

# **National Water Reuse Programme:**

## **Programme Design and Preparation of a Full Funding Proposal to the Green Climate Fund**



## **Communications Strategy and Implementation Plan**

**Annex 24**

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## LIST OF ABBREVIATIONS

<b>AI</b>	Adobe Illustrator
<b>DBSA</b>	Development Bank of Southern Africa
<b>DCOG</b>	Department of Cooperative Governance
<b>DWS</b>	Department of Water and Sanitation
<b>MISA</b>	Municipal Infrastructure Support Agent
<b>NT</b>	National Treasury
<b>WPO</b>	Water Partnerships Office
<b>WRC</b>	Water Research Commission



# 1. CONTEXT

South Africa faces a potential water supply shortfall of 17% by 2030. The national government has already implemented several interventions to prevent this projected water deficit, including diversifying the mix of water supply sources. Specifically, South Africa's National Water and Sanitation Master Plan (2018) notes the need to reduce raw water demand and increase water supply through the "re-use of effluent from wastewater treatment plants, water reclamation, as well as desalination and treated acid mine drainage" (Department of Water and Sanitation, 2018: 12).

At present, most effluent discharge and urban runoff (stormwater) are not reused. This presents an opportunity to put in place a framework for the development of water reuse infrastructure. In a first step towards achieving this, the Development Bank of Southern Africa (DBSA) has partnered with various government departments, including the Department of Water and Sanitation (DWS), the Department of Cooperative Governance (DCOG) through its agency the Municipal Infrastructure Support Agent (MISA), and the National Treasury (NT) to jointly develop a national Water Reuse Programme.

In support of this initiative, the DBSA has developed a proposal to the Green Climate Fund (GCF) to design and implement the programme. The Water Reuse Programme will help targeted municipalities identify, prepare, fund and implement water reuse projects, as well as establish water reuse infrastructure as a new asset class. It will act as a pathfinder programme for the National Water Programme, an umbrella initiative by the DBSA that aims to support additional elements of the water value chain, including non-revenue water reduction and private-sector participation.

The Water Reuse Programme proposal envisages establishing a Water Partnerships Office (WPO), which will be responsible for supporting municipalities in developing and executing projects under the Water Reuse Programme. Part of the WPO's job will be to help municipalities communicate clearly and effectively about the programme's goals and activities, and the need for water reuse. This communications strategy aims to guide the WPO and municipalities in this task, ensuring consistent messaging and a unified voice on all matters related to water and water reuse.

## 1.1 Purpose and structure

The communications strategy provides a framework for all public-facing communications of the Water Reuse Programme, while the implementation plan sets out the communication activities, assets and channels needed to meet the strategy's objectives. This document is structured as follows:

- Section 2 provides context for the communications strategy, outlining South Africa's water situation and the need for wastewater reuse. It also discusses the need for the strategy itself, highlighting the public's knowledge and perceptions of wastewater reuse.



- Section 3 sets out the communications strategy for the Water Reuse Programme. It identifies the target audiences and provides key messages and supporting data and narratives that should inform all communications to these audiences.
- Section 4 provides a monitoring and evaluation framework to measure the effectiveness of the communications strategy.
- Section 5 presents the implementation plan for the communications strategy. It consists of a national public-facing communications campaign to raise general awareness of South Africa's water situation and the need for wastewater reuse; suggested information architecture for the proposed online information hub; and a roadmap for project-specific communications over a project's life.

# SOUTH AFRICA'S WATER REALITY



The country's annual rainfall  
is half the global average



**98%**  
of all surface  
water resources  
are already  
in use



South Africa  
is the  
**30<sup>th</sup>**  
driest country  
in the world



Wastewater  
reuse accounts  
for only  
**14%**  
of all  
available water



South Africa  
faces a potential  
**17%**  
water supply  
shortfall by  
**2030**



**237 litres**  
The average daily  
water use per person  
(global average: 173 litres)



## 2. BACKGROUND

### 2.1 South Africa's Water Situation

South Africa is a water-scarce country, characterised by low and unreliable rainfall that is unevenly distributed across the country. Despite only receiving half the global rainfall average, the country relies primarily on surface water. Ninety-eight percent of all surface water resources are already in use (Department of Water Affairs and Forestry, 2004) – and demand is rising (Department of Water Affairs, 2013). Backlogs in water infrastructure maintenance, repairs, upgrades and rehabilitation, combined with high levels of water wastage and pollution, are further reducing available natural resources. These factors are all contributing to a projected 17% supply shortfall by 2030 (Department of Water Affairs, 2013).

Surface water resources can no longer be relied on to the same extent. Alternative supply sources need to be investigated and used to ensure a sustainable supply of water around the country.

Climate change and climate variability will compound South Africa's water stress, with women being particularly vulnerable. The International Panel on Climate Change (2018) has identified Southern Africa as a climate change hotspot, with the region expected to become drier, experience more extreme rainfall events and warm at about double the rate as the rest of the planet. This will increase the prevalence of multi-year droughts, potentially broken by flooding events. Rising temperatures will drive increases in mean annual evaporation by as much as 25% over many parts of the country, particularly the inland regions. This will translate into reduced runoff and slower groundwater recharge, ultimately contributing to higher levels of water supply vulnerability (Cullis and Phillips, 2019).

Water scarcity poses a challenge to more than everyday quality of life. It also threatens food security, economic growth and energy production. To secure the country's water future, national policies like the National Water and Sanitation Master Plan (2018) and the National Water Resource Strategy (2004; 2013) recognise the need to diversify the water mix, shifting from the country's strong dependence on surface water resources to include increased use of groundwater, desalination and reuse of wastewater.

While groundwater resources vary in accessibility and quality, and desalination is largely only an option in large coastal urban contexts due to the associated costs, water reuse provides options across the country, particularly where climate change impacts are compromising water security.

#### 2.1.1 Wastewater Reuse

Only 14% of current water use in South Africa is from wastewater reuse, also known as water reclamation or water purification. We need to increase reliance on this locally controlled source of water. Purifying wastewater makes more water available for consumers without tapping into natural water sources, the availability of which is affected by climate variability.

