

Collectively, Nelson Mandela Bay is using too much water - we are literally using more water than we have.

We are in a serious drought and the volume of water we are allowed to draw from the local Eastern Cape dams has been restricted by between 50 and 85%. We are trying to balance the system with less water, but this means that more households are reporting low-pressure or no-water (intermittent water supply). Only if everybody reduces their water use, will water reach all areas. When we use too much water, reservoirs run dry as we cannot supply water in the volumes consumed. This affects the high-lying areas first, and often takes a couple of days for reservoirs to be replenished. If we continue to use too much water, this will continue to happen throughout summer.








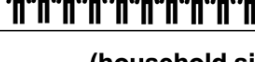
Reducing water demand is not difficult, it requires some effort at individual, household and business level. Compared to the threat of not having running water or working toilets, it is certainly a minor inconvenience. Here are some tips to slash your water use. We will continue to run our communications campaign but need your help to reach every person in the Nelson Mandela Bay.

**How to use less water as an individual** (target usage = 50 litres per person per day direct use):

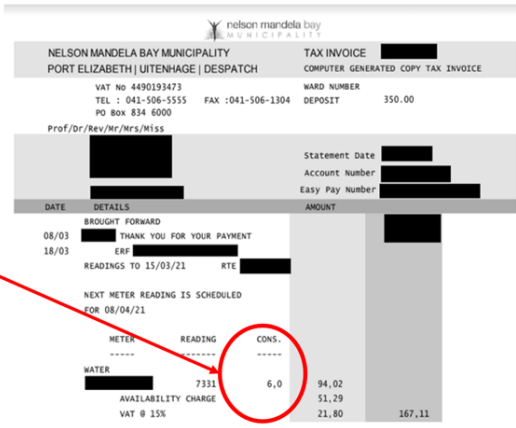
- Don't bath. Have a 2 minute shower instead;
- Catch your shower water in a bucket and use this to flush the toilet, and don't flush the loo unless really necessary, and use grey/recycled water where possible;
- Don't ever leave the tap running unless absolutely critical;
- Talk about what you're doing 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):

- Read your meter daily to see how much water you use and find leaks as soon as they occur;
- Reduce your water pressure by partially closing the tap at your meter;
- 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. For example, if 4 people live in your house, your water bill should reflect consumption of no more than 6.0 kl/month:

READ YOUR WATER BILL		
NUMBER OF PEOPLE IN HOUSEHOLD		MONTHLY WATER BILL VOLUME
	<b>1</b>	<b>1.5</b>
	<b>2</b>	<b>3.0</b>
	<b>3</b>	<b>4.5</b>
	<b>4</b>	<b>6.0</b>
	<b>5</b>	<b>7.5</b>
	<b>6</b>	<b>9.0</b>
	<b>8</b>	<b>12.0</b>
	<b>10</b>	<b>15.0</b>
<b>(household size)</b>		<b>(kilolitres per household)</b>

**For example, for a household of 4:**



The screenshot shows a water bill with the following details:

- Customer:** Prof/Dr/Rev/Mr/Mrs/Miss
- Statement Date:** [Redacted]
- Account Number:** [Redacted]
- Easy Pay Number:** [Redacted]
- DATE** | **DETAILS** | **AMOUNT**
- 08/03 BROUGHT FORWARD
- 18/03 THANK YOU FOR YOUR PAYMENT
- 18/03 ERF [Redacted] RTE [Redacted]
- READINGS TO 15/03/21
- NEXT METER READING IS SCHEDULED FOR 08/04/21
- METER READING CONS.
- WATER [Redacted] 7331 6,0 94,02
- AVAILABILITY CHARGE 51,29
- VAT @ 15% 21,80
- TOTAL:** 167,11

