

# Projected Brackish Water Desalination Projects in California

California's Water Supply Strategy: Adapting to a Hotter, Drier Future (Water Supply Strategy), adopted by the Newsom administration in 2022, identifies multiple actions necessary to bolster water supply reliability in the face of climate change. The first set of actions drive the development of new water supplies and set explicit goals for expanding the production of both recycled and desalinated water. Action 1.2 includes specific targets for expanded brackish water desalination production: 28,000 acre-feet per year by 2030, and 84,000 acre-feet per year by 2040.

The Water Supply Strategy directs the Department of Water Resources (DWR) and the State Water Board, in coordination with local agencies, to identify, by January 1, 2024, the brackish desalination projects that have the potential to be operational between 2023 and 2040.

DWR has completed an assessment of future planned desalination projects to meet the brackish water desalination goals identified in the Water Supply Strategy. The assessment identified projects that will increase brackish groundwater and brackish surface water desalination production by 39,600 acre-feet per year and 3,000 acre-feet per year, respectively, by 2030, and 500 acre-feet per year of brackish groundwater desalination production by 2040. At this time, DWR's assessment identified projects that will project to achieve the 2030 goal but does not identify enough planned brackish water desalination projects to project to meet 2040 goals. Note: The assessment does not include information related to seawater desalination projects because the Water Supply Strategy directs DWR and the State Water Board to identify only brackish desalination projects sourcing brackish groundwater and brackish surface water.

Information included in the assessment was compiled from 2020 urban water management plans (UWMPs) submitted to DWR and from direct communication with local water suppliers and operators. UWMPs provide the best estimate of future water supplies to date because UWMP preparers are required by State law to provide information on planned new water supply projects and reliability of water supplies under both normal and drought conditions. There are four more five-year iterations of UWMPs that could inform on more planned projects to meet 2040 goals.

DWR has provided more than \$123 million in grant funds to support local agencies implementing desalination projects for the three types of water sources for desalination. Projects funded by DWR include four brackish water desalination facilities that are either operating, under construction, or in the permitting process. The four brackish water desalination facilities are the City of Torrance Goldsworthy Desalter Expansion (brackish groundwater), the City of Camarillo North Pleasant Valley Desalter (brackish groundwater), City of Antioch Brackish Water Desalination Project (brackish surface water), and City of Santa Monica Brackish Desalter Production Efficiency Enhancement (brackish groundwater). These desalination facilities will provide additional local water supply, which will help to achieve the 2030 goals.