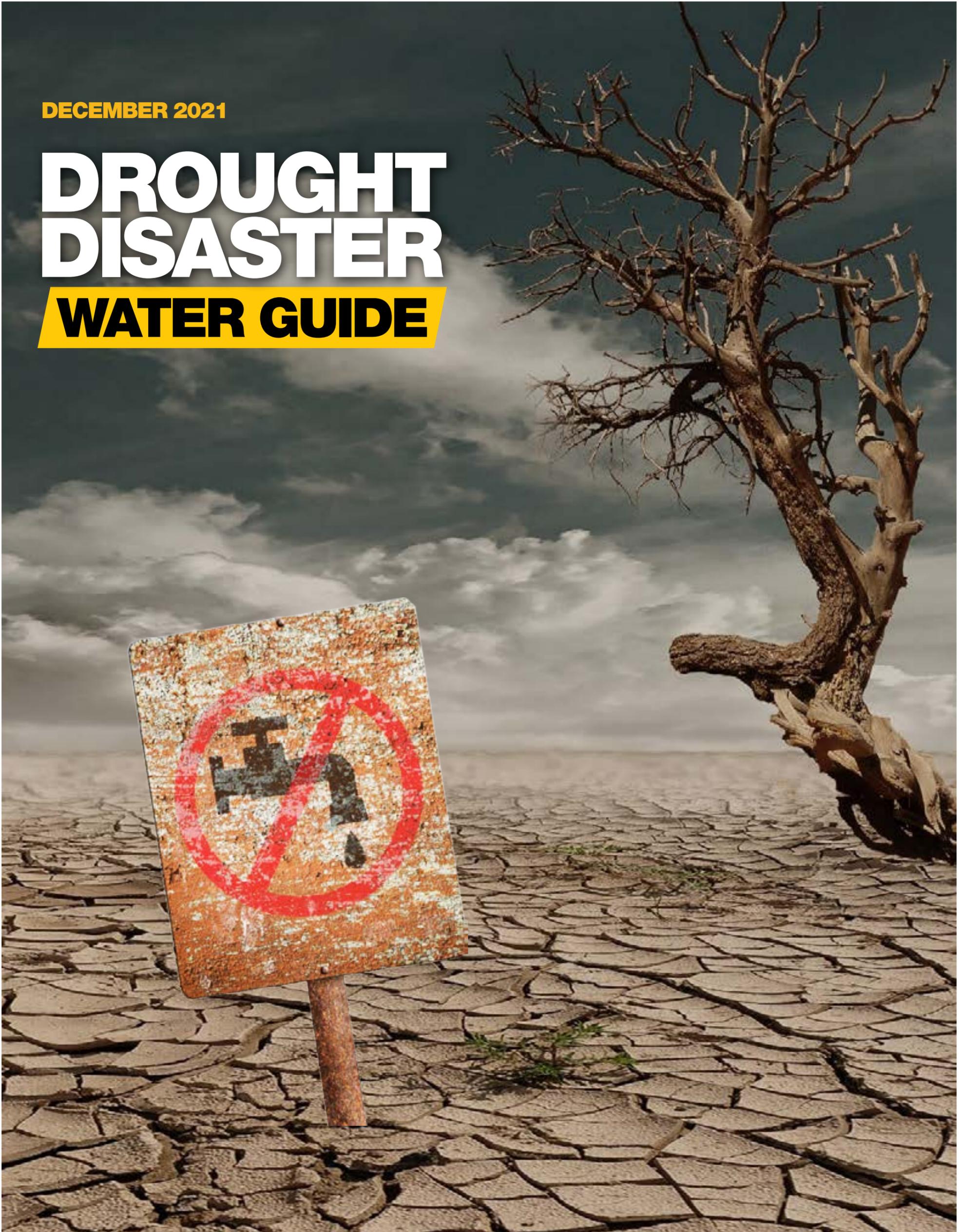


DECEMBER 2021

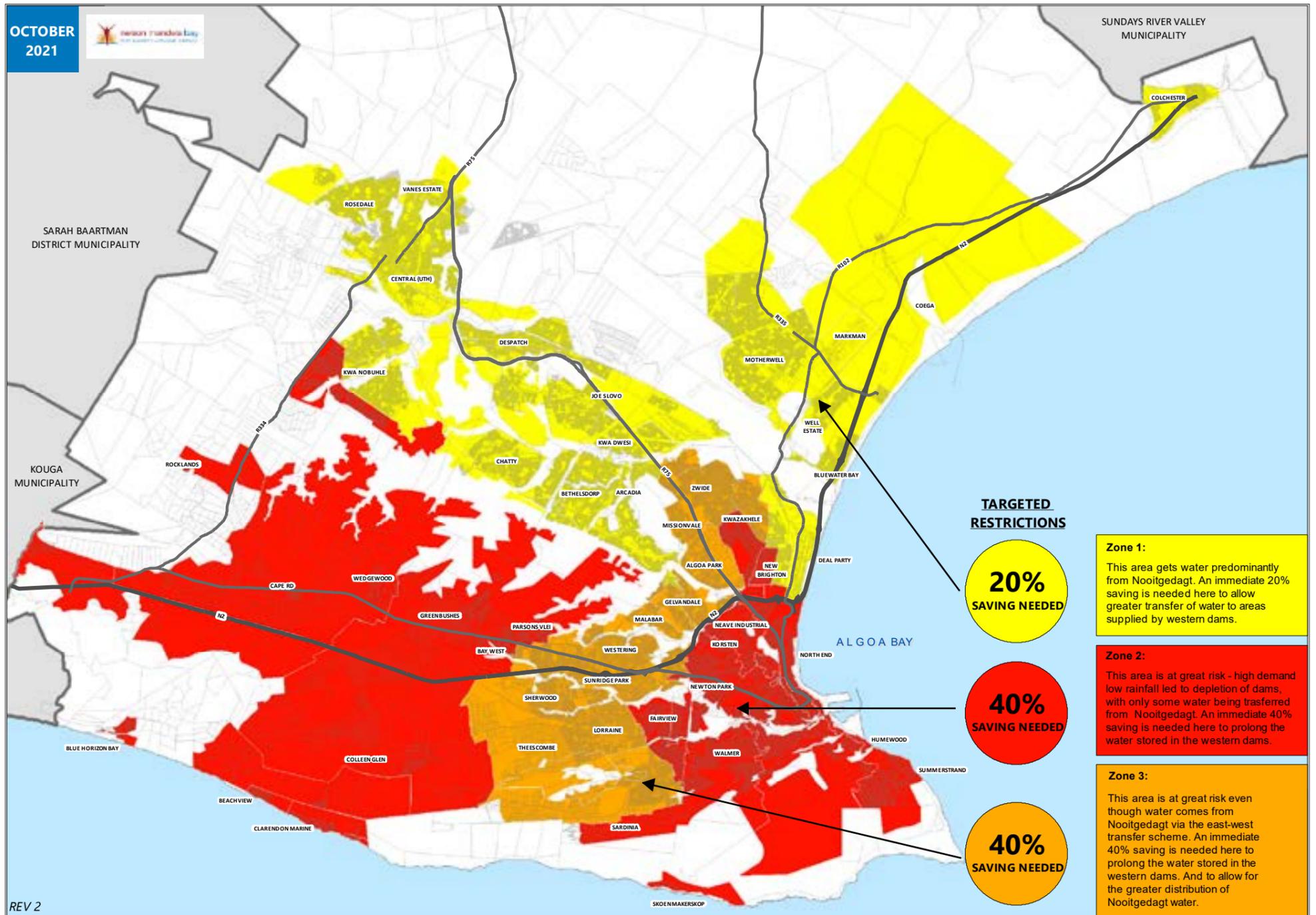
DROUGHT DISASTER

WATER GUIDE



Reduced water availability for Nelson Mandela Bay

We need to intensify our efforts to save water: **spend less time in the shower** and more time in the sea!



On 6 November 2021, the Acting Director-General of the National Department of Water & Sanitation signed off water restrictions on the Mzimvubu-Tsitsikamma Water Management Area in the Eastern Cape. This requires us to reduce our overall water abstraction from the joint water sources which feed Nelson Mandela Bay by 37%. Currently the combined storage level of local dams is less than 12% of capacity, and severe curtailments are required: 70% from Kromme, 85% from Loerie, and 50% from Groendal.

We have already reduced abstraction from Loerie and Groendal Dams as required. At Kromme, comprising Churchill and Impofu Dams, we have, over the past years, abstracted more water than our restricted allocation. This was to meet the water demand from our domestic, industrial and commercial customers. At current consumption, Churchill Dam will run dry by early December 2021. To protect the little water left in these dams, the Municipality has to reduce abstraction from the Kromme system.

