

# **STANISLAUS COUNTY WATER ATLAS**

## **DEFINITION OF A WATER ATLAS**

The purpose of a Water Atlas for Stanislaus County is to provide an overall view of water supply and usage in the county via drawings, charts and spreadsheets based on data from local water agencies.

It would include reference and/or copies of laws, regulations and agreements dealing with water supply and usage in Stanislaus County.

It would include reports prepared by and for water agencies in the county.

It would include annual water supply and water use data collected by the various water agencies in the county most of which is reported to various State agencies.

It would include groundwater contours prepared annually covering the entire county.

## **BENEFITS OF A WATER ATLAS**

Provides a single location for access to a variety of data dealing with water supply and usage in the county

All persons interested in water supply and usage would have the same basic data to work with when discussing water issue.

As new reports and data develop they would be added to the water atlas keeping the water atlas current and useful.

It would be a useful tool for discussing water supply and usage issues with various groups around the county.

## **OVERVIEW**

What do we know about water supply and water usage in Stanislaus County?

### **MAP**

There are three basic areas to account for in the county when dealing with water supply and usage:

- 1 non-irrigated
- 2 irrigated
- 3 urban

Non-irrigated areas of the county have little impact/demand on water supply and water usage do to their current use and/or development. They do represent areas which could development and would increase demands on the areas groundwater resource.

#### MAP

Irrigated areas of the county are served by 12 different irrigation/water districts. Five districts supply both surface and ground water to meet their water demands, while the other seven depend totally on groundwater. The following table lists the irrigation/water districts with some general information on the districts.

#### TABLE

Urban areas of the county are mostly served by public water systems using groundwater as their water source. The City of Modesto water system does use treated surface water for a portion of their supply and several other urban areas are negotiating for the use of surface water in their systems

#### TABLE

The source of surface water for the county is primarily from the Tuolumne River. Other surface water sources include the Stanislaus River, San Joaquin River and Delta Mendota Canal.

#### MAP

The Oakdale, Modesto and Turlock irrigation districts are the primary suppliers and managers of surface water deliveries in the county.

Key features include a system of dams, irrigation canals and a domestic water treatment plant with transmission mains.

- Don Pedro dam
- La Grange dam
- Modesto reservoir
- Turlock reservoir

#### Water source for Oakdale

The Oakdale irrigation district has water rights on the Stanislaus River. The district is 50,000 acres in size and delivers 100,000 ac ft of surface water to its agricultural customers in a normal water year

Water source for Modesto and Turlock

Raker Act - Water supply for City and County of San Francisco

Federal permit for Don Pedro Dam – Required environmental water discharge

The Modesto irrigation district shares water rights on the Tuolumne River with the Turlock irrigation district. The district is 90,000 acres in size and delivers 900,000 to 1,100,000 ac ft of surface water to its agricultural customers in a normal year.

The Modesto irrigation district also supplies the City of Modesto water system with a maximum of 67,667 ac ft of treated domestic water per year for urban use.

The Turlock irrigation district is 180,000 acres in size and delivers 900,000 to 1,100,000 ac ft of surface to its agricultural customers in a normal water year.

The Turlock irrigation district will also supply a maximum of 50,000 ac ft of treated domestic water to local municipal water systems in there service area beginning in 2010.

## **GROUNDWATER SUPPLY**

Department of Water Resources – State of California – Bulletin 18 identifies groundwater basins in the central valley.

San Joaquin Groundwater Basin  
Modesto sub basin  
Turlock sub basin  
Delta Mendota sub basin  
San Joaquin sub basin

## **URBAN WATER USAGE**

Listing of all domestic water suppliers

Urban Water Management Plans

## **AGRICULTURE WATER USAGE**

Listing of all agricultural water suppliers

## **DRAWINGS, SPREADSHEETS AND CHARTS**