**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.

## Report Water Leaks in one of three ways:

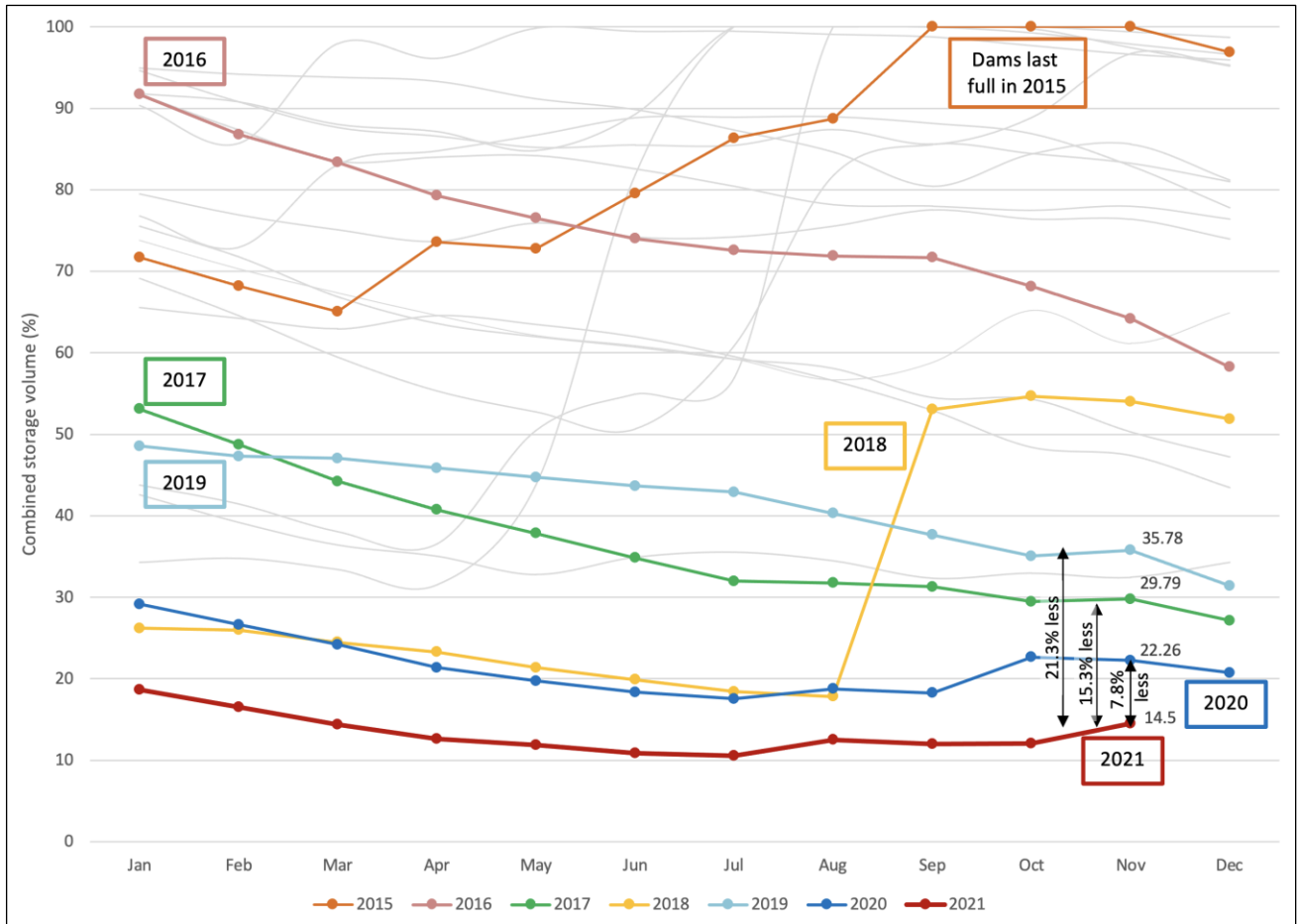
- Call Centre: 0800 20 5050
- Email: [waterleaks@mandelametro.gov.za](mailto:waterleaks@mandelametro.gov.za)
- Smart phone: Download NMBM App and log an incident.

For further communication material, see:

[https://nelsonmandelabay.gov.za/DataRepository/Documents/watersavingtipsbooklet\\_JJvh0.pdf](https://nelsonmandelabay.gov.za/DataRepository/Documents/watersavingtipsbooklet_JJvh0.pdf)

