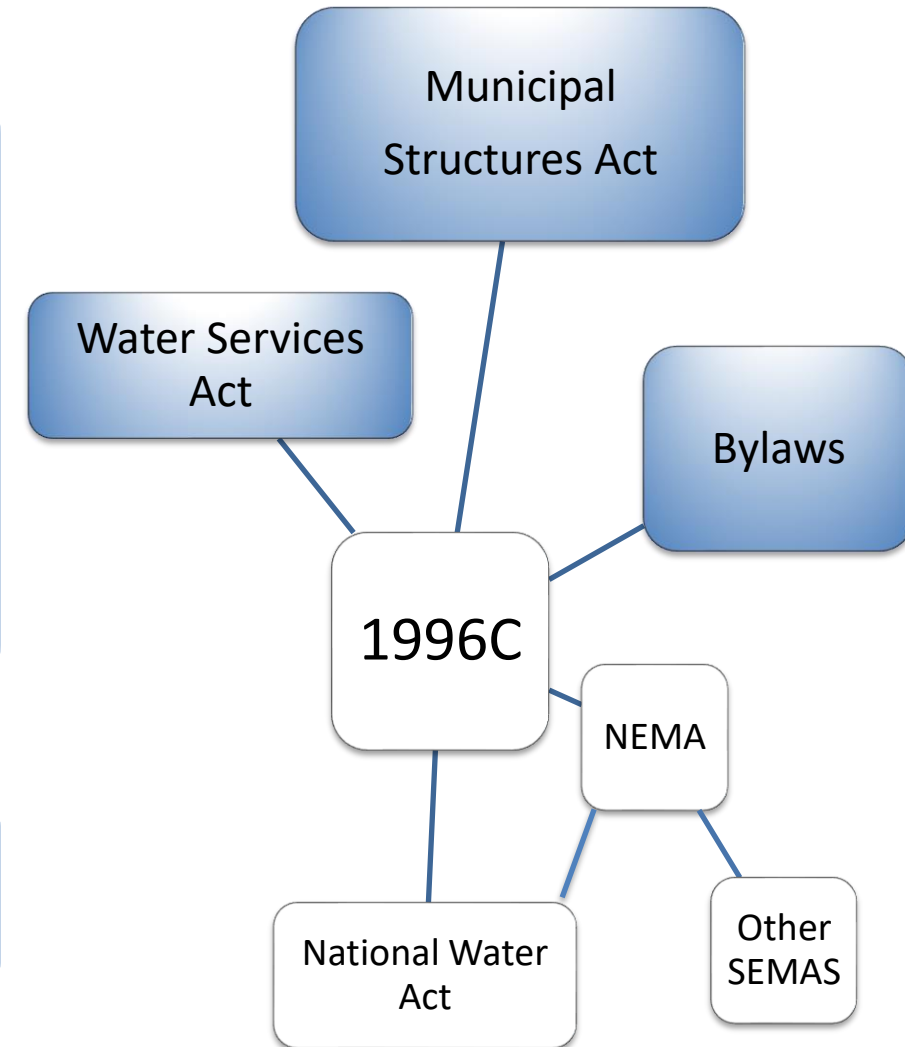
#### Chapter 5 Functions and Powers of Municipalities

S85 Adjustment of division of functions and powers between DM and LMs

### Municipal Bylaws

Litter and solid waste management

Stormwater Management



## National Water Act, a36 of 1998

Chapter 3 (NWA) allows for protection of the resource

Section 19 – Prevention and remedying effects of pollution

- Section 19 (NWA) allows for a Directive to be issued, and for remedial work to be done by the Department/CMA at cost of the water user.