Following the successful repairs to the Churchill pipeline, we are currently re-charging the water network. From Saturday, we will be reducing supply from the Kromme system from ± 90 Ml/day to ± 60 Ml/day, which is two-thirds of the volume of water previously supplied. We will be reducing this further over the coming weeks so that we can achieve the restricted volume of 31 Ml/day.

For all households in Nelson Mandela Bay to have continuous water supply, it is now imperative that the savings of 40% and 20% be implemented immediately as shown on the map.

Our bulk water supply modelling shows that if we all play our part in implementing these water saving measures, we will be able to extend the remaining storage in our local dams and provide water to all consumers until May 2022. At this time, critical infrastructure such as a transfer pump station at Chelsea Reservoir will be commissioned to better distribute water from Nooitgedagt across the Metro.

The period from May to August every year is also more favourable for the high-intensity rainfall required to meaningfully raise local dam levels.

All preparations to avoid dry taps continue, and if both NMBM and residents increase efforts to reduce overall water consumption, dry taps can still be avoided. NMBM continues with the roll-out of aggressive pressure management initiatives, fixing leaks and replacing meters.

As we move into the hot summer months, we need to intensify our efforts to save water: spend less time in the shower and more time in the sea!

Please visit <https://www.nelsonmandelabay.gov.za/page/drought-mitigation-plans-and-projects> for all water-related information, including restrictions and FAQs as well as tips to lower usage even further.



LEARN HOW TO READ YOUR WATER METER TO SEE JUST HOW MUCH WATER YOU AND YOUR FAMILY ARE SAVING!

- 1 Locate the meter on your property.
- 2 Read the number on the dial.
 - The black numbers represent kilolitres (kℓ).
 - The red numbers represent litres (ℓ).
- 3 Take a reading first thing in the morning before anyone in your household starts using water.
- 4 Take another reading last thing at night.
- 5 Subtract (-) the morning number from the evening number. Divide (÷) the answer by the number of people in your household. If the result is more than 50, **YOU ARE OVER THE LIMIT!**

How to use less water as an INDIVIDUAL (target usage = 50 litres per person per day nett):

- Don't bath. Have a 2-minute shower instead;
- Catch your shower water in a bucket and use this to flush the toilet;
- Don't flush the loo unless really necessary, and use grey/recycled water where possible;
- Don't leave the tap running when you brush your teeth;
- Talk about what you're doing to save water and share on social media;
- Report water leaks, etc.

How to use less water as a HOUSEHOLD (target usage in kℓ/month = number of people x 50 litres x 30 days):

- Learn how to read your water meter, and check for leaks;
- Read your meter often to see how much water you use;
- Reduce your water pressure;
- Re-use your grey water;
- Don't water your garden, wash your car, or spray down hard surfaces;
- Cover your pool and don't fill it with potable municipal water;
- Put a brick or a plastic bottle filled with water in your cistern;
- Install low-flow showerheads and tap aerators;
- Remember to close all taps after water outages;
- At 50 litres per day, each person should add no more than 1.5 kilolitres to the monthly bill;
- So multiply 1.5 by the number of people in your household to see how much your bill should be. The average household in NMB has less than 6 people, so your monthly use should be less than 9 kilolitres.

How to use less water as a BUSINESS (target usage = 20% reduction in demand):

- Know what your historical and current consumption is so that you can make sure you meet your target reduction of 20%;
- Read your meter regularly and check your premises for underground leaks;
- Review all your processes which use water;
- Print your own signage (use City templates if you want to) and educate your visitors and staff to save water at work and at home;
- Provide hand sanitiser in bathrooms instead of soap, and install aerators in taps, etc.

We will need to test the new infrastructure under the proposed operating conditions as these are commissioned. We may need to adapt this plan as necessary, but still with the aim of making sure the system continues to operate. We will communicate any changes to you.

Since its establishment, the City's water infrastructure developed organically, in response to growing demand, under many different leaderships and ever-evolving legislation. Some of the infrastructure is old, and competing demand on City budgets has often meant that we've not been able to maintain it as well as we would have liked.

Our plan is dependent on infrastructure working, and we are committed to continue our repair & maintenance programmes, but pipe bursts are still likely to happen, which could result in areas not having water for a couple of days, but water will be restored in terms of this plan.

In the Cape Town drought, gross demand reduced from 240 to 140 litres per person per day. Here we also need to reduce by 100 litres a day - from about 250 to **150 litres per person per day.**

How to use your 50 litres per day:



Keeping the City's taps from running dry

Avoid **queuing for water** this Christmas and **cut consumption** to avoid dry taps!



