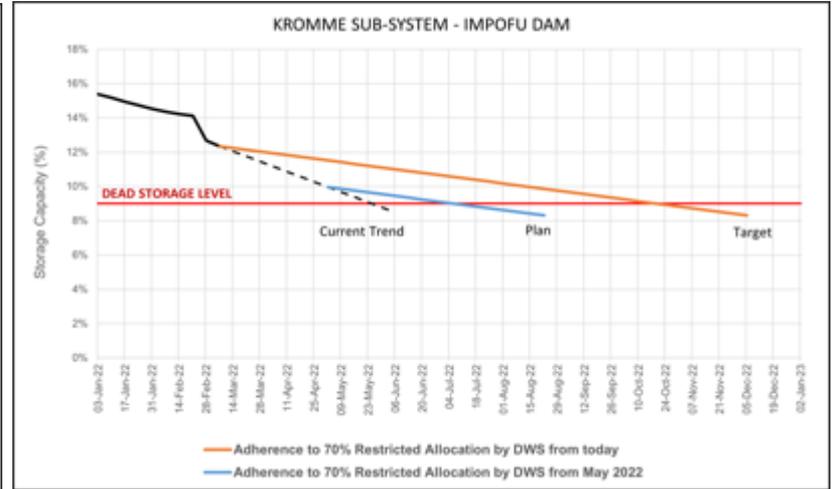
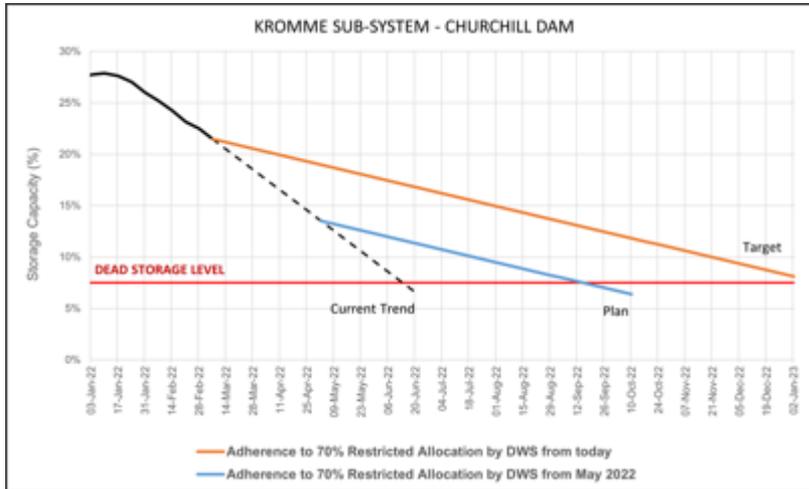
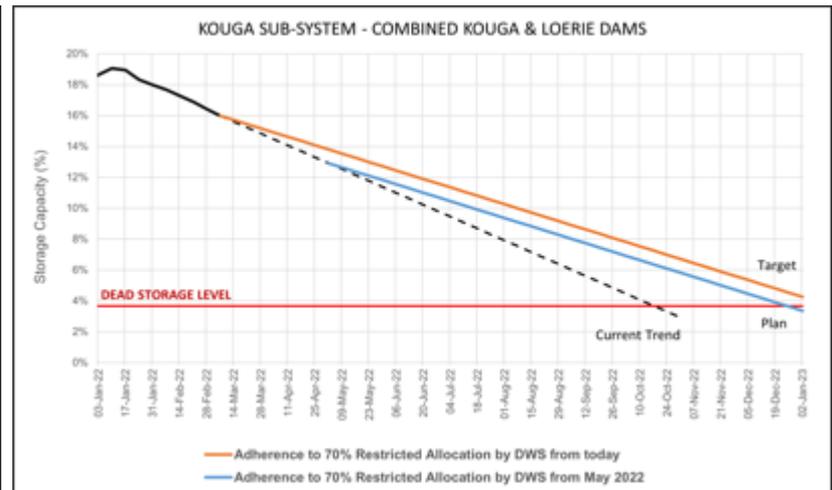
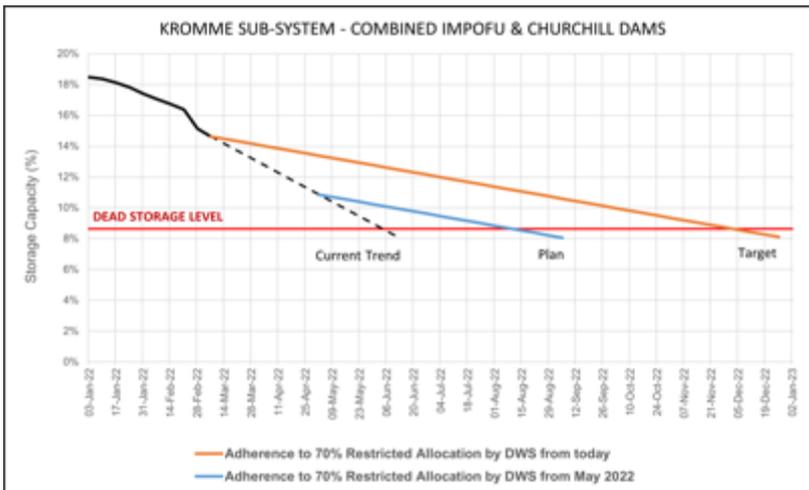


