



**water & sanitation**

Department:  
Water and Sanitation  
**REPUBLIC OF SOUTH AFRICA**

# Implications of the 2021 State of the Nation Address for the Department of Water and Sanitation

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# 1. Purpose

To brief the Portfolio Committee on Human Settlements, Water and Sanitation on implications of the 2021 State of the Nation Address for the Department of Water and Sanitation

## 2. District Development Model

# District Development Model

## SONA pronouncement

- We are proceeding with our efforts to strengthen the local government infrastructure and accelerate service delivery through the District Development Model to bring all three spheres of government to focus on key priorities and implementation of critical high impact projects
- Working with both public and private sector partners, government is implementing a range of measures to support municipalities to address inadequate and inconsistent service delivery in areas such water provision, infrastructure build and maintenance
- We are focusing on the appointment of properly qualified officials at a local level to ensure effective management and provision of services

## Status/Implementation

- The DWS is participating and collaborating with all government spheres to streamline projects that are aimed at increasing access to water and sanitation services in local government space
- The DDM ensures that water services plans are aligned with other sector plans to ensure integration and efficiency in streamlining of delivery of water and sanitation services by municipalities
- The DDM platform is also leveraging on the Department's National Water and Sanitation Master Plan

# 3. Water Infrastructure projects



# Water Infrastructure Projects

SONA pronouncement	Status/ Implementation
<ul style="list-style-type: none"><li>• Progress is being made on several major water infrastructure projects, including:<ul style="list-style-type: none"><li>– Phase 2A of the Mokolo and Crocodile River Project</li><li>– UMkhomazi Water Project</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Progress made by the department with regard to the Infrastructure Projects is outlined below within the Planning and Infrastructure programmes of the Department</li></ul>

# Umkhomazi Water Project - Phase 1

## Project Description:

Construction of Smithfield Dam and the associated conveyance infrastructure to augment the Mgeni System.

Water will be transferred to a new Water Treatment Plant, from where it will be conveyed to a tie-in point with the eThekweni distribution system.

The Mgeni System, which supplies water to the third largest economic hub in the country with the second largest population, was estimated to be in deficit since 2017.

If fast-tracked this system can supply water by 2028.

**Province:** KwaZulu-Natal

## Project Scope (Phase I):

Construction of Smithfield Dam

- 81 m high dam
- Storage capacity = 250 million m<sup>3</sup>/a (0,31 MAR)
- Yield = 215 million m<sup>3</sup>/a at 99% assurance

Transfer Tunnel

- 32 km long @ 3,5 m diameter

## Project Schedule:

- Feasibility studies completed
- Environmental Authorisation expected by December 2020
- Revised RID scheduled for 2020/2021
- Implementation: 8 years



## Status:

- Technical Feasibility study completed
- Environmental Impact Assessment in progress

## Projected cost to completion (2014 baseline):

Approx. R12 billion (excluding WTW and funding costs)

Total project R18.5 billion of which 25% is proposed for Treasury funding and 75% off-budget funding.

## Progress & Challenges:

- Agreements between end users (Municipalities), Water Board and DWS
- Assessment and comparison of alternative options (desalinisation, re-use)
- Approvals of project (environmental, ministerial, etc.)
- Securing project funding



# Mokolo Crocodile River Water Augmentation Project Phase 2A (MCWAP-2A)

## **Project Description**

To supply demands in the Waterberg Coal Fields (Eskom, IPP's, Coal Mines and Lephalale Municipality), utilizing surplus return flows from Gauteng being discharged in the Crocodile (West ) River Catchment.

**Province:** Limpopo

## **Status:**

- Minister of Water issued formal directive to the TCTA to co-fund and implement MCWAP-2A with capacity of 100 million m<sup>3</sup>/annum.
- Minister of Water and Sanitation approved a Borrowing Limit for a Project of 75 million m<sup>3</sup>/a, taking cognisance of the September 2016 Cabinet Resolution of reduced capacity to 75 million m<sup>3</sup>/a.
- Environmental Authorisation was received on 18 March 2019 and Eight (8) appeals were lodged against the Project.
- The Decisions on the Appeals received from the Minister of Environmental Affairs, Fisheries and Forestry on 11 October 2020
- All appeals against the project dismissed
- The Tender Design is completed and construction Contract will be awarded in October 2021.