Chapter 4 Use of Water

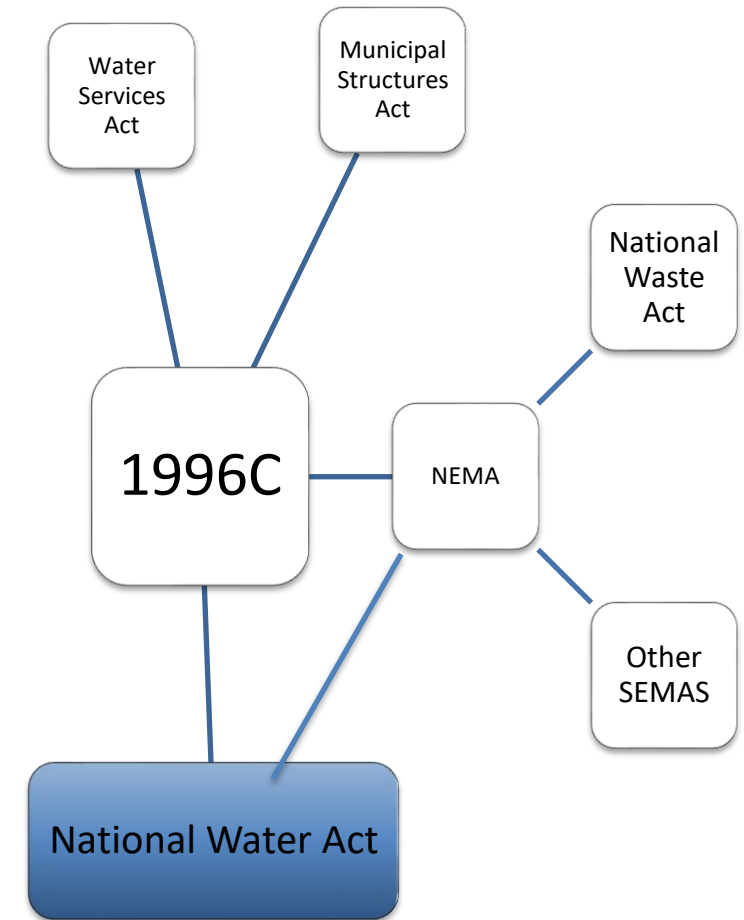
- Section 53 (NWA) allows for a Directive to be issued, for remedial work to be done by Department/CMA at cost of the water user, and to seek appropriate relief from a competent court.

Offences

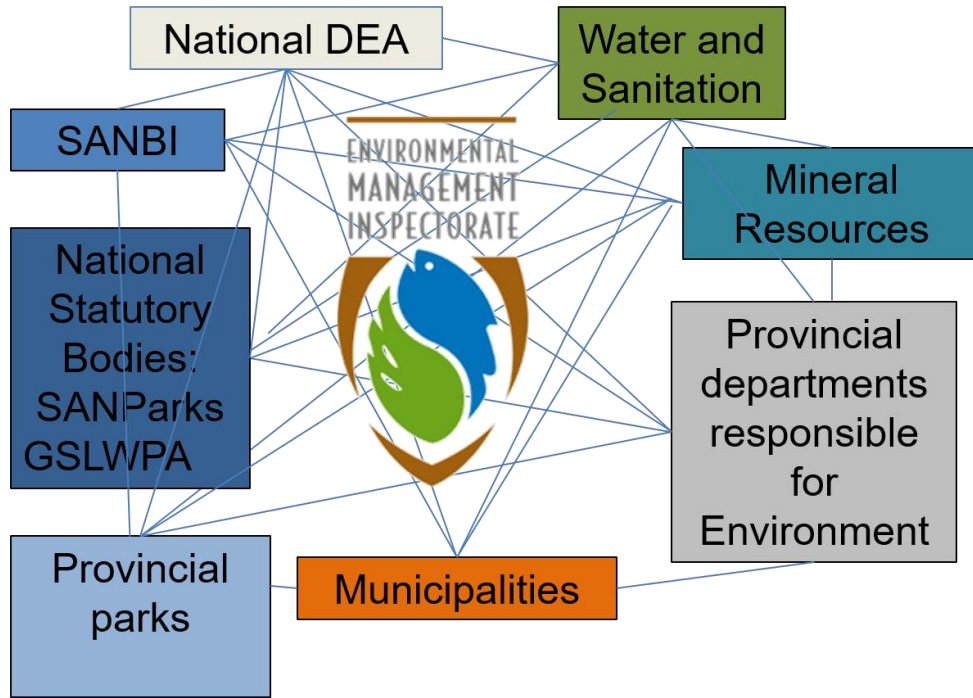
- Section 151 (NWA) stipulates the extent of an offence and premise for a sentence of not more than 5 years or a fine (1<sup>st</sup> offence).