Water reuse and recycling have already been successfully implemented in South Africa. A handful of forward-looking private-sector property developers have implemented water reclamation plants at a small scale for



local use. At municipal level, Beaufort West, the City of Cape Town, eThekweni and others rely on reclaimed water. Beyond our borders, Windhoek has been reclaiming water for half a century.

Taking its lead from the National Water and Sanitation Master Plan, the DBSA is establishing a national Water Reuse Programme to support the preparation, funding and implementation of water reuse projects in municipalities across the country. This is the first of several programmes that will fall under the umbrella National Water Programme, which will in time explore other options to strengthen water security in South Africa, including non-revenue water, rural water supply and off-grid sanitation.

## **2.2 Knowledge and Perceptions of Water Reuse in South Africa**

South Africans need to come together to secure the country's water future. This requires everyone, from the general public to decision makers, to understand South Africa's water situation and be willing to accept water reuse as a responsible approach to augmenting supply.

According to a study by the Water Research Commission (WRC), knowledge about water in general, and reuse in particular, is low across all demographic groups and education levels in South Africa (Slabbert and Green, 2020a). Knowledge of water reuse influences acceptability, with support increasing with better understanding, so educating the public about water reuse will be important for the Water Reuse Programme's success.

### **2.2.1 What Do South Africans Know About Our Water Situation?**

Encouragingly, 68.7% of respondents to the WRC study were aware that South Africa is a water-scarce country and 78.6% were aware of the effect climate change has on water availability (Slabbert and Green, 2020a). This suggests that the public could be receptive to reducing water demand. However, only about half of study participants (50.2%) correctly answered questions about common myths and misconceptions of water reuse (ibid.), indicating a low level of general knowledge about water, where it comes from and the reality that all water is, ultimately, reused.

### **2.2.2 What Do South Africans Think About Reusing Water?**

Globally, public acceptance is recognised as a key challenge to water reuse projects – especially when the water is intended for potable use (drinking, cooking and other means of human consumption) (WateReuse, n.d.). South Africa is no different: the WRC study found that only 48.5% of respondents would support direct potable use in times of extreme need such as a drought. Interestingly, the support for industrial reuse was only slightly higher, at 50.3% (Slabbert and Green, 2020a). A separate study, published in 2020, found that two of the top three words that South African study participants associated with recycled water were “disgust” (11.6%) and “contamination” (15.3%) (Etale et al., 2020). These negative connotations totalled 26.9% of responses, marginally more than the 26.4% of responses that associated recycled water with the term “cleanliness” (ibid.). This indicates how polarised the debate about wastewater reuse – especially for potable purposes – is likely to be in South Africa.

In addition to assessing subjective associations with treated wastewater, the 2020 study also assessed the effect of trust on willingness to use treated wastewater. Unsurprisingly, respondents who reported having a



high level of trust in local water services authorities were also more willing to use reclaimed water (ibid.). This points to the need for municipalities to foster trust by communicating clearly, transparently and consistently about local water reuse projects, starting well before purified water enters the municipal water system.

Interestingly, cultural beliefs and environmental concerns were found to have a minimal effect on willingness to use recycled water (ibid.). However, there are signs of a growing awareness of environmental challenges among the public, with a recent report finding a 71% increase in online searches for sustainable goods over the past five years (Economist Intelligence Unit, 2021). This heightened awareness could provide a useful basis for establishing the need to use treated wastewater in the public consciousness.

### **2.2.3 Implications for the Water Reuse Programme**

Given the scale of South Africa's water challenges and the investment required to diversify our water mix, it is crucial that the Water Reuse Programme's implementing partners communicate clearly, consistently and effectively about South Africa's water challenges, the need for specific water reuse projects and how such projects will be rolled out. If the public is not adequately engaged, strong public resistance could lead to the abandonment of projects, as was the case in Toowoomba, Australia, and San Diego, United States (World Health Organization, 2017).

The strategy that follows aims to equip communication practitioners in both the WPO and at municipal level with the language, data and tools required to raise the level of public awareness and acceptance of water reuse. Public acceptance is a requirement for the success of this important initiative, which aims to safeguard the country against some of the worst effects of climate change and climate variability, with a particular focus on women.



## 3. COMMUNICATIONS STRATEGY FOR WATER REUSE PROGRAMME

Communication is a key enabler of the successful implementation of the Water Reuse Programme. Building awareness of South Africa's water situation and the benefits and mitigation of risks of wastewater reuse will increase social acceptance of the programme among the public and decision makers and empower stakeholders across the board to participate in informed discussions about the programme. Moreover, outreach can lead to behavioural change at the household level, which will complement the national effort to use water resources more efficiently.

### 3.1 Objectives

This communications strategy has the following aims:

- **Improve public knowledge of South Africa's water security position** to drive reduction in water demand and improve acceptance of the need to seek alternative water sources, including treated wastewater (national campaign).
- **Help the WPO communicate with water services authorities** about its role in establishing circular water economies and how it can support municipalities.
- **Empower water services authorities (municipalities) that choose to augment potable water sources with treated wastewater to communicate clearly, consistently and transparently** about water reuse projects to build public trust in water reuse projects (project-specific campaigns).

The communications strategy is a living document. As the scope of the Water Reuse Programme expands, this strategy will need to be adapted to reflect the evolving goals and communication needs of the programme.



### Successful measures to build trust and acceptance from around the world

The likes of Perth, Australia; San Diego and El Paso, the United States; and Singapore have employed the following measures to garner public support for water reuse:

- **Identify and engage with key stakeholder groups who can help to garner more public support.** These include political, religious, media, medical and university leaders, who can influence the opinions, attitudes and behaviours of others.
- **Employ an independent expert panel** in fields such as public health, water technology and chemistry to provide independent testimony and answer questions on health, safety and quality issues.
- **Offer virtual or in-person tours of visitor centres or demonstration plants for schools and individuals.** Tours give people a concrete, evidence-based opportunity to understand the need for water reuse and the purification process, the technologies used and the safety measures in place.
- **Provide opportunities to taste the water.** Bottles of the reclaimed water can be distributed at events and visitor centres for the public to sample. Another option is to hold blind taste tests with members of the public.