## **Project Scope:**

- Abstraction Works on the Crocodile River (West) at Vlieëpoort near Thabazimbi.
- Low Lift Pump Station and Pipeline to convey water to the Balancing Dams and the Sediment Abstraction Works.
- High Lift Pump Station and Rising Main Pipeline (approx 29 km) to the Break Pressure Reservoir.
- Gravity Main Pipeline (approximately 128 km) from the Break Pressure Reservoir to terminal points close to Medupi Power Station and Steenbokpan.
- River Management System to manage abstractions from, and the river flow in relevant parts of the Crocodile River (West) Catchment upstream of the Vlieëpoort Weir.

## **Estimated Projected Cost to Completion:**

- R 16 billion (escalated from 2015 to 2020).

## **Project Schedule:**

Construction Contract Awarded – October 2021.

Start of Construction - January 2022.

Water Delivery – January 2026.

Commissioning of River Management System – March 2025.

## **Progress & Challenges:**

- The RID has been issued to TCTA for a transfer capacity of 75 million m<sup>3</sup>/a.
- The amended Implementation and Water Supply Agreement were submitted to the DWS for review and sign-off.
- Potential legal action against the DWS by some appellants.

No.	Project	Location	Purpose	Status	Estimated Cost								
A1	Mokolo River Augmentation Project (MCWAP) Phase 2A	Crocodile Limpopo (Lepalale)	<p>To increase water supply for energy generation (Medupi Power station) and coal mining development). Phase 1 of this project is already in operation (commissioned in 2014). MCWAP-2A consists of an abstraction weir, a 160 km water transfer pipeline with capacity of 75 million m<sup>3</sup>/annum. The project aims to provide additional water to Medupi Power Station for the Flue Gas Desulphurization (FGD) units.