■ Save every drop, as a dry December will be a reality if water consumption is not reduced

Taps running dry is not a prospect any city wants to consider. But running dry is a definite threat in Nelson Mandela Bay (NMB) right now. The region has been classified as a drought disaster area, and not without cause. If we do nothing, then a large part of our supply system will fail, and will do so within weeks. We, the Nelson Mandela Bay Municipality (NMBM), have implemented a number of projects to stretch our water to the max and avoid running out, but we need your help urgently in reducing water demand.

If we don't act NOW to reduce our demand, large parts of the City will have to collect water from water tankers for weeks or even months, as soon as

Christmas. We are all in this together – even if some of our taps run dry, it will affect the entire economy and business confidence, potentially damaging our City permanently. The water disruptions over the long weekend in September that affected large portions of the Metro will be the norm, should the system fail. And if the system fails before connecting infrastructure is complete, the Municipality will not be able to restore water at all. The sanitation system will also fail. We have to avoid this at all costs.

Some areas of Nelson Mandela Bay are supplied through the Nooitgedagt scheme from the Gariep Dam, which is currently more than 80% full.

By volume, the Nooitgedagt Water Treatment Works currently provides close to two-thirds of the volume of water used. The balance of the areas are supplied by the western dams, which provide water from the Kromme and Kouga sub-systems, the Groendal Dam and a number of Older Dams.

These systems have been supplying about one-third of the water consumed by Nelson Mandela Bay.

The National Department of Water and Sanitation (DWS) recently confirmed the restrictions on the system, as shown in the table below, and we must comply.

COMPONENT			LICENCE	RESTRICTIONS			
Sub-system	Category	Consumer		2020/21	2021/22		
			Million Cubic Meters Per Annum (Mm3/a)	Curtailment (Curt.%)	Curtailment (Curt.%)	Megalitres Per Day (MLD)	Million Cubic Meters Per Annum (Mm3/a)
Kouga	Irrig.	Gamtoos IB	60.3	80%	85%	25	9.05
	Loss	Canal	6.9	13%	20%	15	5.5
	Urban	Hankey	0.5	29%	65%	0	0.2
	Urban	Patensie	4.0	30%	65%	4	1.4
Loerie	Urban	NMBM	23.0	70%	85%	9	3.5
Kromme: Churchill + Impofu	Urban	NMBM	38.2	50%	70%	31	11.5
	Irrig.	Kromme	2.0	80%	70%	2	0.6
	Env.	Release	2.0	100%	100%	0	0.0
Groendal	Urban	NMBM	4.4	20%	50%	6	2.2
	Irrig.	Release	2.4	67%	70%	2	0.7
Uitenhage Springs	Urban	NMBM	2.2	0%	0%	6	2.2
Old Dams	Urban	NMBM	3.3	0%	0%	9	3.3
Sundays	Urban	NMBM	58.3	0%	0%	160	58.3
Total for Existing Algoa System	All	All	203.8	44%	52%	268	97.8
	Urban	NMBM only	129.3	28%	37%	223	81.5

Table 1: Department of Water & Sanitation water restrictions October 2021

To avert disaster, we have developed an updated system optimisation plan, in terms of which we will be able to distribute water as far as practically possible across the Metro so that everyone has access to water to meet their basic needs, even if the local dam catchments get no further rainfall.

While no rainfall is unlikely, we have no control of how

much, where or when rain will fall, but we do have control over other parts of our water cycle. One such area of control is in how water is distributed and how much we use.

There is a complex network of reticulation mains fed from various supply sources and distributed by means of pump stations.

We are being completely transparent about this: with our current usage, and with no meaningful rainfall, the Kromme system (Churchill and Impofu Dams) will fail before the end of the year.

The Kouga system (Kouga and Loerie Dams) is not managed by the Municipality but with current drawdown is likely to fail even before the Kromme does.

Intensified Water Leaks Programme in full swing to reduce water losses

The Nelson Mandela Bay Municipality continues to experience severe drought, and to curb the wastage of water through leaks, the NMBM Water & Sanitation Sub-directorate is working tirelessly through its intensified water leaks programme to fix damaged water pipes and water meters that contribute to water leaks.

A total of seven contractors have been employed to repair leaks across the Metro and are in different

areas of the Metro daily. It is important for residents to note that due to the aging infrastructure in the Metro, leaks will always be a challenge that the Municipality will face.

The intensified leaks programme is a commitment to residents that this moving target will always be pursued. The worst leaks are prioritised first as our water reticulation system is a pressurised system.