(Source: World Health Organization, 2017)

## 3.2 Target Audiences

The communications strategy targets:

- **The general public**, including the media, academics, researchers and civil society organisations, with a particular focus on women because they are the most vulnerable to the effects of climate change and because they are key social change makers.
- **Implementing water services authorities (municipalities) and utilities** as both users of purified water and as partners in potential water reuse projects.

Further stratification by age or education level is excluded because the messages need to land with all groups.

Public-facing communications will focus on creating awareness of South Africa's water situation, the need to be more water-wise, and the concept of water reuse more broadly. Given anticipated low levels of acceptance, municipal-level messaging for locations selected as (pilot) projects for wastewater purification and reuse will require stronger messaging.



### 3.3 Logo and Tagline

Human attention is a scarce commodity in this age of information overload, multi-screening and social media. An eye-catching logo with a tagline can be a powerful tool for introducing a public audience to the Water Reuse Programme.

#### 3.3.1 Logo

Below are some logo options for consideration. The logos convey the concepts of water reuse, recycling and sustainability through the use of symbols (the triangular recycling symbol in Options 2A–C and the infinity symbol in Option 3) and the use of different shades of blue and green, representing water at various stages in the recycling process (Option 1). The increase in font thickness represents the increase in water supply that will be brought about by reusing water. Option 6 links the concept of water with the abbreviation for the programme to build brand recognition.

Option 1



Option 2A



Option 2B



Option 2C



Option 3



Option 4





Option 5



Option 6



### 3.3.2 Tagline

A tagline is a short, declarative sentence that uses plain language to drive home an organisation's underlying reason for being. The following suggested tagline links the country's economic growth aspirations with the physical limitations of living in a dry country:

***Because there is no wealth without water.***



### 3.4 Key Messages

Key messages help to drown out “information noise” by providing a clear drumbeat for communications practitioners to follow when speaking to both internal and external audiences. The key messages that follow are intended to guide all communications. Ideally, they should be consistently applied, in much the same way companies use unchanging slogans or payoff lines, to ensure a unified, coherent narrative.

*There is no need to use all the key messages with every communication.* Rather, the aim is to select a message or two that best answers the given communication need, which in turn is determined by context. For example, someone writing a mayoral speech for a groundbreaking ceremony at a water reuse works building site might want to include only the lines “South Africa is a water-scarce country that is becoming increasingly vulnerable to climate change impacts” and “We have the technology to safely reuse and recycle water”. Context-specific supporting information will then be added to flesh out the speech and create a compelling narrative.

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#### Key messages

1. South Africa is a water-scarce country that is becoming increasingly vulnerable to climate change impacts.
2. Saving water is everyone’s business.
3. We have the technology to safely reuse and recycle water.
4. Reusing and recycling water will ensure water for everyone, for decades to come.
5. It costs money to provide clean drinking water.
6. The Water Reuse Programme has the skills and capacity to help municipalities design, implement and maintain world-class water reuse projects that support gender equity.

#### Additional, project-level key message

7. [Place name] is a suitable candidate for water reuse.
-



## Word choice matters

Simple and clear communications are easy to understand and foster transparency. A 2020 WRC study found that less than 30% of South African participants were familiar with the term “potable” (Slabbert and Green, 2020), indicating that technical terms like “potable reuse” should be avoided as they are not well understood. In addition, words with negative connotations such as “wastewater” and “sewage” should be replaced with neutral yet factual terms.

It is useful to decide early on in the communication process on common terminology that will be consistently applied in all communication products. Examples of neutral terms to use include the following:

- Wastewater and sewage → used water
- Treated sewage/potable reuse → purified water, recycled water or reclaimed water
- Wastewater treatment and reuse → water purification or water recycling
- Wastewater treatment plant → water reuse/reclamation plant, water recycling centre or water resource centre
- Circular water economy → recycling or reclaiming water

## 3.5 Supporting Data

- South Africa is the **30th** driest country in the world.<sup>1</sup>
- **98%** of all surface water resources are already in use.<sup>2</sup>
- South Africa’s annual rainfall is **half** the global average.<sup>3</sup>
- South Africa’s average daily water use per person is **237 litres** (global average: 173 litres).
- South Africa faces a potential **17%** water supply shortfall by 2030.
- Wastewater reuse accounts for only **14%** of all available water.
- The agricultural sector is the largest water user (**61%**), followed by municipalities (**27%**).
- **65%** of households have access to a reliable and safe water supply.
- Over **3 million** South Africans lack access to a basic water supply service and **14.1 million** do not have access to safe sanitation.
- **50%** of towns have no water conservation or demand management strategy.
- **41%** of municipal water does not generate revenue.
- **35%** of municipal water is lost through leakages.
- **11%** of water supply schemes in South Africa are completely dysfunctional.
- In 27 priority district municipalities, the water reliability is only **42%**.

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<sup>1</sup> WWF, 2017.

<sup>2</sup> Department of Water Affairs and Forestry, 2004.

<sup>3</sup> All other figures are from Department of Water and Sanitation, 2018.



- **56%** of wastewater treatment works and **44%** of water treatment works are in a poor condition and require urgent rehabilitation.

## 3.6 Supporting Narratives

Each key message has one or more supporting messages to reinforce and substantiate the main point. The supporting narratives, in turn, elaborate on the messages. The communications team can draw on these messages and narratives when drafting communications material such as fact sheets and speeches. The narratives should be tailored as necessary. Over time, further messages and narratives will be added to the strategy based on feedback and evolving needs.

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### KEY MESSAGE 1

*South Africa is a water-scarce country that is becoming increasingly vulnerable to climate change impacts.*

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#### **South Africa is the 30th driest country in the world.**

South Africa receives about half the global average annual rainfall. Since 2013, nearly every region in South Africa has experienced some form of drought (Winter, 2018). Moreover, in 2016, eight of our nine provinces were declared disaster areas due to ongoing droughts (WWF, 2017). Prolonged droughts in recent years have led to the threat of taps running dry in Cape Town and Gqeberha, among other places. A similar challenge led municipalities in Makhanda, Kimberley and Polokwane to take the drastic measure of rationing water (Engineering News, 2020).

