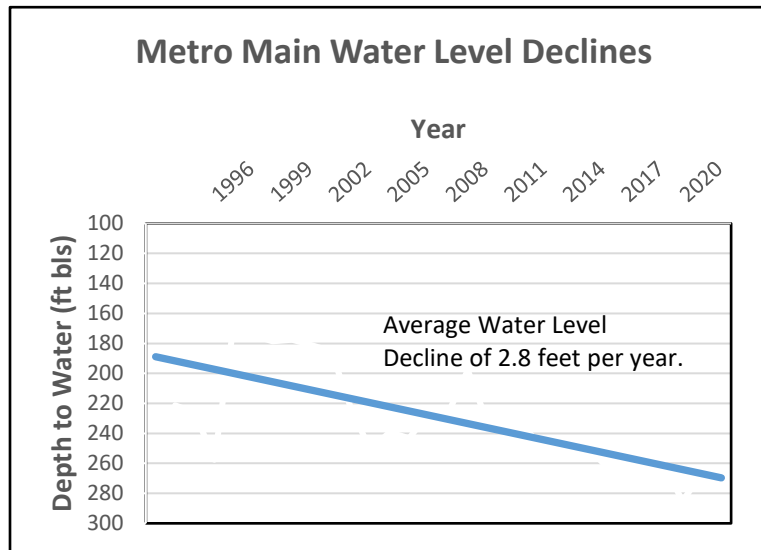


Metropolitan Domestic Water Improvement District Drought Preparedness and Response Plan April 10, 2023

Arizona is in the midst of a prolonged drought that has various impacts on our environment. Regarding water supplies in Southern Arizona, the drought does not immediately equate to water shortage, however, climate research suggests that reductions in precipitation locally and on the Colorado River flows will be pervasive in the future. This can affect the long-term physical availability of groundwater supplies that Metro Water District (District) relies on.

The District has a 100-year Assured Water Supply Designation from the State of Arizona, and has been steadily working toward the use of renewable supplies rather than relying solely on groundwater. The District has a CAP water allocation of 13,460 acre-feet per year. This water is stored in recharge projects and recovered to meet annual customer demands. Customer demands annually have been less than the CAP allocation that is recharged, which creates long-term storage credits that can be recovered in the future when CAP supplies are potentially reduced due to the impacts of climate change on the Colorado River Basin.

During the last 25 years, the District has seen the decline in water levels in its wells intensified in large part to the drought. Metro Main wells have been declining on average almost three feet per year. With reduced natural recharge occurring due to lack of precipitation and overall water demand staying the same, the cumulative decline in well levels becomes more distinct.



The Arizona Department of Water Resources requires that

all water providers have a Drought Preparedness Plan. With increasing levels of shortage anticipated for 2023 through 2026 in the Colorado River System, maintaining a robust drought plan and implementation of the Northwest Recharge, Recovery and Delivery System (NWRRDS) is imperative. The NWRRDS project is a system of recovery wells, transmission pipelines, a forebay and booster pumps designed to bring renewable water resources into the Metro Main service area. The construction of NWRRDS will physically recover stored CAP water resources in lieu of declining groundwater that will be crucial to sustainably meeting customer needs in the long term. the District's Drought Preparedness Plan and NWRRDS are critical elements

necessary to respond to a reduction of available groundwater supply due to continued drought and impacts of climate change.

The District's Drought Preparedness and Response Plan includes measures initiated based on the severity of the drought impacts to physically available water supplies. Since the District is not a municipality with enforcement capabilities, the District must rely on customers to voluntarily comply with requests for water reduction. The District can also implement a drought surcharge to the rate structure, limit potable water for construction uses, and not approve water service agreements for new construction projects in the most severe drought response stage. The main focus of the Drought Preparedness and Response Plan is to continue its overall objective of sound water management. A primary tool is the current cooperation with Oro Valley and Marana to construct the NWRRDS. By recovering stored CAP water where it is recharged and conveying this renewable water to the Metro Main service area, groundwater pumping can be reduced. This reduction in groundwater pumpage will reduce or eliminate the historical water level declines in each provider's respective service areas.

Drought Response Measures

A **Stage 1 (Alert)** drought response will be declared by the Board, on the advice of the General Manager, when a shortage is declared in Lake Mead which is when water levels are between 1090' and 1025' above sea level. Select response measures for this stage include:

- Increase customer awareness about the drought and water resources through education.
- Work with Pima County to put in place ordinances that strengthen the regions water conservation ethic.
- Work with neighboring water providers to look at cooperative efforts that include providing emergency interconnections as well as joint conservation efforts.
- Continue overall water management efforts to use renewable water supplies by constructing NWRRDS starting in 2024.
- Hotels and restaurants will be asked to initiate measures for conserving water, such as providing water only on request and washing sheets and towels only if requested.

A **Stage 2 (Warning)** drought response also will be declared by the Board, on the advice of the General Manager, when any shortage is imposed on the District's current CAP allocation. Select response measures for this stage include:

- Continuation of all Stage 1 actions.
- Request customers to limit landscape irrigation to two days per week between 8:00 p.m. and 8:00 a.m. and avoid other outdoor water uses.
- Continue efforts to fully utilize the capacity of NWRRDS to reduce groundwater use in the Metro Main service area

A **Stage 3 (Emergency)** drought response will be declared by the Board, upon the recommendation of the General Manager, when the District must start using Long Term Storage Credits (LTSC) to offset shortages to its CAP allocation. Select response measures for this stage include:

- Continuation of all previous actions under Stage 1 and 2.
- The Board will consider instituting a drought surcharge to Tier 4 of the rate structure.

- Additional voluntary water reduction measures will be requested from customers including the limiting of landscape irrigation to one day per week between 8:00 p.m. and 8:00 a.m.
- In addition to avoiding outdoor water uses, customers will be asked not to empty or fill their pools.

A **Stage 4 (Crisis)** drought response will be declared by the Board, upon the recommendation of the General Manager, when the District must use 1,750 or more acre-feet per year of LTSCs to offset shortages to its CAP allocation as this level of LTSC use could potentially impact the District's ability to meet the requirements for the 100-year Designation of Assured Water Supply. Select response measures for this stage include:

- Continuation of Stage 1, 2, and 3 response actions.
- No new water service agreements will be approved.
- The Board will consider instituting a drought surcharge to Tier 2 and Tier 3 of the rate structure in addition to the one for Tier 4.
- Customers will be requested to limit landscape irrigation **ONLY** to trees and shrubs one day per week between 8:00 p.m. and 8:00 a.m. and no irrigation of turf or ground covers.