Regulations:

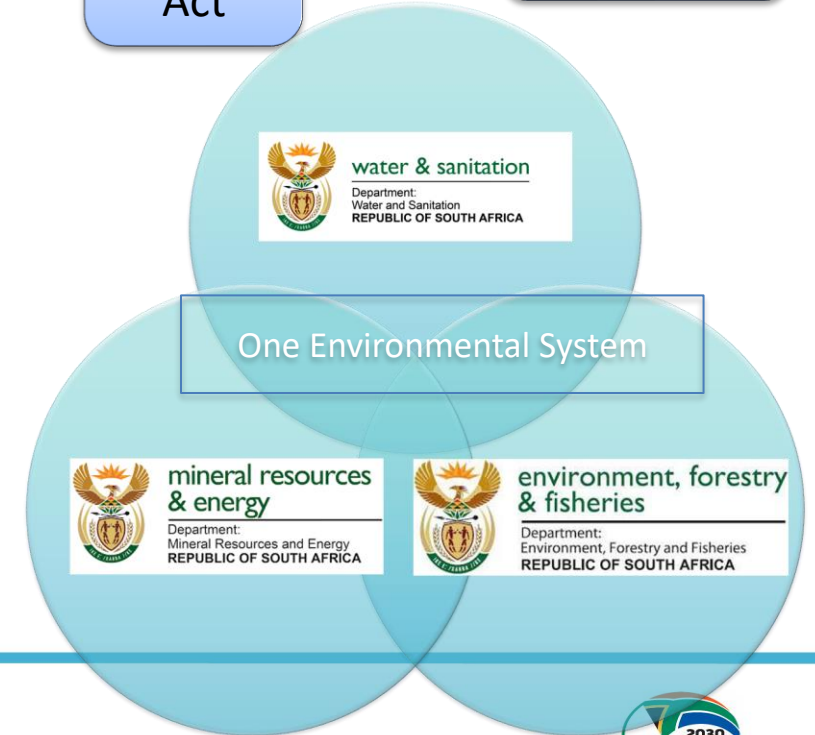
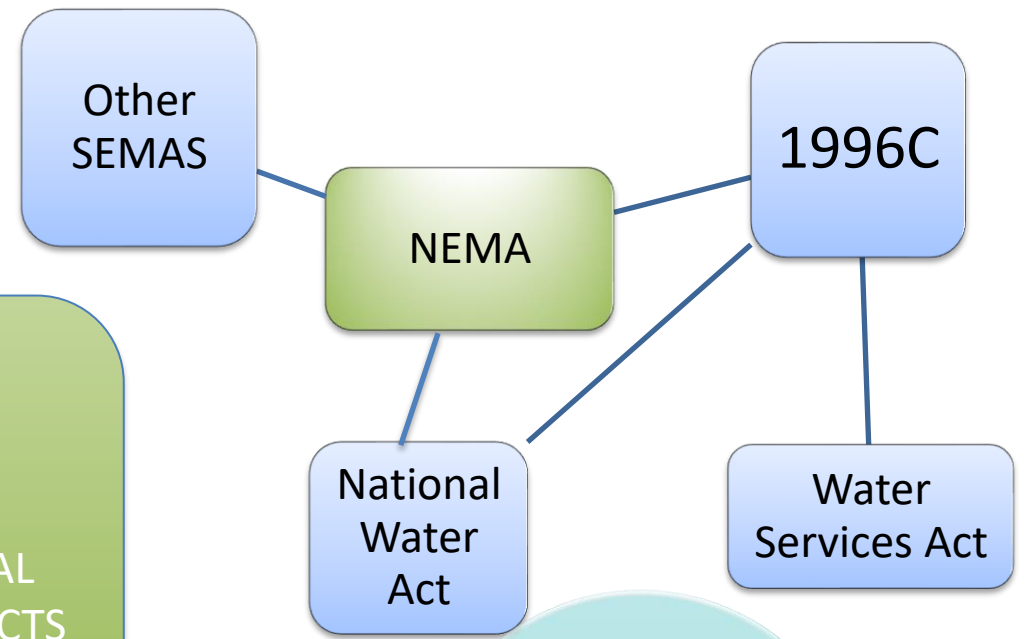
- Regulations on use of water for mining
- Dam Safety regulations



