ABOUT THE MODESTO & TURLOCK SUBBASINS

WHAT IS A SUBBASIN?

A groundwater basin is an underground reserve of water which may take the form of a single aquifer or a series of aquifers that has reasonably well-defined boundaries. A subbasin is a groundwater basin that is divided into smaller units - like the Modesto and Turlock Subbasins.

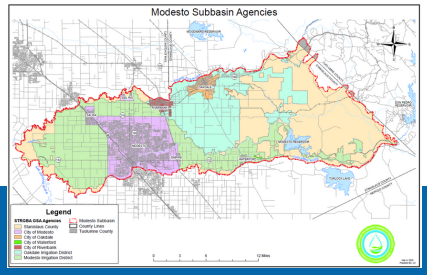
MODESTO SUBBASIN

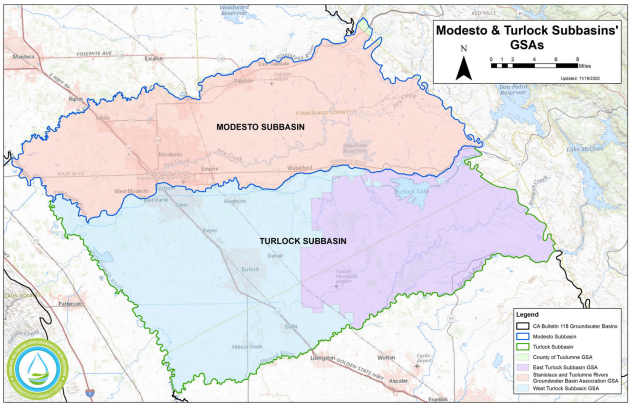
The Modesto Subbasin is approximately 247,000 acres located in Stanislaus County (with a small portion in Tuolumne County). It is part of the San Joaquin Valley Groundwater Basin (DWR* Basin 5-22.02). Three out of the four cities in the Modesto Subbasin - Oakdale, Riverbank and Waterford - rely solely on groundwater for their water resources. Groundwater is used conjunctively with surface water supplies to grow food, support dairies, and maintain the long-term vitality of our region's agricultural economy.

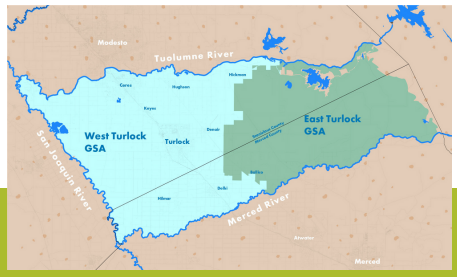
TURLOCK SUBBASIN

The Turlock Subbasin is approximately 347,000 acres and is part of the San Joaquin Valley Groundwater Basin (DWR Basin 5-22.03). The Subbasin is primarily supplied by the Tuolumne River, with a small portion also coming from the Merced River. The main source of groundwater recharge is from the import of surface water for irrigation. Currently, urban and domestic water uses rely entirely on groundwater for supply.

*DWR - Department of Water Resources







MODESTO SUBBASIN - HIGH PRIORITY

While not in a condition of critical overdraft, the Modesto Subbasin is categorized as a high priority basin by DWR based on the following scoring:

- Number of public supply wells: Approx. 190 or 0.5 per square mile (score 4 out of 5)
- Number of production wells: Approx. 4,000 or 10.5 per square mile (score 4 out of 5)
- Irrigated acreage: Approx. 119,000 acres or about 310 acres per square mile, covering approximately 48% of the Subbasin (score 4 out of 5)
- Groundwater use: Approx. 216,500 acre-feet (AF) or about 0.9 AF per acre (score 5 out of 5)
- Declining groundwater levels over long term

TURLOCK SUBBASIN - HIGH PRIORITY

While not in a condition of critical overdraft, the Turlock Subbasin is categorized as a high priority basin by DWR based on the following scoring:

- Number of public supply wells: Approx. 180 or 0.3 per square mile (score 3 out of 5)
- Number of production wells: Approx. 6,600 or 12 per square mile (score 4 out of 5)
- Irrigated acreage: Approx. 221,600 acres or about 410 acres per square mile, covering approximately 48% of the Subbasin (score 5 out of 5)
- Groundwater use: Approx. 475,500 AF or about 1.4 AF per acre (score 5 out of 5)
- Declining groundwater levels over long term

WHAT'S SGMA AND GSPs?

In September 2014, Governor Jerry Brown signed the Sustainable Groundwater Management Act (SGMA). SGMA sets the framework for statewide sustainable groundwater management by local agencies. SGMA requires, among other things, the formation of GSAs and the preparation of Groundwater Sustainability Plans (GSP). Groundwater basins subject to SGMA must achieve sustainability within 20 years of implementing their GSP.

STRGBA GSA

The Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) was formed to coordinate groundwater management activities and develop a GSP for the Modesto Subbasin. The seven participating members of the GSA are:

- City of Modesto
- City of Oakdale
- City of Riverbank
- City of Waterford
- Modesto Irrigation District
- Oakdale Irrigation District
- Stanislaus County

EAST AND WEST TURLOCK SUBBASIN GSAs

The Turlock Subbasin is made up of the the East Turlock GSA consisting of five public agencies and the West Turlock GSA consisting of 12 public agencies.

East Turlock GSA - Ballico-Cortez Water District, Eastside Water District, Merced County, Merced Irrigation District and Stanislaus County.

West Turlock GSA - City of Ceres, City of Hughson, City of Modesto, City of Turlock, City of Waterford, Delhi County Water District, Denair Community Services District, Hilmar County Water District, Keyes Community Services District, Merced County, Stanislaus County and Turlock Irrigation District.

TIMELINE FOR ACHEIVING SUSTAINABILITY IN THE MODESTO AND TURLOCK SUBBASINS

WHAT IS SUSTAINABILITY?

Sustainability refers to the management and use of groundwater in a manner that can be sustained during the 50-year GSP planning and implementation process without causing undesirable results.

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