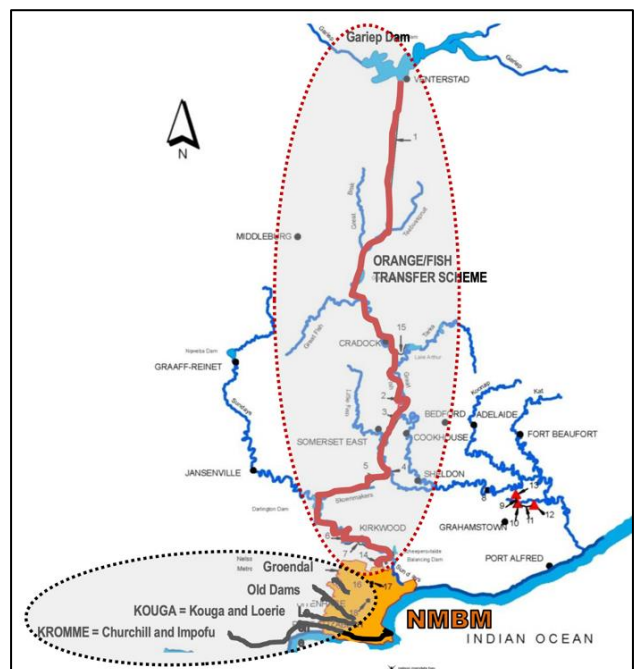
**BACKGROUND AND TECHNICAL INFORMATION:**

Recent rainfall has resulted in an increase in local dam levels to 14.5%, but this is still a desperately low level of storage – nearly 8% lower than a year ago, and 21% lower than in 2019. We cannot afford to reduce our efforts now. In fact, restrictions will only be relaxed if storage increases to above 65% before July 2022. Combined storage volume of local dams serving Nelson Mandela Bay are shown here.



Taps running dry is not something any city wants to consider to be possible. But running dry is a definite threat in Nelson Mandela Bay (NMB) right now. The region has been classified as a drought disaster, and not without cause. 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. 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 NMB permanently. 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.

Nelson Mandela Bay gets its water from two main sources. When supply is not restricted, just less than half the water is supplied through the Nooitgedagt scheme from the Gariep dam, which is currently nearly 90% full. Under non-drought conditions, the local dams



to the west of NMB provide just more than half of the city's water (i.e. unrestricted allocation). This supply is from the Kromme and Kouga sub-systems, the Groendal dam and a number of Older Dams. In the current drought conditions with restrictions on the local dams, Nooitgedagt provides around two-thirds, and the local dams only one-third of NMB's water. We need to stretch the available storage in local dams to last as long as possible while we connect infrastructure and reduce overall demand.

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

DWS Curtailment of Water Sources							
Component			Licenced Volumes		Restrictions		
Sub-system	Category	Consumer			2021/22		
			Mm3/a	MLD	Curt.%	Mm <sup>3</sup> /a	MLD
Kouga	Irrig.	Gamtoos IB	60.3	165.2	85%	9.0	24.8
	Loss	Canal	6.9	18.9	20%	5.5	15.1
	Urban	Hankey	0.5	1.4	65%	0.2	0.5
	Urban	Patensie	0.4	1.1	65%	0.1	0.4
Loerie	Urban	NMBM	23.0	63.0	85%	3.5	9.5
Kromme: Churchill+ Impofu	Urban	NMBM	38.1	104.3	70%	11.4	31.3
	Irrig.	Kromme	2.0	5.5	70%	0.6	1.6
	Env.	Release	2.0	5.5	100%	0.0	0.0
Groendal	Urban	NMBM	4.4	12.1	50%	2.2	6.0
	Irrig.	Release	2.4	6.6	70%	0.7	2.0
Uitenhage Springs	Urban	NMBM	2.2	5.9	0%	2.2	5.9
Old Dams	Urban	NMBM	3.3	9.0	0%	3.3	9.0
Sundays	Urban	NMBM	58.3	159.7	0%	58.3	159.7
Total for Existing Algoa System	All	All	203.8	558.2	52%	97.1	265.8
	Urban	NMBM only	129.3	354.1	37%	80.9	221.5

To avert disaster, we have developed an updated system optimisation plan that allows us 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.

The system is not yet fully integrated. To date, system integration has been supported by extending Nooitgedagt water to other areas, including large portions of Kwanobuhle via the Bloemendal pipeline. Critical components of drought intervention projects will come online by end April 2022. We thus have to stretch the supply system to match, so that the local dams don't run dry before May 2022, at which point we will be able to better distribute the available water from Nooitgedagt across the entire NMB.

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 early next year. The Kouga system (Kouga and Loerie Dams) is not managed by the municipality, and we need to adhere to an 85% curtailment.



stream to augment the water supply and we will continue attending to other maintenance matters such as bursts and leaks. We know that our customers have been complaining that our infrastructure is failing and that the municipality is slow to fix leaks and reduce water loss. 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 programs, 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.

We have worked hard to improve this and get additional capacity to shorten the length of time it takes, so that we lose less water. The impact of our efforts will be evident in the coming weeks.

Together we CAN avoid our taps running dry.