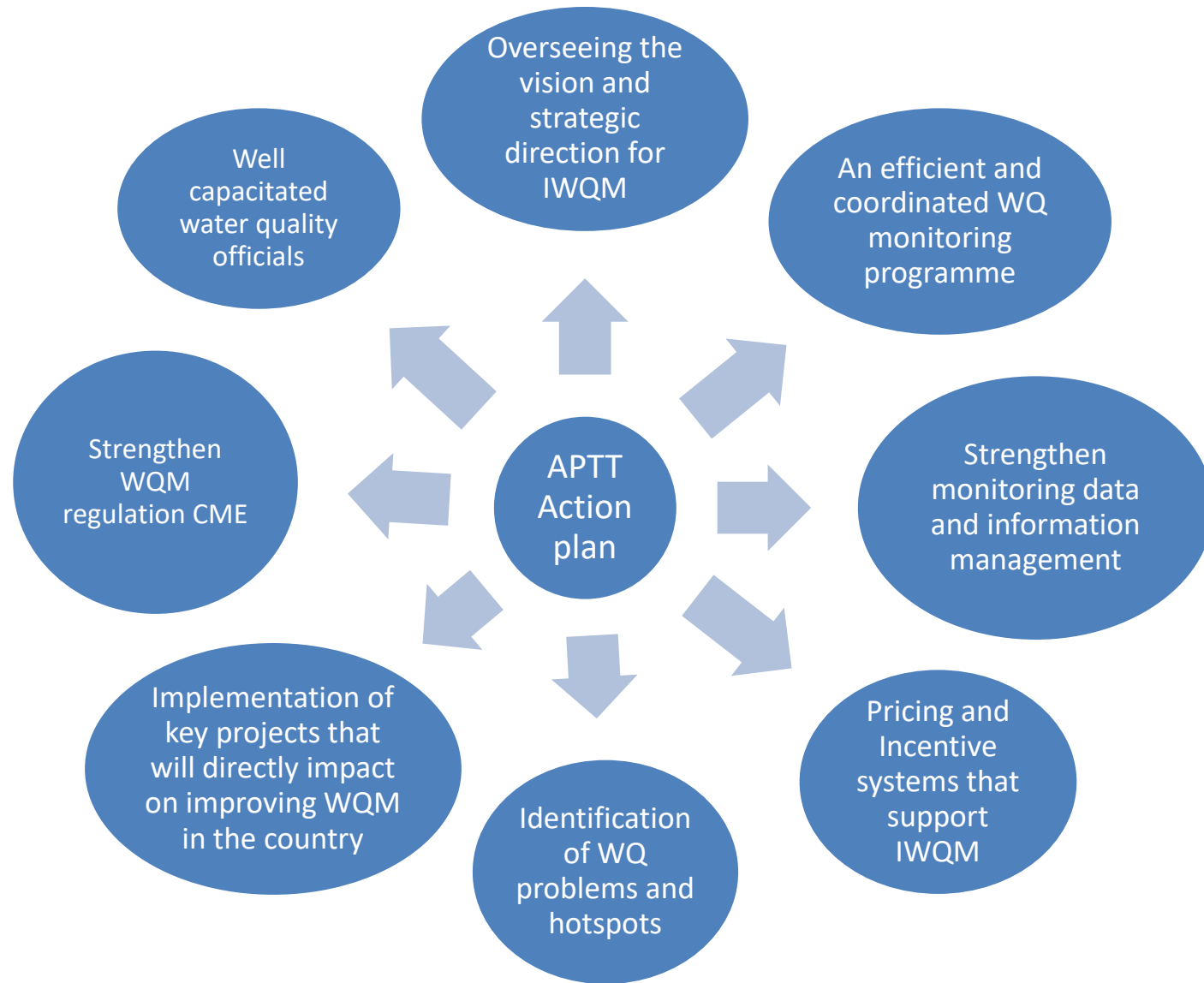
# The EMI Network



**NEMA AND SPECIFIC ENVIRONMENTAL MANAGEMENT ACTS**  
 One Environmental System  
 Duty of Care  
 S30 Emergency Incidents  
 EMI Network