#### **Demand is projected to outstrip supply by 17% by 2030.**

With 98% of all surface water resources already in use and demand expected to outstrip supply by 17% by 2030, it is clear that we need to reduce consumption and diversify our water supply sources to ensure the country's water security.

#### **Southern Africa is a climate change hotspot.**

It has been said that South Africa is not a wet country that is occasionally dry, but a dry country that is occasionally wet. Rainfall is unevenly distributed across the country, with conditions getting drier as one moves westwards (Department of Water and Sanitation, 2018). And the country is only going to get drier. The International Panel on Climate Change (2018) has identified Southern Africa as a climate change hotspot, with the region expected to warm at about double the rate as the rest of the planet.

Climate change is also expected to drive a future decline in average annual rainfall over large parts of South Africa, particularly in the southwest region of the country (Davis-Reddy and Vincent, 2017). Rising temperatures and reduced rainfall are expected to increase the prevalence of multi-year droughts (potentially broken by flooding events) and water supply vulnerability in the face of growing water demand.



**Women are particularly vulnerable to climate change impacts.**

Women, especially poor women, are one of the groups most vulnerable to the effects of climate change. They are also the least likely to have the resources to cope with climate change due to existing inequalities between men and women in South Africa, including unequal access to resources, gendered division of labour and lack of decision-making power (see the Water Reuse Programme's gender assessment and action plan for more information).



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## KEY MESSAGE 2

*Saving water is everyone's business.*

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### **We need to work together to secure South Africa's water future.**

Cape Town's taps almost ran dry in 2018 following a three-year drought. To avoid Day Zero, citizens worked with the municipality, successfully cutting water use by more than 40% (City of Cape Town, 2020). Measures included calls for citizens to reduce individual consumption to 50 litres per person per day, placing restrictions on what water could be used for, reducing water pressure, increasing water tariffs and fining people who used too much water.

### **Small collective actions can have a large impact.**

If every South African used just 10 litres of water less each day, we could save up to 580 million litres of water a day (Nedbank and WWF, 2020). Citizens can play their part by reducing water usage with these tips:

- Shower for less than two minutes.
- Catch shower water in a bucket while waiting for the water to heat up. This can be used to flush toilets or water the garden.
- Don't wash items such as food, dishes or clothes under a running tap.
- Flush less often. Use dirty bath or shower water when you do flush.
- Wear your clothes more than once and only wash when you have a full load.
- Install a rainwater tank to collect water from your roof.
- Install water-saving taps and showerheads.

### **Women have a key role to play in water and sanitation decisions.**

As the primary providers, managers and users of water, women improve the effectiveness of water and sanitation services when they participate throughout the project process, from planning to operations and maintenance. A World Bank evaluation found that water projects which included women were six to seven times more effective than those that did not (Narayan, 1995). Female water users can provide input on the design, operation and maintenance of water systems that reflect their needs and preferences (De Albuquerque, 2021).



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### KEY MESSAGE 3

*We have the technology to safely reuse and recycle water.*

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#### **We already reuse and recycle drinking water.**

Wastewater treatment works release treated wastewater into rivers and other water bodies. Downstream communities then abstract and treat this water for reuse. Most of our country's inland population drinks water that has been used upstream by another town.

#### **Water reuse and recycling is well established in Southern Africa.**

Recycling water for drinking purposes is not new. It has been successfully implemented in Namibia, Singapore, the United States and Australia. Windhoek residents have been drinking reclaimed water for over 50 years! Locally, Beaufort West has been using reclaimed water since 2011.

#### **The water purification process is safe, reliable and sustainable.**

The water purification process typically involves passing treated wastewater through an advanced multi-barrier purification process that removes fine particles and pollutants and kills bacteria, viruses and pathogens to leave drinking-quality water that meets strict global standards.

Purified water can either be fed into the drinking supply (direct reuse) or discharged into an environmental buffer such as an aquifer, where it is blended with other water before being abstracted, treated again and supplied to people for drinking or other uses (indirect reuse).

#### **Refining the narrative for individual projects**

Note that individual projects should tailor this narrative to reflect the specific technologies and control systems used. The following supporting messages can be elaborated on:

- **The advanced treatment technology has been tried and tested internationally and improved over decades:** Provide information on the technology used to purify the used water.
- **Water is treated to the highest international standards:** Provide detail on the water-quality standards followed.
- **The water is continuously monitored for quality and safety:** Outline the monitoring process in place.



### **Case Study: Direct Water Reuse – A First for South Africa**

In 2011, South Africa's first direct water reclamation plant became operational in Beaufort West. The plant was built in response to a crippling drought, in which both the town's dams and about half its boreholes dried up. Beaufort West is located in the Great Karoo. There are no permanent surface water sources so the town is completely reliant on surface runoff from rain and groundwater. Recognising the need for alternative water sources, the municipality built a plant to purify wastewater in addition to implementing short-term measures to manage water demand. It also plans to develop additional boreholes further outside the town.

The wastewater goes through multiple treatment stages to meet SANS 241 requirements for drinking water quality. The purified water is then piped to a reservoir for blending with treated dam and borehole water before being supplied to consumers. The reclaimed water accounts for 20% of the town's water supply and can be increased to 25% as needed. The water is continuously monitored and the test results are published in the local newspaper.

(Source: Marais and Von Dürckheim, 2012)

### **Case Study: Windhoek: Reusing Water for Over 50 Years**

Windhoek is a pioneer in producing drinking water from wastewater, being the first city in the world to make use of this technology – all the way back in 1968. Namibia is one of the driest countries in Africa, receiving an average of 250 mm of rain a year. Water supply is a challenge for Windhoek because it is not located close to a permanent river. It relies on boreholes and three dams located between 60 km and 200 km away.