</p> <p><i>140 240 people / 43 002 households (2016)</i></p>	<p>TCTA implementing this as an Off-Budget project. Design @ 68% Environmental Appeals process finalised (Caused an ±18 month delay)</p> <table border="1"> <tr> <td>Project Charter Signed</td> <td>29 Apr 2019</td> </tr> <tr> <td>Contract Award</td> <td>31 October 2021</td> </tr> <tr> <td>Construction Start</td> <td>13 January 2022</td> </tr> <tr> <td>Water Delivery</td> <td>25 January 2026</td> </tr> </table>	Project Charter Signed	29 Apr 2019	Contract Award	31 October 2021	Construction Start	13 January 2022	Water Delivery	25 January 2026	R12.4 billion
Project Charter Signed	29 Apr 2019												
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Water Delivery	25 January 2026												
A2	uMkhomazi Water Project (uMWP)	KZN (eThekweni)	<p>To augment water supply to eThekweni Metropolitan. Recent droughts in the area further exposed the current lack of resilience of the uMgeni System thus increasing the need for this project. The project involves the construction of a new dam on the uMkhomazi River and associated infrastructure, raw water conveyance infrastructure (tunnel and pipeline) to the uMlaza River valley including a balancing dam, and a water treatment works in the uMlaza River valley with a gravity pipeline to the Umgeni Water bulk distribution system.</p> <p><i>Approx 3 700 000 people / 1 125 767 households (2016)</i></p>	<p>TCTA implementing this as an Off-Budget project.</p> <table border="1"> <tr> <td>Directive Issued</td> <td>25 February 2019</td> </tr> <tr> <td>Construction Start</td> <td>2022/2023</td> </tr> <tr> <td>Water Delivery</td> <td>2029</td> </tr> </table>	Directive Issued	25 February 2019	Construction Start	2022/2023	Water Delivery	2029	R23.2 billion		
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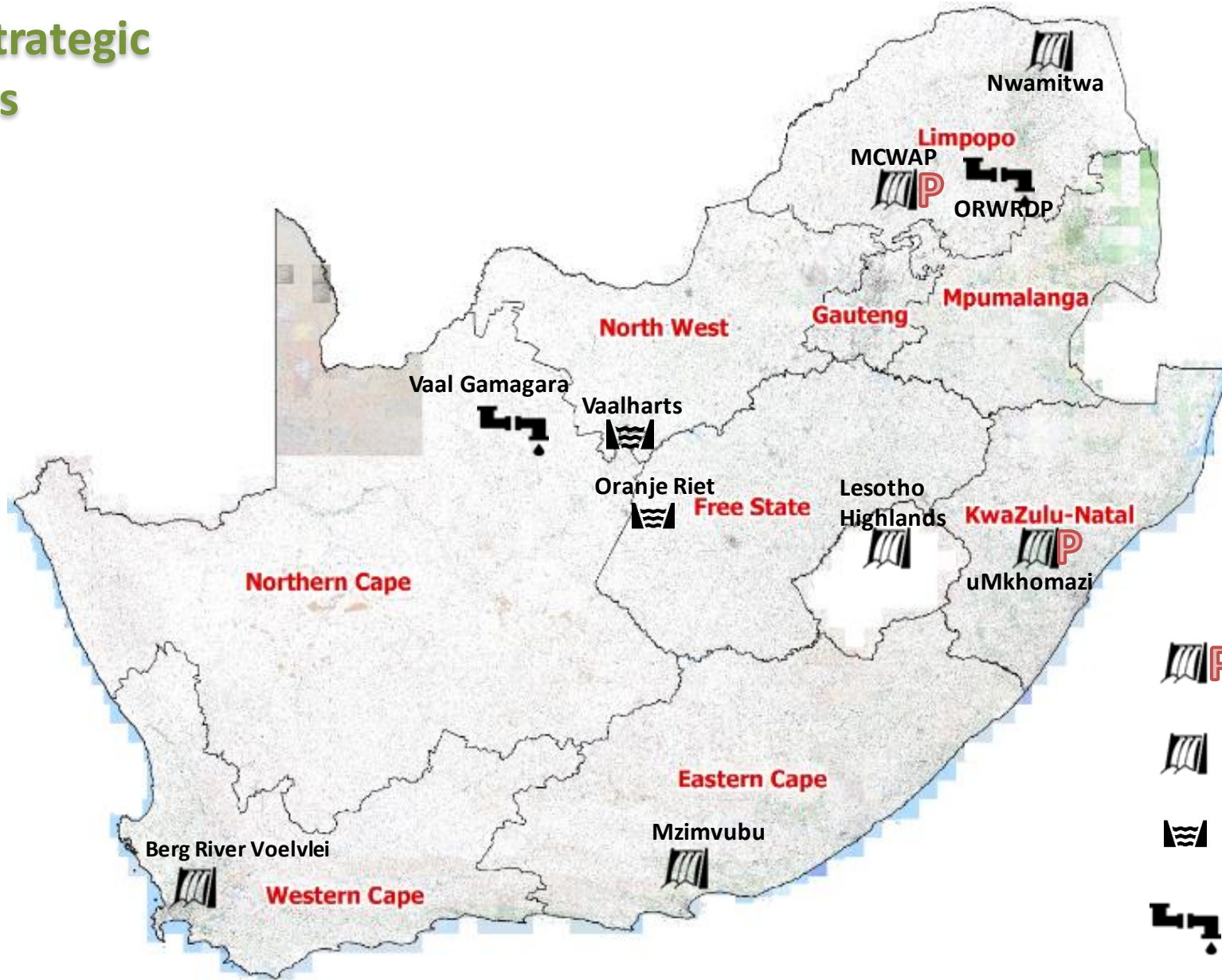