Residents are encouraged to continue reporting water leaks to the Service Delivery Call Centre at **0800 20 50 50**, or to waterleaks@mandelametro.gov.za or via the 'NMBM Mobile Application' that can be downloaded on Google Play and App Store.

Below is a breakdown of the leaks repaired from July – October 2021:

DISTRIBUTION					
Month	Carryover of Outstanding Repairs	New Leaks per Month	Completed Repairs per Month	Carry Forward of Outstanding Repairs	Carry Forward of Outstanding Repairs at Month End
July 2021	3,450	1,398	919	479	3,929
August 2021	3,929	1,295	697	598	4,527
September 2021	4,527	1,159	561	598	5,125
October 2021	5,125	1,249	382	867	5,992

INSTALLATION					
Month	Carryover of Outstanding Repairs	New Leaks per Month	Completed Repairs per Month	Carry Forward of Outstanding Repairs	Carry Forward of Outstanding Repairs at Month End
July 2021	550	844	810	34	584
August 2021	584	666	572	94	678
September 2021	678	638	529	109	787
October 2021	787	872	538	334	1,121

ASSISTANCE TO THE POOR (ATTP)					
Month	Carryover of Outstanding Repairs	New Leaks per Month	Completed Repairs per Month	Carry Forward of Outstanding Repairs	Carry Forward of Outstanding Repairs at Month End
July 2021	2,023	33	10	23	2,046
August 2021	2,046	38	14	24	2,070
September 2021	2,070	57	4	53	2,123
October 2021	2,123	64	0	64	2,187

ASSISTANCE TO THE POOR (ATTP) HIGH CONSUMPTION					
Month	Carryover of Outstanding Repairs	New Leaks per Month	Completed Repairs per Month	Carry Forward of Outstanding Repairs	Carry Forward of Outstanding Repairs at Month End
July 2021	8,530	1	1	0	8,530
August 2021	8,531	2	1	1	8,532
September 2021	8,532	1	0	1	8,533
October 2021	8,533	4	2	2	8,535

SAVE WATER, SAVE MONEY!

You could save money by reducing your water consumption!

- If you reduce your monthly water consumption from **30 megalitres to 20 megalitres**, your payment can drop from **R1 586.4 to R696.09**. **This is a saving of R890.40!**
- If you reduce your monthly water consumption from **20 megalitres to 15 megalitres**, your payment can drop from **R696.09 to R378.09**. **This is a saving of R318.00!**
- If you reduce your monthly water consumption from **15 megalitres to 10 megalitres**, your payment can drop from **R378.09 to R219.09**. **This is a saving of R159.00!**
- If you reduce your monthly water consumption from **10 megalitres to 8 megalitres**, your payment can drop from **R219.09 to R166.48**. **This is a saving of R52.61!**

Every drop counts, but so does every rand. By reducing your water consumption, you **WILL** save money!



Companies permitted to sell non-potable water to assist residents in time of water shortages

The Nelson Mandela Bay Municipality has given four companies permission to supply non-potable water throughout the Metro in terms of *Clause 26 (1) of the NMBM By-Laws and the General Authorisation Permit*. This has been done to assist during times of water shortages.

Permits have been issued to the companies by the Department of Water and Sanitation. The Department has granted these companies permission to use their source of water as detailed in the approval and under the prevailing laws of the *National Water Act 36 of 1998 Clause 3*.

These permits grant the companies permission to supply water to residents and businesses in the Metro for non-potable use, such as the filling of swimming pools, car washes, high pressure cleaning services and domestic uses.

Residents and businesses are encouraged to buy non-potable water from the service providers below, as purchasing water from a company without a permit is a crime and residents will be held accountable for buying and selling water illegally.

1. Toral Talati – 041 992 3226 / 061 494 4398

2. Rehoboth Spring Water – 041 506 2442 / 082 367 6896
3. Bay Water Supplies – 082 575 1791
4. Water Delivery – 041 363 0311

Residents are encouraged to continue reporting water leaks to the Service Delivery Call Centre at **0800 20 50 50**, or to waterleaks@mandelametro.gov.za or via the 'NMBM Mobile Application' that can be downloaded on Google Play and App Store.

**AVOID
DRY
TAPS!**

SAVE WATER NOW!

**FILLING POOLS
WITH MUNICIPAL
WATER IS STRICTLY
FORBIDDEN!**



Report leaks on 0800 20 50 50



waterleaks@mandelametro.gov.za