# ANTI-POLLUTION TASK TEAM



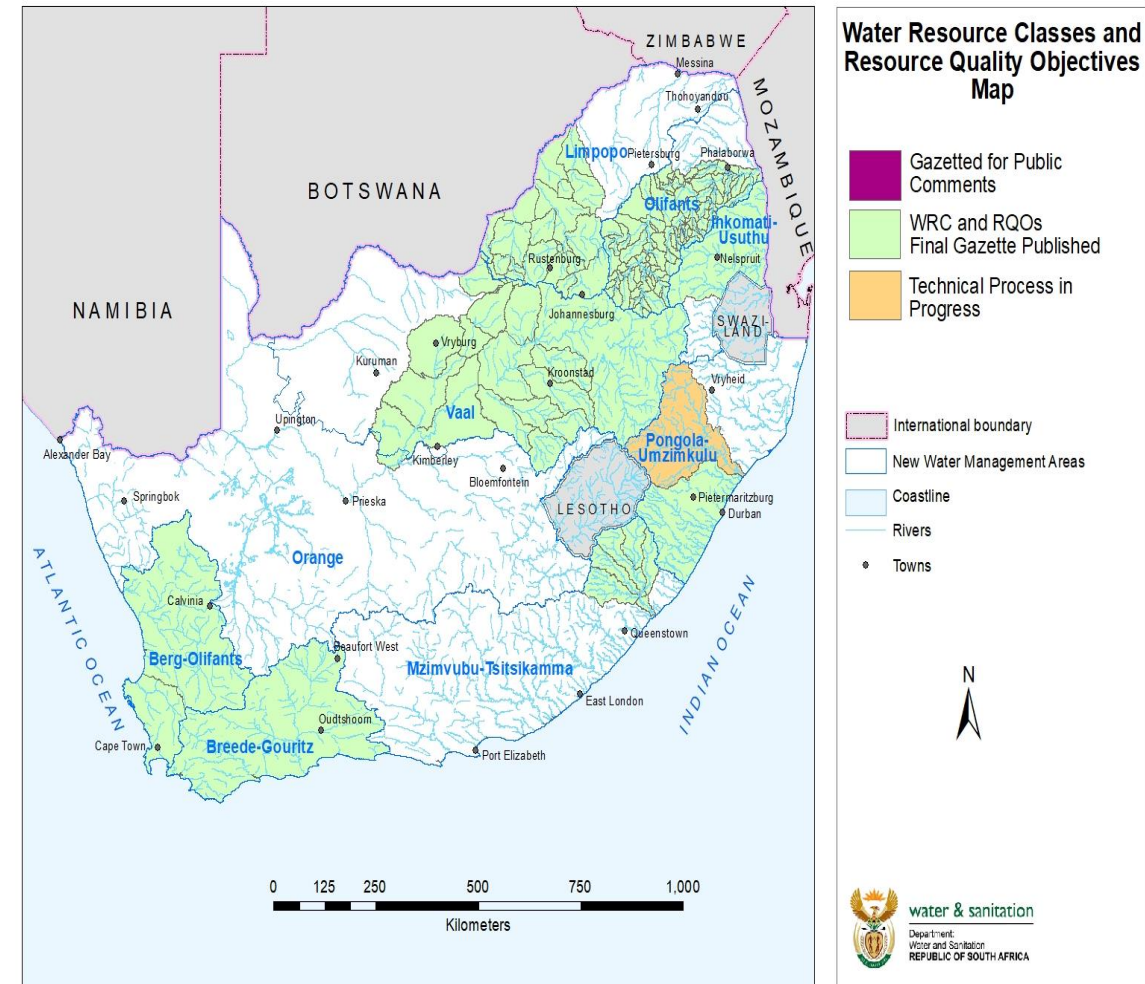
## Establishment of Regional Forums

- Linked to CM Forums
- Provincial Regulation units and (Proto - ) CMAs to have catchment-based Water Quality Recovery Plans in place by June '22 with a set target of improving water quality by 60% within 36 months.