# Other Strategic Infrastructure Projects

Project	Description	Expected Cost
Berg River Voëlvelei Augmentation Scheme (BRVAS)	To increase water security to the City of Cape Town	R0.798 billion
Lesotho Highlands Phase 2	To augment supply to the Vaal System to specifically meet the increasing water demand from Gauteng and other downstream users.	R32.6 billion
Extend Treatment Capacity at Rustfontein Water Treatment Works (WTW)	increase water security and water supply from the Rustfontein WTW to Mangaung	R0.50 billion
Phase 2 of the Olifants River Water Resources Development Project (ORWRDP-2)	To implement the remaining of the bulk distribution conveyance system to increase water security fro domestic and industrial use in Sekhukhune, Polokwane and Mogalakwena, as well as the mining sector	R12 billion
Rehabilitation of the Vaalharts-Taung irrigation scheme]	To enhance water security for food production and domestic supply in Magareng	R 4 billion
OrangeRiet Canal increase of bulk raw water supply	An upgrade of this scheme will ensure that additional water can be conveyed through to Rooigrond	R0.45 billion
Groot Letaba River Water Development Project - Nwamitwa Dam	To provide for the ecological water reserve, domestic and irrigation water requirements in the Greater Letaba area of Limpopo	R3.8 billion
Mzimvubu Water Project	Entails the construction of two multi-purpose dams; Ntabelanga and Lalini Dams, a hydropower station, water treatment plant, primary and secondary water distribution systems with reservoirs and ancillary infrastructure.	R15 billion
Vaal Gamagara Water Project	To provide assurance of supply to e various mines, municipalities, agricultural sector and Transnet.	R10 billion

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# Location of Strategic Projects



-  DAM - SONA Mentioned Project
-  DAM - Strategic Project (SIDS)
-  CANAL – Strategic Irrigation (SIDS) Project
-  Bulk Pipe-line Project (SIDS)

# 4. Reforms in the Water Sector



# Reforms in the Water Sector

## SONA Pronouncement

- In the water sector, we are working through Operation Vulindlela to:
  - Ensure that water license applications are finalised within the revised timeframe of 90 days;

## Status/ Implementation

- Following the announcement of the reduced timeframes, the department embarked on re-engineering the current business process from 300 days to 90 days, which involved a thorough review of the current process and making the necessary changes in accordance to the relevant sections of the National Water Act.
- New turnaround times will be effective from 01 April 2021
- Reconfiguration of the E-WULAAS (the online application portal) to align to the revised process
- Parallel to the two activities is implementing the capacity augmentation plan to increase human capacity
- The Department will, in February and March 2021, embark on workshops aimed at capacitating the Regions, Catchment Management Agencies (CMAs) and applicants on the new business process.
- All applications that will be submitted and accompanied by all the requisite administrative and technical information will be finalised within the 90 days

# 90 days turnaround timeframes

- As part of operationalising Operation Vulindlela, the department is collaborating with the Government Technical Advisory Centre (GTAC) from National Treasury to develop and strengthen the business processes with a view to improve business engineering processes and the turnaround time.
- There have been number of engagements with National Treasury and the support team, with the next engagement scheduled for later this week

# 90 Day Turnaround time to finalise Water Use Licences

	Challenge	Solution
1.	Inadequate information/ poor quality reports from applicants.	Applicants will be assisted with list of information to submit. A table of contents for the technical reports will be given to applicants. Studies and reports are to be conducted and written by people registered with professional bodies.
2.	Inadequate human capacity in the Department.	The Department is currently recruiting additional officials for processing of water use licence applications.
3.	Historically Disadvantaged Individuals lack resources to submit applications online	The Department provides its resources to assist HDIs with the application process.



# 90 day turnaround time to finalise Water Use Licences

No	Step	Agric and Forestry	Infrastructure projects from SOC	LG and developments	Mines and industry
0	Pre-application and compilation of application (reports + PP)	-	-	-	0
1	Submit application and supporting documents	1	1	1	1
2	Accept or reject application	2	3	3	3
3	Preliminary Assessment	3	5	5	5
4	Specialist comments	35	45	45	45
5	Final Assessment	9	12	12	12
7	WUAAAC presentation	5	7	7	7
8	Recommendation (RH / CEO)	2	2	2	2
9	Recommendation (DDG Reg.)	2	3	3	3
10	Preparing documents for signature	2	2	2	2
11	Consideration and decision	5	6	6	6
12	Post decision admin	4	4	4	4
<b>Total</b>		<b>70</b>	<b>90</b>	<b>90</b>	<b>90</b>