Increase in local dam draw-down has put us in a precarious position at risk of taps running dry



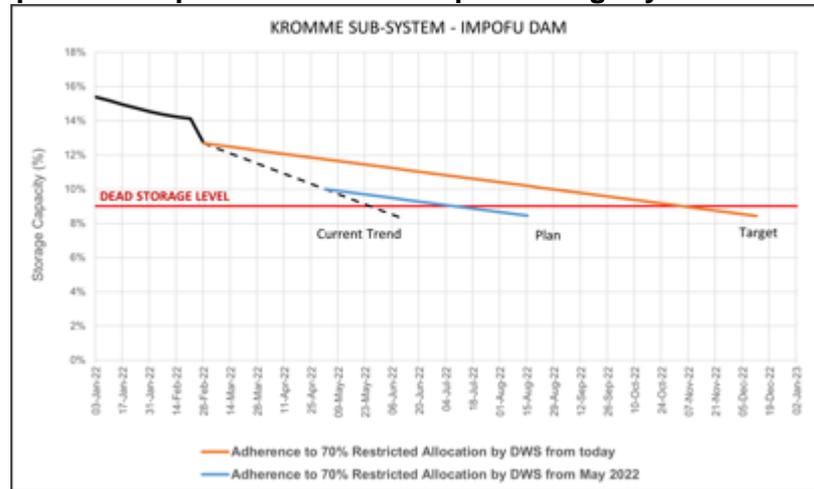
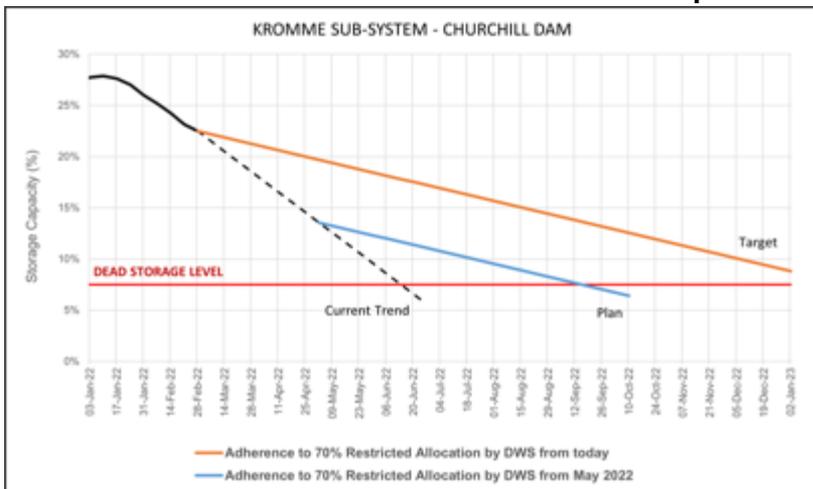
Rainfall in local catchments so far in 2022 has been too little to positively impact dam levels. Abstraction has been increased to compensate for Grassridge temporary treatment plant being temporarily de-commissioned. At the current rate of abstraction, Impofu will run dry by **24 May 2022**, and Churchill by **13 June 2022**. If all goes to plan and the Kwanobuhle pumpstation is functionally complete in May, then the life of the Kromme system as a whole will be extended from early in June to mid-August 2022. Thereafter the Kromme system will deliver no water.