The city started to explore alternative water sources in the 1950s when existing water resources began running low. After years of research and piloting, the original Goreangab water reclamation plant was built and began operating in 1969, treating 4.8 million litres of water per day. Over the years, the plant technology and capacity has been upgraded and improved. The old plant was replaced in 2001 with a new one that can treat 21 million litres of water per day, accounting for 25% of demand from the city's 350 000 inhabitants. Purifying wastewater is key to the city's water security because it makes more water available for consumers without tapping into natural resources.

(Sources: Veolia, 2018; World Health Organization, 2017)



### **Case Study: Long-Term Planning to Secure Singapore's Water Future**

Although Singapore receives an average of 2 166 mm of rain each year (Meteorological Service Singapore, n.d.), in 2015 the Water Research Institute classified it as one of the most water-stressed countries in the world. This is because the highly urbanised island city-state does not have enough available land to catch and store rainwater, with 5.7 million people living on 728 km<sup>2</sup> of land. As the population and economy continue to grow, demand for water is expected to double between 2016 and 2060.

Singapore is increasingly relying on reclaimed water to meet demand and address supply challenges presented by an increasingly hotter and variable climate, and its agreement to import water from Malaysia ending in 2061. After years of research and testing, Singapore launched NEWater in 2003 with two plants and a visitor centre. This high-grade reclaimed water goes through multiple treatment steps so that it meets the water-quality guidelines of the United States Environmental Protection Agency and the World Health Organization.

NEWater is mainly supplied to water-intensive industries such as wafer fabrication parks and commercial buildings for cooling and industrial processes. During dry periods, NEWater is blended with rainwater in reservoirs and then further treated to supplement drinking water supplies. NEWater currently serves up to 40% of water demand and Singapore aims to increase this to 55% by 2060 to help secure the nation's water supply and increase its resilience to climate change.

(Source: PUB, 2018)



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#### KEY MESSAGE 4

*Reusing and recycling water will ensure water for everyone, for decades to come.*

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#### **Water security improves quality of life for all, especially the poor.**

The National Development Plan has set a national target of 100% universal and sustainable provision of reliable water supply and sanitation services by 2030 (National Planning Commission, 2012). According to the National Water and Sanitation Master Plan, in 2017 more than 3 million South Africans lacked access to a basic water supply service and 14.1 million did not have access to safe sanitation (Department of Water and Sanitation, 2018). Reclaimed water can help diversify South Africa's water supply, increasing the amount of water available for social and economic development and improving the country's water security.

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#### KEY MESSAGE 5

*It costs money to provide clean drinking water.*

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#### **Water tariffs in some municipalities do not reflect the true cost of providing water.**

Every drop of water that reaches a business or home first needs to be abstracted from a water source – a river or a dam – and distributed through a water reticulation system that includes pipes, a drinking water treatment plant, pump stations, storage tanks and pipelines. Maintaining this infrastructure costs money – money that isn't always adequately recovered through water tariffs (BusinessTech, 2021).

#### **Water tariffs need to better reflect the cost of supplying water over the long term.**

Water tariffs need to cover the cost of maintaining existing infrastructure and building new plants – including water reclamation centres – to safeguard long-term water supplies. In some municipalities, shifting to cost-reflectivity may require an increase in water tariffs over time. This needs to be done in a way that does not create price shocks or impede people's right to water, as enshrined in sections 24 and 27 of the Constitution (1996).

#### **South Africa's water and sanitation infrastructure needs investment.**

With over half the country's wastewater treatment works requiring rehabilitation, the Water Reuse Programme provides an opportunity to improve existing water and sanitation infrastructure in addition to building new infrastructure. Recognising the enabling role the umbrella National Water Programme can play in realising government planning instruments such as the National Development Plan, the Presidential Infrastructure Coordinating Commission Council endorsed the programme in April 2021.



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## KEY MESSAGE 6

*The Water Reuse Programme has the skills and capacity to help municipalities design, implement and maintain world-class water reuse projects that support gender equity.*

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### **The WPO provides a one-stop shop for water services authorities.**

As a centre of excellence for the Water Reuse Programme, the WPO gives water services authorities access to a centralised pool of technical, financial and legal experts, capable of advising on all stages of project development, from selection and preparation to financing and implementation.

The WPO provides a standardised approach to contracting, procurement and loan agreements – reducing costs and the time taken to prepare projects – and helps monitor project progress. In addition, the office manages communications on behalf of the programme to create awareness and facilitate knowledge exchange of the climatic, socioeconomic and developmental benefits of the programme’s water reuse projects.

### **The Water Reuse Programme promotes gender equity through its projects.**

The Water Reuse Programme integrates gender-responsive initiatives and interventions into the design and implementation of projects as well as in the procurement, management and operational functions. It does this by selecting projects that are gender-responsive and do not exacerbate existing social inequalities; improving working conditions and procurement processes; creating gender-specific contracting provisions and appointment of staff; and building the capacity of women in senior leadership in utilities.



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### PROJECT-SPECIFIC KEY MESSAGE

*[PLACE NAME] is a suitable candidate for water reuse.*

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The narrative for this key message should highlight the viability of the project and explain the need for water reuse in the chosen place.

Additional project-specific key messages should seek to answer questions that the public and media are likely to have regarding a particular project. When crafting the supporting narratives, the communications team would do well to ensure that they answer the following questions:

- Why is the town considering water reuse and what are the expected benefits?
- Why was this town chosen? The answer will likely link big-picture reasons (climate change) with local reasons (the town has a wastewater treatment works that meets the technical requirements).
- What are the construction plans? Outline the project timeline and where the plant will be built.
- Which technologies will be used and why? If this technology has been successfully used elsewhere, include a case study.
- What safety and monitoring protocols will be put in place?
- What steps have been put in place to protect the environment? For example, has an environmental impact assessment been completed, and if so, what were the findings?
- Will the water be reused for potable purposes or for other purposes?
- Who is funding this project?
- Who is the municipality partnering with to ensure the success of the project?
- Who can the public/media contact to find out more about this project? In addition, outline opportunities for stakeholder engagement.



