



City of Santa Barbara
Public Works Department

Memorandum

DATE: November 18, 2021
TO: Water Commission
VIA: Joshua Haggmark, Water Resources Manager
FROM: Madeline Wood, Water Conservation Supervisor
SUBJECT: Water Conservation Roundup

Staff will provide information on the long-term water demand management measures employed by the City as part of water supply planning. Staff will also provide information on short-term, extraordinary demand management measures that can be used in times of drought, or other water shortage emergencies.

Water Conservation Strategic Plan

The 2020 Water Conservation Strategic Plan (Conservation Plan) was prepared by City staff and Maddaus Water Management, Inc. to enable the City to project long-range water demands, identify attainable conservation goals, develop strategies, and raise awareness through the identification and prioritization of conservation measures. The Conservation Plan includes a cost-effective suite of water conservation measures that will help the City meet future water demands.

The purpose of the analysis and foundation of the Conservation Plan was fourfold:

1. Project future water demands by using current, historical, and projected population growth rates, along with new commercial growth rates.
2. Evaluate current conservation measures, and identify new measures to reduce future water demands by using a set of applicable criteria.
3. Quantify the costs and water savings of these measures.
4. Combine the measures into increasingly aggressive programs, and evaluate the costs and water savings of these programs.

The planning process included analyzing more than 100 conservation measures targeted for existing water customers of all categories and building codes for new development. By combining new initiatives with existing programs, the City's conservation activities identified within the Conservation Plan are expected to save an estimated 2,615 acre-feet of water per year in 2050.

Water Conservation has been a long-term priority for the City, and is considered a water supply. A supply assessment is conducted annually by the City in which the water saved through conservation is regarded as equal to other water supply options. The City's commitment to

water conservation has been evidenced by reductions in water demands over the past 30 years. Current community water use has decreased to the same level it was in the 1950s, despite the population more than doubling since that time.

Water use efficiency in the City is supported by coordinating conservation initiatives and programs to achieve a holistic approach to providing each customer within the service area with the tools needed to conserve water. The City has a robust conservation program with demand management measures targeted toward residential water use, commercial water use, outdoor water use efficiency, youth education programs, and public information including:

- Landscape Design Standards for development
- Water Checkups
- Dedicated irrigation meter budgets
- Rebates on Flume water monitoring, mulch delivery, and high efficiency washing machines
- Commercial survey and incentive program
- Restaurant and lodging programs
- Green Gardener Program
- Garden Wise TV show
- Graywater resources
- Rainwater harvesting resources
- Demonstration gardens
- Recognition programs
- Online resources
- Youth education

Water Shortage Contingency Plan

The Water Shortage Contingency Plan (Shortage Plan) is a detailed plan for how the City intends to respond to water shortages. A water shortage occurs when the water supply is reduced to a level that cannot support typical demand at any given time. The Shortage Plan is used to provide guidance to the City's elected officials, staff, and the public by identifying response actions to allow for efficient management of water shortages with predictability and accountability. The Shortage Plan provides tools to maintain reliable supplies and reduce the impacts of supply interruptions caused by extended drought or catastrophic supply interruptions. The 2021 Water Shortage Contingency Plan is a stand-alone document that was adopted separately from, but at the same time as, the Enhanced Urban Water Management Plan and can be modified as needed.

Two key components of the Shortage Plan related to water shortage response include:

- Shortage Stages: The City's water shortage planning addresses supply shortages ranging from a slowly developing drought to sudden and potentially catastrophic

interruptions, such as earthquakes and/or failure of major water system components. Consistent with past plans and experience with severe droughts, including the most recent record drought, this plan uses four stages to structure the City's response to water shortages. It reflects the City's experience that each shortage situation is different and that flexibility is needed to respond to developing water supply conditions. This is especially important with the increasing diversity of the City's water supply portfolio and the need to comply with State mandates regarding water reduction targets and water use regulations.

- **Shortage Response Actions:** The Shortage Plan identifies various actions to be considered by the Water Commission and City Council during the various water shortage stages, including public information, water conservation assistance, supply augmentation, water use regulations, development approvals, and demand tracking. In the event of a water shortage emergency, the City will evaluate the cause of the emergency to help inform which response actions should be implemented. Depending on the nature of the water shortage, the City can elect to implement one or several response actions to mitigate the shortage and reduce gaps between supply and demand.

Rather than absolute direction, the Shortage Plan is intended to provide guidance for City action in response to water shortages. It also is intended to provide the City with options for responsibly managing water shortages. As during past droughts, staff continues to monitor drought response and direction from state agencies as the City's water shortage actions are adaptive to direction from the state. During the most recent drought period, state-prescribed mandatory demand reductions and water use regulations were required for urban water suppliers regardless of the supplier's water shortage stage, staff anticipates similar state direction in future drought periods.