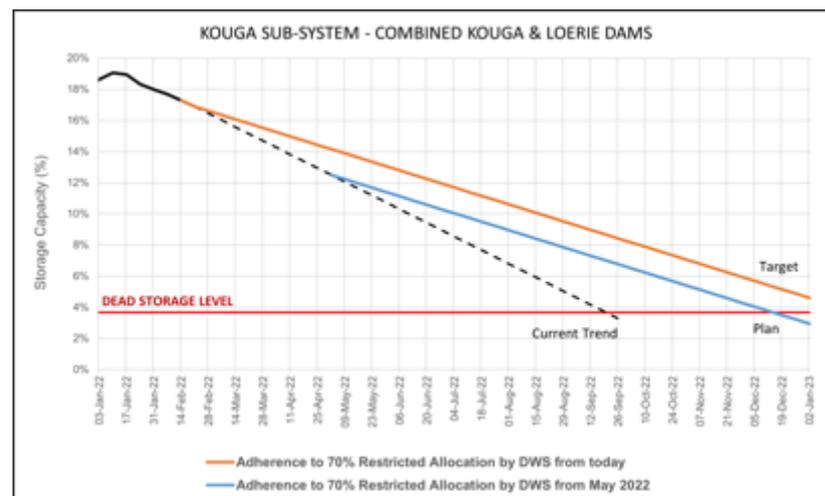
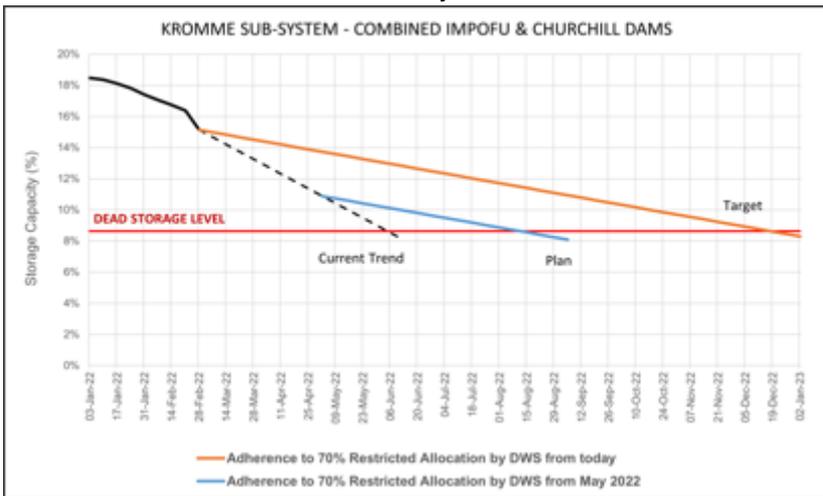
At current storage, the Kouga system will be able to provide water until mid-October 2022, and Groendal until November 2022.

NMBM IS OVER-ABSTRACTING FROM LOCAL DAMS AND CONTRAVENING DWS GAZETTED RESTRICTIONS!

Increase in local dam draw-down has put us in a precarious position at risk of taps running dry



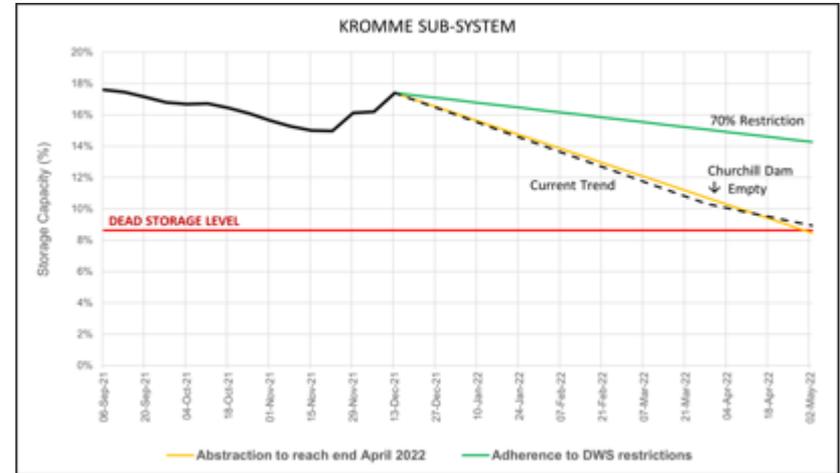
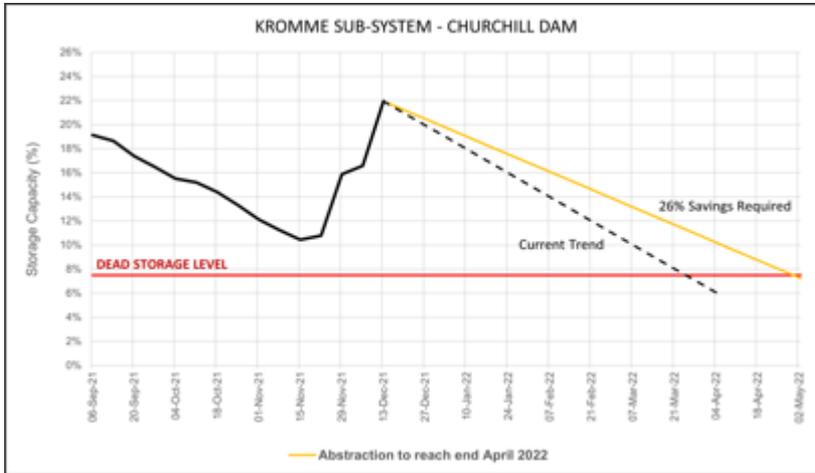
Rainfall in local catchments so far in 2022 has been too little to positively impact dam levels. Abstraction has been increased to compensate for Grassridge temporary treatment plant being temporarily de-commissioned. At the current rate of abstraction, Impofu will run dry by **25 May 2022**, and Churchill by **13 June 2022**. If all goes to plan and the Kwanobuhle pumpstation is functionally complete in May, then the life of the Kromme system as a whole will be extended from early in June to mid-August 2022. Thereafter the Kromme system will deliver no water.