## 4. MEASURING PUBLIC AWARENESS AND SUPPORT

The WPO needs to monitor whether the strategy is meeting its aim of improving public knowledge of South Africa's water situation. To this end, it should appoint a team tasked with developing and executing a monitoring and evaluation plan that aligns with the objectives of this strategy.

### 4.1 Framework for monitoring and evaluation plan

The monitoring and evaluation plan should link relevant indicators to the strategic objectives noted in section 3.1 to determine if communications activities have effectively conveyed key messages to relevant target audiences. The table below includes key considerations and examples of monitoring and evaluation approaches and indicators. The nature of the plan will be affected by the implementation plan approach and budget for monitoring and evaluation activities. The communications strategy and implementation plan should be regarded as living documents and open to change based on the monitoring and evaluation findings.

KEY QUESTIONS	INFORMATION GATHERING METHOD/SOURCE	INDICATORS	WHAT THIS TELLS YOU
<b>Objective 1: Improve public knowledge of South Africa's water security position</b>			
<b>Are key messages resonating with the target audience?</b>	<p>Surveys (online, telephonic and in person, conducted before <u>and</u> after campaign)</p> <p>Ongoing surveys available on the online information hub and at visitor demonstration plants, and distributed at community events</p> <p>Social media</p> <p>Google analytics</p> <p>Face-to-face outreach and events (depending on lockdown regulations)</p>	<p>Number of survey respondents who display improved knowledge relative to a baseline reading, disaggregated by gender and other demographics</p> <p>Number of respondents who display improved support for water reuse for potable purposes after campaign (compared with before), disaggregated by gender and other demographics</p> <p>Number of social media followers</p> <p>Number of people searching for keywords</p> <p>Number of people reached through in-person interactions, disaggregated by gender and other demographics</p>	<p>Campaign is improving knowledge of water issues</p> <p>Higher awareness of water issues is driving greater acceptance of water reuse</p> <p><u>OR</u></p> <p>Higher awareness of water issues is failing to drive acceptance of water reuse</p> <p>Awareness of campaign within target audiences</p>



KEY QUESTIONS	INFORMATION GATHERING METHOD/SOURCE	INDICATORS	WHAT THIS TELLS YOU
<b>Did the public interact with or share the outputs?</b>	Social media analytics References in traditional media (newspapers, radio, etc.)	Number of comments on social media Number of shares on Facebook and Twitter Number of mentions in local newspapers and radio	Audiences are invested in water issues and water reuse  Qualitative analysis may be needed to determine positive or negative valence
<b>Which sectors interacted the most?</b>	Surveys (online, telephonic and in person, conducted before <u>and</u> after campaign)  Social media  References in traditional media		Provides indication of which sectors may need more attention as programme continues
<b>Objective 2: Help the WPO communicate with water services authorities</b>			
<b>Is the WPO making use of the communications strategy and related materials?</b>	Regular online surveys with WPO staff  Qualitative interviews with WPO staff	Subjective assessment scales of usefulness of information hub  Subjective assessment scales of usefulness of supporting materials	What is useful from communications strategy and implementation plan  What needs to be developed or expanded
<b>Objective 3: Empower municipalities to communicate clearly, consistently and transparently about water reuse projects</b>			
<b>Are municipalities drawing communications support from the WPO?</b>	Direct engagements Website analytics	Subjective assessment of communications support received from the WPO  User analytics (time on page, number of clicks, etc.)  Number of times supporting communication materials downloaded  Number of requests for engagement from municipalities	Whether municipalities are aware of public communications campaign  Whether municipalities are aware of project-specific support from the WPO  How the WPO might better support municipal communication around water reuse projects



## 5. IMPLEMENTATION PLAN

This implementation plan is based on the Water Reuse Programme communications strategy and includes:

- **A national public-facing communications campaign** to raise general awareness of South Africa's water security position.
- **An online information hub** to support the Water Partnerships Office's activities.
- **A roadmap for project-specific communications** to improve local awareness and acceptance of projects within the programme.

The exact scope of the implementation plan is yet to be determined, based on the needs of the overall Water Reuse Programme once it has been established. The appointed communications manager can then propose a budget based on the final plan.

### 5.1 Capacity Requirement

The WPO will need to appoint at least one senior communications manager to:

- Provide general communications support to the WPO
- Maintain the information hub and oversee social media interactions
- Identify, brief and manage service providers
- Liaise with external stakeholders (including the media) when rolling out campaigns
- Monitor and evaluate the impact of marketing campaigns
- Propose and manage the communications budget.

A communications officer may be needed to support the manager in their duties when the programme starts to scale.

### 5.2 Corporate Identity and Collateral Materials

The Water Reuse Programme requires a corporate identity to improve awareness of the programme, its goals and the entities that support it.

A corporate identity includes the following elements:

- A logo in various file formats (logo variations: vertical and horizontal, with and without payoff line; colour spaces: digital and print; colour variations: full colour, inverse, black and white; file formats: Adobe Illustrator (AI), editable PDF, EPS, SVG, JPEG and PNG) – see section 3.3
- A payoff line
- Visual assets that are used to create a visually coherent personality across all communications
- A colour palette
- Typeface specifications



- Style guidelines.

Once developed, the corporate identity should be used to create the templates for communications products emanating from the office. These include:

- MS Office templates (for MS Word, MS PowerPoint and email)
- Social media profiles and content
- Printed collateral (such as posters and banners as needed).

In addition, the corporate identity could be used to create branded materials such as masks and T-shirts that programme representatives can wear when engaging with the public. Branded canvas bags sporting various key messages – containing pamphlets, T-shirts and masks – can be distributed to the public at outreach events.

### 5.3 Online Hub

The WRC's communications strategy for water reuse identified the need for a central hub of resources (Slabbert and Green, 2020b). The DBSA proposes hosting this hub through the WPO.

The WPO will require an interactive, content-rich online hub to support the public communications campaign and engagements with municipalities, water boards and other stakeholders.