# Reforms in the Water Sector

## SONA Pronouncement

- In the water sector, we are working through Operation Vulindlela to:
  - To revive the Green Drop and Blue Drop programmes to strengthen water quality monitoring.
  - To finalise and implement the revised raw water pricing strategy, and
  - To accelerate the establishment of a national Water Resources Infrastructure Agency

## Status/ Implementation

- Department has begun work towards implementing Operation Vulindlela as set out in the slides below

# Revive Blue and Green Drop programmes

## Current Status of the programme

- The last Green Drop Report was published in 2013 while the Blue Drop Report was published in 2014
- Lack of budget hampered the continuation of programme hence the focus was on monitoring of identified non-compliant water supply and wastewater systems
- Funding was received in the third quarter of 2020/21 financial year to revive the Blue Drop/Green Drop programmes

## Status/ Implementation

- Funding reprioritised in the third quarter of 2020/21 financial year to revive the Blue Drop/Green Drop programmes
- DWS currently finalising procurement processes to undertake full Green Drop and Blue Drop progress assessments in 2021/22
- Full Green Drop assessments to be undertaken in 2021/22
- Full Blue Drop assessments will be done in 2022/23

# Progress to date

Task	Timeframe
Tender advertisement	Closed 14 January 2021
Finalize procurement	-Bid evaluation done -Contracting envisaged to be finalized mid-March pending approval
Inception Report	April 2021
Sector Consultation	May-June 2021
Training of Inspectors & assessors	May 2021
Assessments & selected site visits	July-September 2021
Confirmation Sessions	October 2021
Moderation	October- November 2021
Draft Report (Full Green Drop & Blue Drop PAT)	December- January 2022 (GD audit report) March 2022 (BD PAT report)
Initiate full Blue Drop assessment process	March 2022

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# Revised Water Pricing Strategy

## Current Status

- The revised Water Pricing Strategy was gazetted for public consultation in November 2015
- Upon request for concurrence, National Treasury raised a number of issues which the department is still in the process of addressing
- Majority of the concerns raised, have been addressed and updated onto the revised pricing strategy

## Status/Implementation

- Remaining concerns are cross-cutting issues, going over and above the tariffing process, therefore requires dedicated focus
- Water Research Commission will be assisting with further research
- The target date for finalisation of the Revised Pricing Strategy is the end of November 2021
- A second round of public consultation process still to take place during 2021/22
- To follow approval process from March/April 2022
- The department is working in collaboration with the Operation Vulindlela support team in the National Treasury to fast track finalisation of the pricing strategy as a priority

# Establishment of the National Water Resource Infrastructure Agency

## Current Status

- National infrastructure investment, implementation, operations and maintenance are fragmented between DWS, TCTA and Water User Associations
- Strategic asset management is limited
- Need to strengthen existing construction capacity within department
- Existing infrastructure is not easily used as leverage for new debt, hence causing an increased burden on the fiscus
- Sustainability of the sector value chain is currently under threat due to disrupted revenue flows, caused by, inter alia:
  - Non-payment by many users, and inconsistent credit control responses
  - Vast accumulated debt owed to water boards and DWS
  - Long-standing sub-economic tariffs, and tariff adjustment for 2020/21 not made
  - Sub-optimal revenue management

## Status/Implementation Plans

- Aim is to establish an Agency which could achieve eventual financial viability, albeit with continued fiscal transfers for social projects
- Equally important, is the strategic intent of the State to use the Agency as an integrated vehicle for accelerating universal access
- A total R100.8 billion worth of assets in NWRI will be transferred to the NWRIA as well as all liabilities (including TCTA debt) of R23,3 billion showing total reserves of R77,5 billion in the NWRIA
- The National Water Resources Infrastructure Agency will be a merger of three existing entities in the water sector:
  - National Water Resource Infrastructure Branch
  - Water Trading Entity
  - Trans-Caledon Tunnel Authority