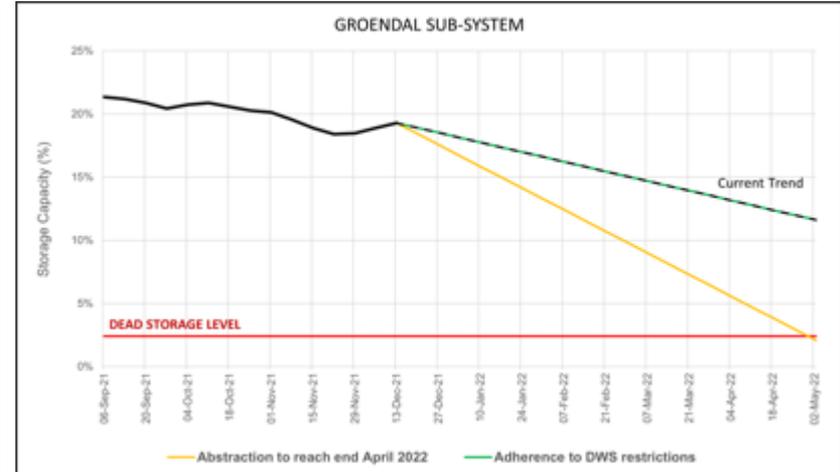
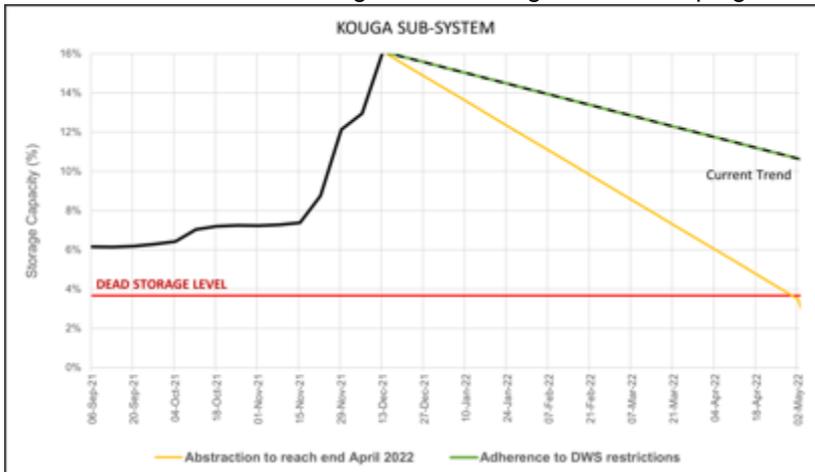
At current storage, the Kouga system will be able to provide water until September 2022.

NBM IS OVER-ABSTRACTING FROM LOCAL DAMS AND CONTRAVENING DWS GAZETTED RESTRICTIONS!

Recent rainfall in the local catchment areas has raised dam levels some more since reported a week ago:



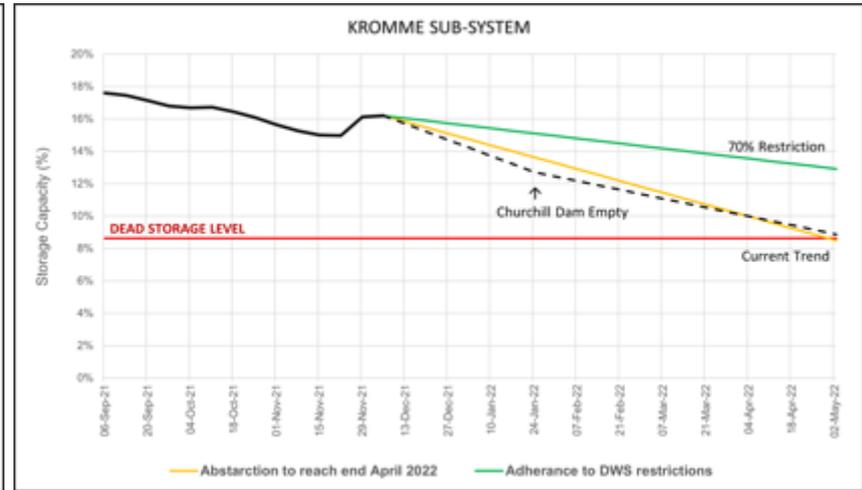
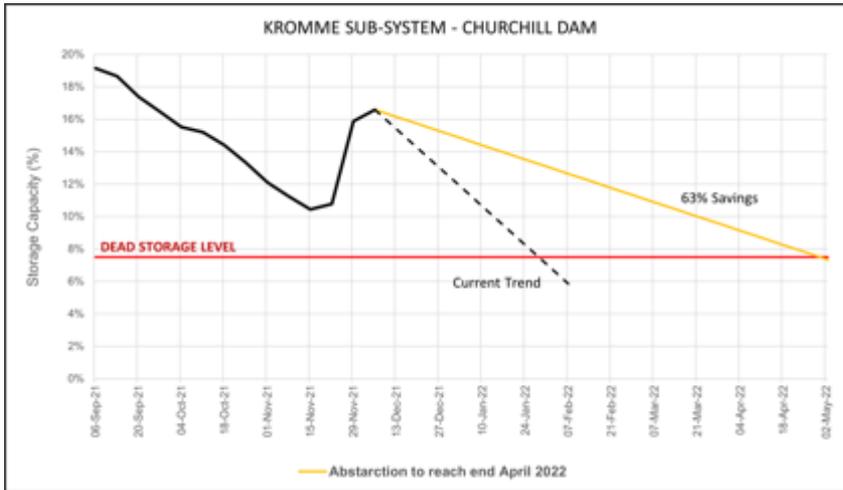
Taps won't run dry before Christmas, but we must still reduce our demand as we are not managing to adhere to the restrictions required by DWS. At the current drawdown rate of close to 45 Mℓ/day, the Churchill dam will fail late in March 2022. To protect the Kromme Sub-System we must reduce current drawdown from the Churchill dam by 26% (to about 33 Mℓ/day). Without the Churchill dam, the maximum volume that the Municipality will be able to supply from the Kromme Sub-System will reduce to just 55 Mℓ/day. Churchill dam production had to be increased in the past two weeks to compensate for reduced supply from other sources due to urgent unplanned maintenance, but we have started reducing abstraction again while keeping reservoirs balanced.



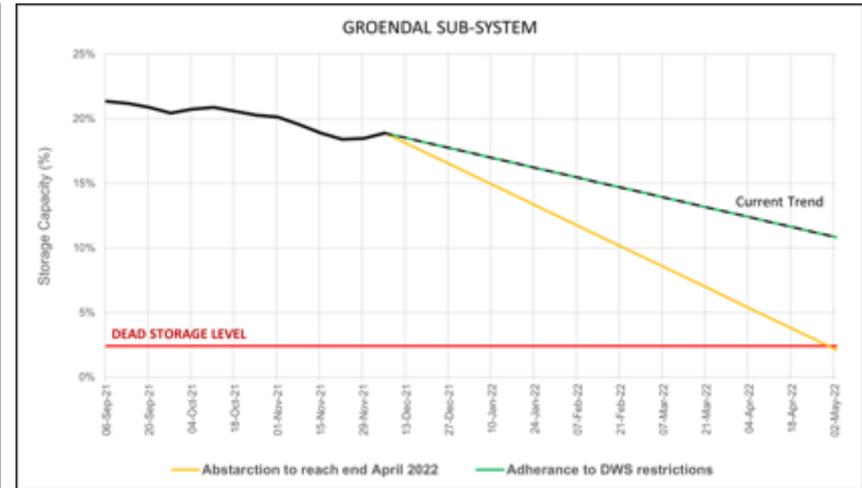
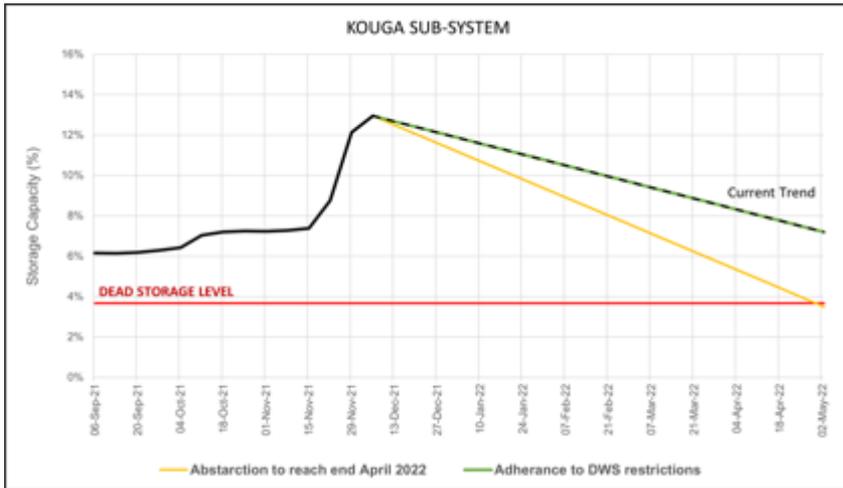
At current storage, both the Kouga system and the Groendal Sub-System will be able to provide water until beyond May 2022.