The hub could consist of the pages outlined in the table below. Where appropriate, the material should be available in all of South Africa's official languages.



Page title	Content
<b>About</b>	<ul style="list-style-type: none"> <li>• Mandate and mission</li> <li>• Partners</li> <li>• Leadership (if the WPO has a board or executive committee)</li> <li>• About the team (WPO)</li> <li>• How to work with the WPO</li> </ul>
<b>South Africa's water situation</b>	<ul style="list-style-type: none"> <li>• Text, videos or online games to elevate each of the key messages</li> </ul>
<b>Pilot projects</b>	<ul style="list-style-type: none"> <li>• Fact sheets of pilot projects: <ul style="list-style-type: none"> <li>◦ Contextual information</li> <li>◦ Need statement</li> <li>◦ Technologies and water standards used</li> <li>◦ Expected outcomes</li> <li>◦ Project timelines</li> <li>◦ Contacts</li> </ul> </li> <li>• Visual display of projects and progress (optional)</li> <li>• Real-time water-quality monitoring (linked to reporting on municipal sites)</li> <li>• Virtual tour of a water resource centre (optional)</li> </ul>
<b>Resources</b>	<ul style="list-style-type: none"> <li>• Learning materials (including non-curriculum information sources for schools/teachers, FAQs and activity sheets)</li> <li>• Printable communications assets (such as infographics and posters)</li> <li>• Explainer videos</li> <li>• Case studies of wastewater reuse</li> <li>• Photos</li> <li>• Logo</li> <li>• Links to international and local resources (optional)</li> </ul>
<b>Media releases</b>	<ul style="list-style-type: none"> <li>• Calls for project-specific community engagement</li> <li>• Feedback on community engagement/answers to questions from the public</li> <li>• Updates on programme and projects</li> </ul>
<b>Contact</b>	<ul style="list-style-type: none"> <li>• Communications manager's contact details</li> <li>• Information request form</li> <li>• Newsletter subscription option</li> <li>• Survey (see section 4)</li> <li>• Reporting mechanism</li> </ul>



## 5.4 National Campaign

### 5.4.1 Assets

The following materials will need to be developed in anticipation of the national communications campaign. All products should be available in English and, where appropriate, the other official languages.

Asset	Key messages and narratives
<b>7 x A4 infographics</b>	<ul style="list-style-type: none"><li>• South Africa is a water-scarce country that is becoming increasingly vulnerable to climate change impacts</li><li>• Saving water is everyone's business</li><li>• We have the technology to safely reuse and recycle water</li><li>• Reusing and recycling water will ensure water for everyone</li><li>• It costs money to provide clean drinking water</li><li>• Impacts of water insecurity on women and girls</li><li>• Women in water: Statistics on women involved in the Water Reuse Programme</li></ul>
<b>3 x social media infographic templates</b>	<ul style="list-style-type: none"><li>• Campaign 1: Facts about South Africa's water situation</li><li>• Campaign 2: Water-saving tips and tricks</li><li>• Campaign 3: Answers to FAQs about wastewater reuse</li></ul>
<b>4 x videos</b>	<ul style="list-style-type: none"><li>• How a water resource centre works (1 minute, TBC)</li><li>• All water use is de facto reuse (1 minute, TBC)</li><li>• Case study: Beaufort West (2 minutes, TBC)</li><li>• Profiles of women who are creating social change in South Africa's water system (2 minutes, TBC)</li></ul>
<b>3 x 700-word opinion pieces</b>	<ul style="list-style-type: none"><li>• Why we need to find alternative water sources</li><li>• Why wastewater reuse is the best option for supplementing water supplies</li><li>• Why women hold the key to South Africa's water resources</li></ul>
<b>3 x 20-second TV ads</b> <b>3 x 20-second radio ads</b> <b>3 x 5-second YouTube ads</b>	<ul style="list-style-type: none"><li>• Ad 1: South Africa is a water-scarce country that is becoming increasingly vulnerable to climate change impacts</li><li>• Ad 2: Saving water is everyone's business</li><li>• Ad 3: Reusing and recycling water will ensure water for everyone</li></ul>
<b>Artwork for outdoor advertising (billboards and posters)</b>	<ul style="list-style-type: none"><li>• South Africa is a water-scarce country that is becoming increasingly vulnerable to climate change impacts</li><li>• Saving water is everyone's business</li><li>• We have the technology to safely reuse and recycle water</li><li>• Reusing and recycling water will ensure water for everyone</li></ul>



## Media releases, speeches

- As needed, responding to context

## Partnerships

To maximise reach and engagement with the public during both the national and project-level campaigns, the Programme Management Office could consider entering into various partnerships. These could take the following forms:

- Partner with private businesses and civil society organisations to **leverage their networks**. The Programme Management Office could run joint campaigns or competitions with these partners or participate in these organisations' forums. At the project level, municipalities could work with local businesses such as spaza shops and tuck shops to distribute pamphlets to customers and display posters on their premises.
- Partner with **women's groups** and **women community leaders** to engage with women about their particular water needs and empower them to take action and participate in discussions about the Water Reuse Programme and its projects.
- Identify well-known and respected people to act as **ambassadors** that can promote the programme on their social media channels or speak on TV or radio shows.
- Put together an **independent expert panel** in fields such as public health and water technology to provide independent testimony and answer questions on health, safety and water quality issues.

When considering who to partner with, the Programme Management Office should ensure that women are adequately represented, in line with the programme's gender action plan.





## 5.5 Project-Level Campaign

Plan, research, prepare Implement Timing uncertain

Municipalities that plan to reclaim water for potable use would benefit from engaging transparently and consistently with citizens early in the process of building a water resource centre to enhance knowledge of the local water situation and improve the likelihood of broad support for the project. A communications budget should be determined during the preparation phase and included as part of the overall project cost to ensure that there are adequate funds for a comprehensive communications campaign.

Projects where the reclaimed water will be used for other purposes may not require such a detailed strategy. Regardless, each municipality should tailor their communications to suit the local context and conditions.