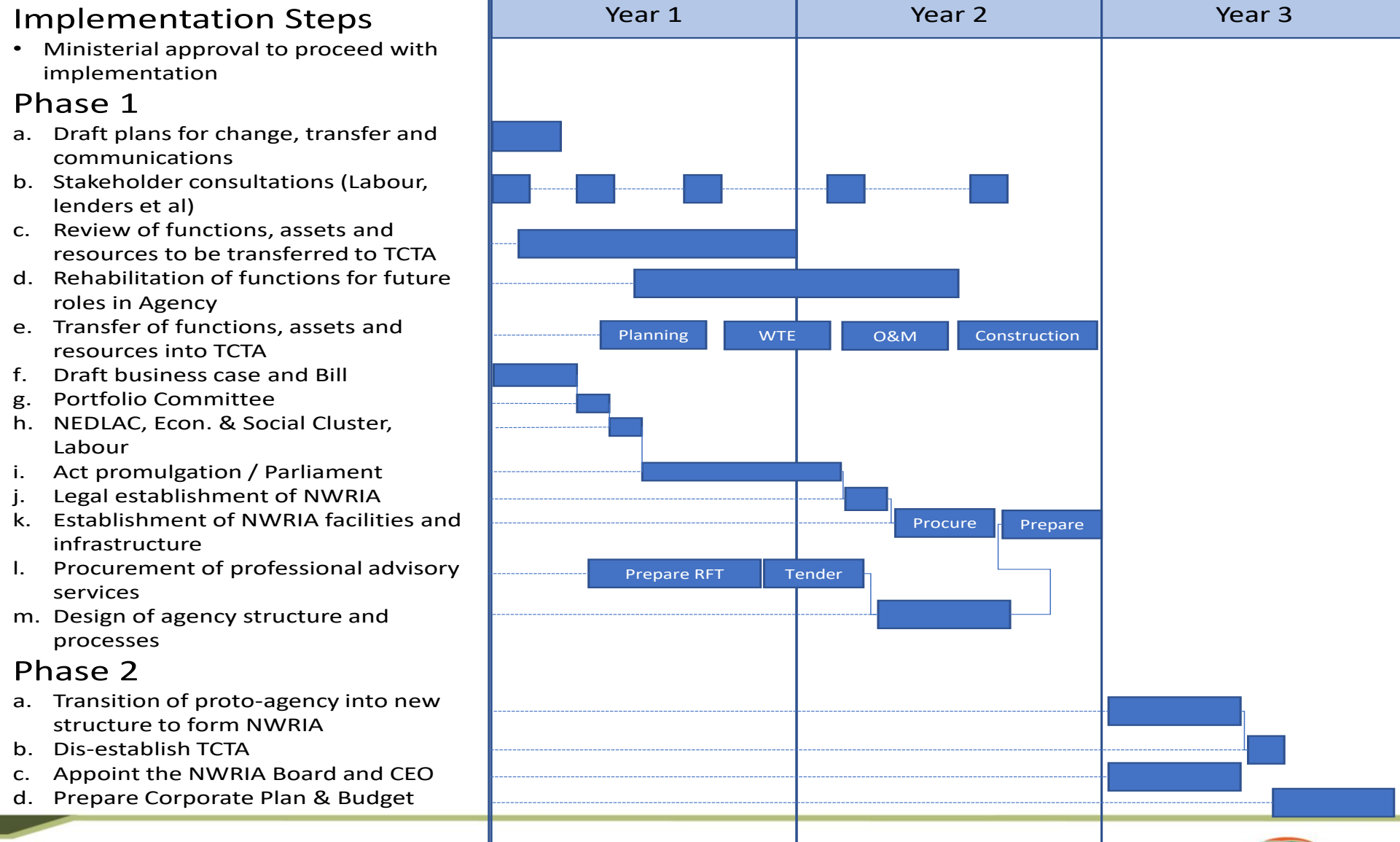
# Establishment of the National Water Resource Infrastructure Agency

## Proposed work-streams to support implementation of NWRIA

Work-streams	Responsibilities
Human Resources and communication	To engage labour, prepare HR plans, agreements and communication strategy and change management .
Functions	To segregate functions between DWS and the NWRIA
Finance	To identify financial requirements and modelling
Legal and institutional	To support the establishment requirements
Infrastructure and operations	To discuss existing infrastructure assets and schemes of national significance and make recommendations.

# 8. Transition and Implementation Plan (cont'd)

High-level implementation plan of the transition indicates the required time-frames.





# Thank You



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