We are not out of the woods – a year ago, dam levels were approximately 6% higher at 22%

Recent rainfall in the local catchment areas has raised dam levels marginally since reported a week ago:



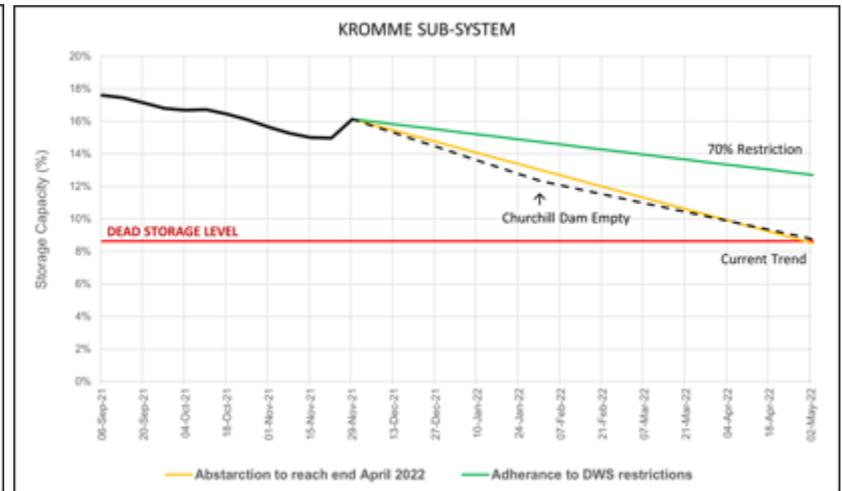
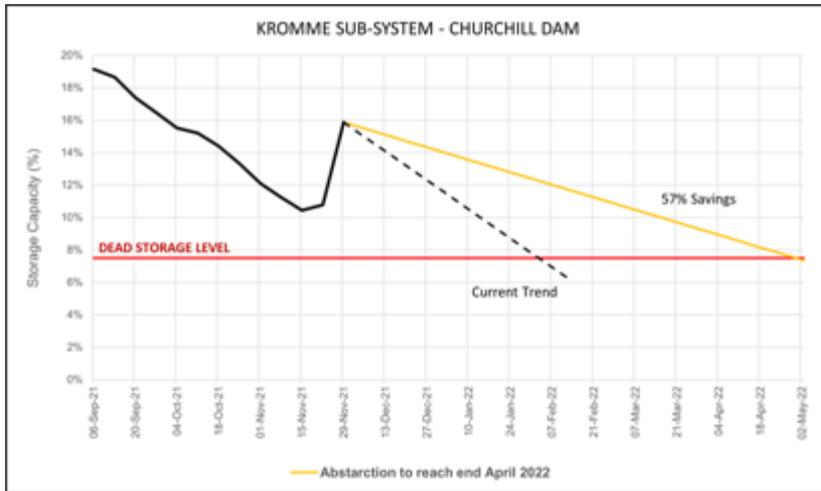
This means that taps are unlikely to run dry before Christmas. But importantly, at the current drawdown rate of close to 60 Mℓ /day, the Churchill dam will fail by the beginning of February 2022. Immediate demand reduction is required, else certain reservoirs will run empty, and taps will be dry. To protect the Kromme Sub-System we must reduce current drawdown from the Churchill dam by 63% (to about 20 Mℓ/day). Without the Churchill dam, the maximum volume that the Municipality will be able to supply from the Kromme Sub-System will reduce to just 55 Mℓ/day. Churchill dam production had to be increased in the past two weeks to compensate for reduced supply from other sources due to urgent unplanned maintenance.