### 5.5.1 Capacity requirement

The municipality may wish to appoint or assign a communications officer who will work with the Water Partnerships Office's communications team and be responsible for:

- Developing a local stakeholder database (including media contacts).
- Engaging via social media and responding to feedback timeously.
- Setting up a media monitoring service to monitor social media and press coverage, public sentiment and engagement.
- Analysing initial public response and using this to inform Phase 2 communications.
- Developing a communication protocol for communicating incidents (non-compliant water quality) and advisories to the media and public once the water resource centre is operational.

### 5.5.2 Assets

The project-level campaign should draw on national-level advertising assets as far as possible. These should be complemented by material that outlines the local context, as noted in the table below.

Asset	Details
3 x 700-word opinion pieces (for local media)	<ul style="list-style-type: none"><li>• Why our municipality needs to find alternative water sources</li><li>• Why wastewater reuse is the best option for our municipality</li><li>• How our municipality is gearing up to the challenge of building and managing a new water resource centre (capacity)</li></ul>
Pamphlets (to accompany municipal bills and be available at municipal facilities such as libraries)	<ul style="list-style-type: none"><li>• Why is wastewater reuse important?</li><li>• Summary of water-quality reports</li></ul>
Local media outreach invitation (email)	<ul style="list-style-type: none"><li>• Press release to invite stakeholder participation</li><li>• Press release to announce project</li><li>• Visit to construction site</li><li>• Q&amp;A with technical lead</li><li>• Speech by relevant local government official</li></ul>



	<ul style="list-style-type: none"> <li>• Press release to announce operations of water resource centre</li> </ul>
Technical presentation	<ul style="list-style-type: none"> <li>• Outlining technical aspects of project to support engagements with press, municipal stakeholders and community leaders</li> <li>• Simplified presentation that can be used for school visits</li> </ul>
Speech and printed collateral for ribbon-cutting ceremony	<ul style="list-style-type: none"> <li>• Theme: Preparing for the future</li> </ul>
Ongoing communications protocol	<ul style="list-style-type: none"> <li>• How to report on water-quality reports</li> <li>• How to frame incidents (non-compliant water quality)</li> <li>• How to respond to challenges from media and public in such instances</li> </ul>

### 5.5.3 Campaign schedule

This campaign schedule provides a communications roadmap for municipalities throughout the different project stages (planning, construction and commissioning). Each phase is suited to different media and will need to be flexible to respond to public sentiment and changing needs. Where appropriate, provide the communications in the two most spoken languages in the area in addition to English.

Goal	Key messages	Channels
<b>PHASE 1: PLANNING</b>		
<b>Amplify national efforts to create awareness of the country's water situation</b>	<ul style="list-style-type: none"> <li>• South Africa is a water-scarce country</li> <li>• Saving water is everyone's business</li> <li>• Message about area's water situation with tangible evidence</li> </ul>	<ul style="list-style-type: none"> <li>• Outdoor advertising (such as posters on lampposts and in municipal buildings, billboards and roadside electronic message boards)</li> <li>• Local radio stations</li> <li>• Municipal bills</li> <li>• Social media</li> <li>• Municipal website (if possible)</li> </ul>
<b>Create awareness of the need for wastewater reuse and the planned wastewater reuse project</b>	<ul style="list-style-type: none"> <li>• We have the technology to safely reuse and recycle water</li> <li>• Reusing and recycling water will ensure water for everyone</li> <li>• [Place name] is a suitable candidate for water reuse</li> <li>• The Water Reuse Programme has the skills and capacity to help municipalities design, implement and maintain world-class water</li> </ul>	<ul style="list-style-type: none"> <li>• Op-eds in local newspapers</li> <li>• Press release and press briefing</li> <li>• Social media</li> <li>• Events: Public meetings, ward council meetings, community events, school visits, public information kiosks/tents</li> <li>• Interviews (local radio stations)</li> <li>• Engage with women, religious leaders and local civil society organisations to gather</li> </ul>



Goal	Key messages	Channels
	reuse projects that support gender equity	support for communicating to their networks
<b>PHASE 2: CONSTRUCTION</b>		
<p><b>Keep the public and key stakeholders updated of the project's progress</b></p> <p><b>Reinforce the message that reclaimed water is safe, with a focus on addressing gender-specific safety concerns</b></p>	<ul style="list-style-type: none"> <li>• We have the technology to safely reuse and recycle water</li> <li>• Water reuse projects are designed to meet the highest international water-quality standards, backed by real-time monitoring and regular testing</li> </ul>	<ul style="list-style-type: none"> <li>• Social media</li> <li>• Events: Public meetings, ward council meetings, community events, school visits, public information kiosks/tents</li> <li>• Emails</li> <li>• Local newspapers</li> <li>• Interviews on local radio stations</li> </ul>
<b>PHASE 3: COMMISSIONING</b>		
<b>Notify the public when the water resource centre becomes operational</b>	<ul style="list-style-type: none"> <li>• Reusing and recycling water will ensure water for everyone, for decades to come</li> </ul>	<ul style="list-style-type: none"> <li>• Press release and press briefing</li> <li>• Launch event</li> <li>• Social media</li> <li>• Emails</li> <li>• Tours of (demonstration) centre</li> <li>• Water tastings at meetings and events</li> </ul>
<b>Keep the public updated on monitoring of water quality and safety issues</b>	<ul style="list-style-type: none"> <li>• We have the technology to safely reuse and recycle water</li> <li>• Water reuse projects are designed to meet the highest international water-quality standards, backed by real-time monitoring and regular testing</li> </ul>	<ul style="list-style-type: none"> <li>• Social media</li> <li>• Emails</li> <li>• Ward council meetings</li> <li>• Tours of (demonstration) centre</li> <li>• Water tastings at meetings and events</li> <li>• Pamphlets</li> <li>• Municipal website (this could involve real-time publication of results of monitoring system)</li> </ul>



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## 7.APPENDIX: RESOURCES

### Infographic



Water SA  
infographic.pdf

### Logo options



Logo options.pdf



**Logo**  
**options\_Final.ai**



[www.DBSA.org](http://www.DBSA.org)