# ACHIEVEMENTS IN WQ IN SA (1)

- Classification of water resources has been done for most major rivers in the country and RQOs have been set for these rivers
- Department also started with monitoring compliance to these RQOs this financial year to ensure that the RQOs are maintained.
- Water Quality monitoring has been re-instated in all the WMAs, there are over 2400 WQ monitoring sites in the country.
- Classification and mapping of WQ Hotspots completed in Breede-Gouritz, Mzimvubu-Tsitsikama, Pongola – Mtamvuna, Inkomati, Limpopo and Berg-Olifants.
- Polluter Pays (WDCS) Currently being piloted in the Limpopo, Vaal and the Olifants Water Management Areas.
  - The tariff consultations for the 2022/23 financial year will include tariffs for the water resource management charge for waste related activities and this tariff will be implemented in 2023/24 financial year.



# ANTI-POLLUTION TASK TEAM TASKS & PROGRESS

TASK	EXPECTED OUTCOMES	STATUS
1.) OVERSEEING THE VISION AND STRATEGIC DIRECTION FOR IWQM	A core group of water quality champions that would collectively enable IWQM & wall to wall resource protection.	Implemented in 2020
	Approved Action Plan for the Operation of the Task Team and the SteerComm.	Plan Approved in March 2020
	Fully implemented Integrated Water Quality Management Strategy.	Implementation Fora established Regional Forums to be established in 2022
2.) AN EFFICIENT AND COORDINATED WATER QUALITY MONITORING PROGRAMME	Re-aligned and coordinated water quality monitoring programmes	Accreditation of DWS laboratories in progress.
	Monitoring Points at all strategic points	Identification of monitoring point gaps in progress.
	The use of technology as an early warning system (to be changed) to deal with pollution promptly	Available real-time monitoring technologies being assessed. Medium term WRM goal.



# ANTI-POLLUTION TASK TEAM TASKS & PROGRESS (II)

TASK	EXPECTED OUTCOMES	STATUS
3.) STRENGTHEN MONITORING DATA AND INFORMATION MANAGEMENT	Information Systems that are current and accessible to support adaptive water quality management	Regional WMS assessments completed. Gaps identified
	The use of technology as an early warning system (to be changed) to deal with pollution promptly	Alignment of WMS with other systems yet to be achieved – longer term Available real-time monitoring technologies being assessed. Medium term WRM goal. WRC in the process of completing research on best options to be used.
4.) PRICING AND INCENTIVE SYSTEMS THAT SUPPORT IWQM	Fully implemented polluter pays principle	Drafting of Funding model underway with support from National Treasury
		Waste Discharge Charge System (WDCS) Gap Analysis Report for the 3 priority catchment has been finalised.
		Being piloted in the Vaal and to be included in the 2023 Tariffs model. To be consulted in June 2022.
		Penalties and Fines not done as yet. (Research required as well on calculator and criteria for administrative penalties)

# ANTI-POLLUTION TASK TEAM TASKS & PROGRESS (III)

TASK	EXPECTED OUTCOMES	STATUS
5.) : IDENTIFICATION OF WATER QUALITY PROBLEMS AND HOTSPOTS	Report on water quality hotspots in the country based on certain variables	9 Reports done with 2020 WQ data analysis.
		Classification and mapping of WQ Hotspots completed in Breede-Gouritz & Mzimvubu-Tsitsikama
6.) IMPLEMENTATION OF KEY PROJECTS THAT WILL HAVE A DIRECT LINK TO IMPROVING WATER QUALITY IN THE COUNTRY	Reduced pollution and improved water quality in all rivers.	Approval of Integrated Water Quality Management (IWQM) Policy. (Inputs received from CSIR& WRC and clusters). Was submitted to Cabinet – purpose to obtain permission for public consultation. Returned for amendments currently at DDG WRM
		Draft Mine Water Management Policy presented to EISID Cluster – Was submitted to Cabinet for final approval. Returned for amendments currently at DDG WRM
7.) STRENGTHEN WQM REGULATION	Reduced pollution and improved water quality in all rivers.	Register for WWTWs and Mining activity was updated.
		Internal resource quality regulation capacity to be improved by creating a dedicated WR Regulation Directorate within CD: WUCME ).
8.) WELL CAPACITATED WATER QUALITY OFFICIALS	Formalised training for Management officials, external stakeholders as well as WQM and Regulation Officials	WQM Training Committee is established. Orientation Course ready.
		First induction training for 2022 to be held in March . EMI basic training in May 2022. Advanced sampling training material to be developed in 2022 in collaboration with DFFE

# Way forward

To be determined, shortly...



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