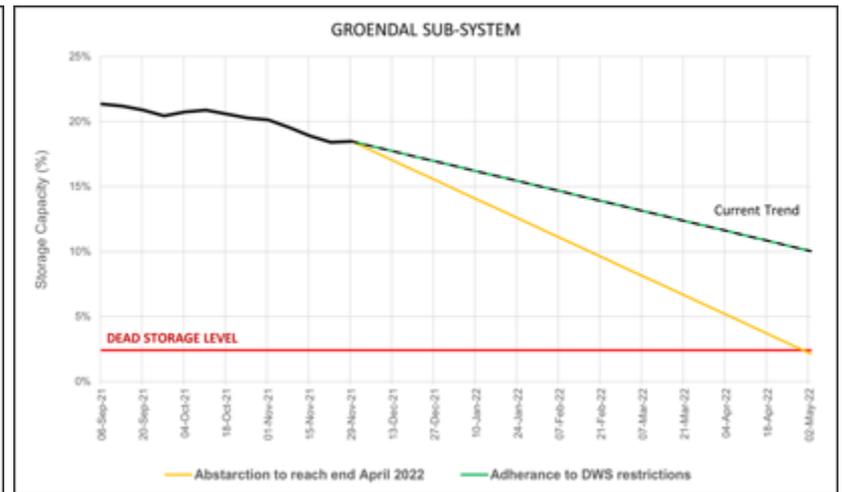
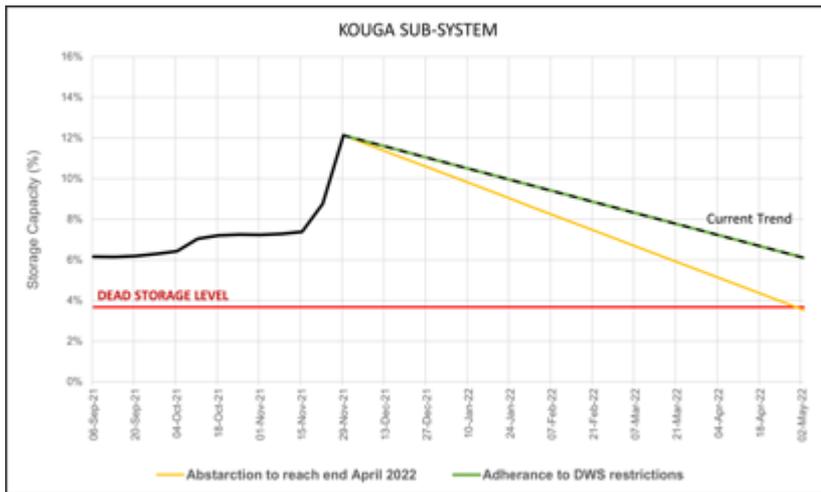
At current storage, both the Kouga system and the Groendal Sub-System will be able to provide water until beyond May 2022.

We are not out of the woods – a year ago, dam levels at the end of November were 8% higher at 22.26%.

Recent rainfall in the local catchment areas has raised dam levels marginally since reported 2 weeks ago:



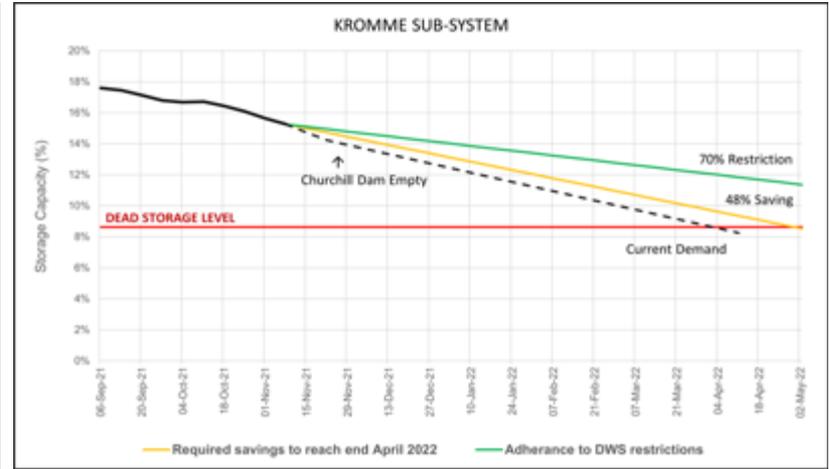
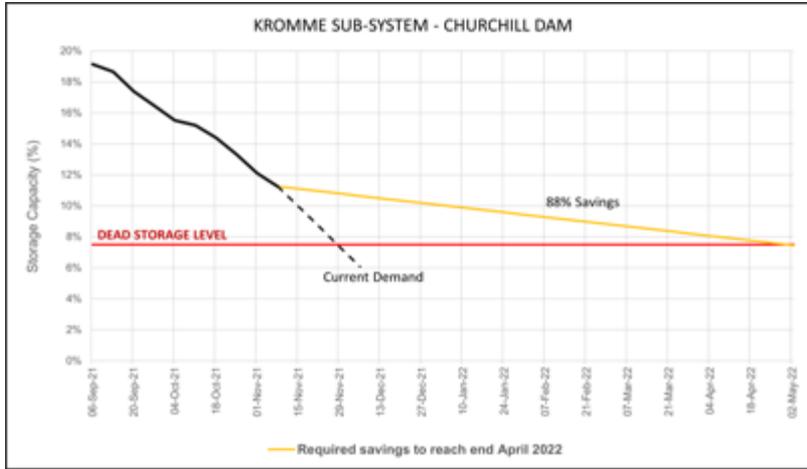
This means that taps are unlikely to run dry before Christmas. But importantly, at the current drawdown rate, the Churchill dam will fail by the beginning of February 2022, meaning that the Kromme Sub-System will fail to meet the demands currently being placed on it. Immediate demand reduction is required, else certain reservoirs will run empty, and taps will be dry. To protect the Kromme Sub-System we must reduce current drawdown from the Churchill dam by 57% (to 20 Mℓ/day). Without the Churchill dam, the maximum volume that the Municipality will be able to supply from the Kromme Sub-System will reduce to just 55 Mℓ/day.



