# Drought planning and management for urban water suppliers

This data resource aims to pilot an approach for providing usable data for analyses related to drought planning and management for urban water suppliers--ultimately contributing to improvements in communication around drought. These analyses require synthesizing disparate data sources across the Department of Water Resources (DWR) and the State Water Resources and Control Board (SWB) in a standard format and maintaining these derived datasets to ensure access to timely data. This resource includes a data management plan describing its development and maintenance. Below are summaries of the datasets included in this package.

**monthly\_water\_shortage\_outlook**

This table provides forecasted monthly (and annual) potable water shortage (or surplus) with and without shortage actions for a dry year. The Annual Water Supply and Demand Assessment (AWSDA) reports this data. All data reported through the AWSDA are available on the Department of Water Resource’s Water Use Efficiency (WUE) portal (<https://wuedata.water.ca.gov/wsda_export>). The most recent AWSDA guidance is available here: <https://wuedata.water.ca.gov/public/public_resources/3517484366/AWSDA-Final-Guidance-4-2022.pdf>. See pages 30-35 for information about the data elements in the monthly\_water\_shortage\_outlook table. Methodology guidance is included in this report, though it is not implemented consistently across urban water suppliers.

*Guidance for data use:* The primary function of the AWSDA is to motivate planning processes for water shortages. These data represent forecasts specific to the urban supplier and a snapshot in time based on the conditions when the supplier the plan. These data are expected to change as conditions change and water shortage plans are updated. These data can only be used within the year they are reported for, though if the forecasted water year is not dry, they are unreliable.

**five\_year\_water\_shortage\_outlook**

This table provides anticipated annual potable water levels (both surplus and shortage) with shortage actions and without shortage actions for five years based on the five driest consecutive years on record. The Urban Water Management Plans (UWMP) reports this data. All data reported through the UWMP are currently available on the WUE portal (<https://wuedata.water.ca.gov/wsda_export>) and the California Natural Resources Open Data Portal (https://data.cnra.ca.gov/dataset/2020-uwmp-data-export-tables). The most recent UWMP guidance is available here: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/UWMP-Guidebook-2020---Final-032921.pdf>. See 7-20 through 7-34 for information about the data elements contained in the five\_year\_outlook table.

*Guidance for data use:*

**number\_sources**

This table summarizes the number of unique water supply sources by year and supplier. These data were historically submitted in the Electronic Annual Report (eAR) and are currently available on the eAR landing page (<https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/ear.html>). The structure and naming conventions have changed over time. Beginning in 2024, this information will be captured in the SAFER Clearinghouse through the Drought and Technical Reporting Order.

*Guidance for data use:*

**source\_name**

This table summarizes the water source type, status, and location by public water system for a given period. These data are submitted through the SAFER Clearinghouse.

*Guidance for data use:*

**drought\_risk\_assessment**

This table summarizes…

*Guidance for data use:*

**id\_crosswalk**

This table summarizes…

*Guidance for data use:*

**population**

This table summarizes…

*Guidance for data use:*

**production\_delivery\_volume**

This table summarizes…

*Guidance for data use:*

**water\_shortage\_level**

This table summarizes…

*Guidance for data use:*