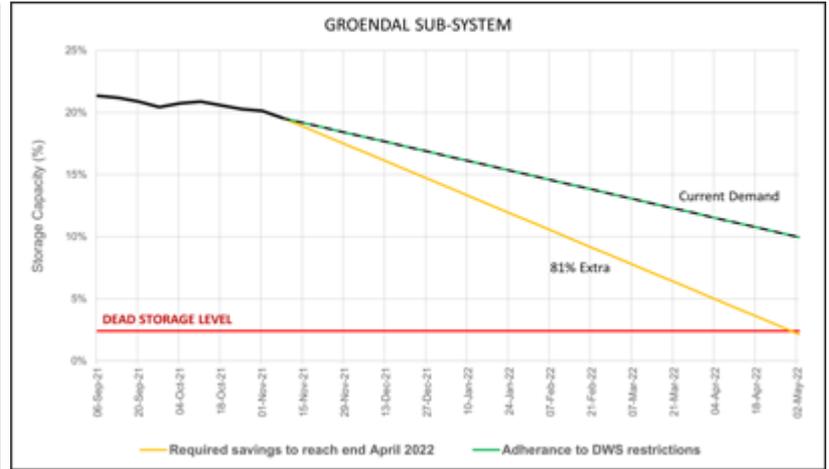
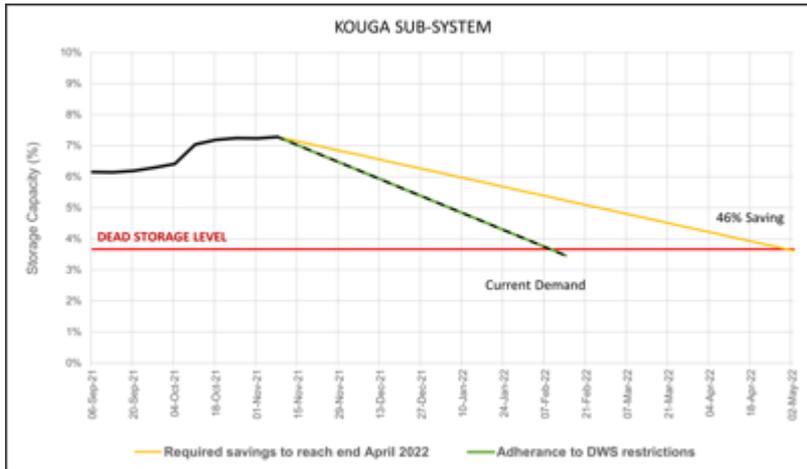
At current storage, both the Kouga system and the Groendal Sub-System will be able to provide water until beyond May 2022.

We are not out of the woods – a year ago, dam levels were 8% higher at 22.26%.

To further explain why the 20% and 40% demand reduction is crucial, we have prepared some graphs on dam drawdown:



At current drawdown rate, the Churchill dam will fail by the end of November 2021. The Impofu dam will continue to provide water until the start of May 2022, but as a system, the Kromme Sub-System will fail to meet the demands currently being placed on it. Immediate demand reduction is required, else certain reservoirs will run empty and taps will be dry. To protect the Kromme Sub-System we must immediately reduce current drawdown from the Churchill dam by 88%, and the Impofu dam by 48%. Without the Churchill dam, the maximum volume that the Municipality we will be able to supply from the Kromme Sub-System will reduce from 95MI/day to just 55MI/day.



At current storage, the Loerie balancing dam will run dry before Christmas. Fortunately, the Loerie balancing dam is supplemented by releases from Kouga dam, which means that if all users adhere to the total restricted allocation of 50.25MI/day, the Kouga system will fail on 8 February 2022. The NMBM's Kouga Sub-System restricted allocation of 9.45MI/day cannot be exceeded. We do not anticipate that the Groendal Sub-System will fail within this critical period.