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## KDWCD Vision Statement

Kaweah Delta Water Conservation District's vision is to protect, conserve, and maintain the Kaweah Basin's water resources through actively pursuing a comprehensive understanding of the region's water resources and through the management of those resources to their fullest potential. The District strives to achieve its vision by engaging in the following core directives:

- Monitoring water resources and demands
- Conserving and enhancing available water resources, both local and regional,
- Investigating and evaluating the Region's water resources,
- Conserving and protecting Kaweah Basin water rights,
- Preventing the interference with/or diminutions of natural flow, and
- Protecting lands from flood or overflow

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## Sustainable Groundwater Management Act

If landmark legislation achieves its goals, California will have sustainable groundwater basins...in about 20 years.

By now, everyone has heard of the Sustainable Groundwater Management Act of 2014. The sweeping legislation -- actually three bills in one -- commit the state to locally controlled, sustainable groundwater management. Commonly referred to as SGMA (pronounced sig-ma), the law also provides tools, authorities and deadlines for local agencies to achieve sustainability goals during a 20-year implementation period.

SGMA's goal is to achieve "sustainability" for each basin or sub-basin. Generally, "sustainability" means bringing the basin or sub-basin into balance by eliminating overdraft. While broad parameters for that goal are included in the legislation, it will be defined more precisely by local agencies based on their unique circumstances.

For local agencies, like the Kaweah Delta Water Conservation District, the law's requirements are significant and will take several years to accomplish.

The law allows each groundwater basin or sub-basin separate regulation. [A sub-basin is a geologically distinct supply of groundwater.] The Kaweah Sub-basin has been designated as a high priority basin. This ranking is developed from criteria including the extent to which the population and irrigated agriculture depend on groundwater. About 125 basins are considered "high" or "medium" priority and account for 90 percent of the state's annual groundwater use.

Local agencies overlying groundwater basins or sub-basins, such as Kaweah Delta Water Conservation District, will be given both the mandate and an array of tools to regulate groundwater in their areas. These tools include limiting groundwater extractions, as well as imposing fees related to groundwater use.

For Kaweah, the task to achieve sustainability will be challenging. The district has tracked groundwater activity since before the 1950s. While there is an

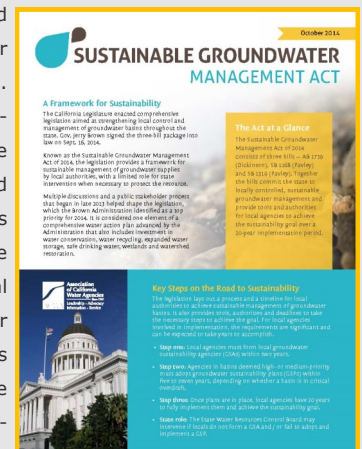
overall trend of declining groundwater levels in the basin, in above-normal water years, the basin has demonstrated its ability to recover. That's not to say that achieving sustainability will come easily - it won't - but with local management and by tapping into available resources, the Kaweah basin should be able to achieve sustainability.

SGMA provides a process and timeline for local agencies to achieve the goals of the legislation. The first step will be the formation of a Groundwater Sustainability Agency, or GSA, within two years. Because Kaweah is a high-priority basin, its GSA must adopt a groundwater sustainability plan, or GSP, within five to seven years.

The District will work collaboratively with other affected agencies to cover the entire basin. The plan will include measurable objectives and period milestones

to achieve the sustainability goal within the 20-year timeframe. GSPs also must include physical descriptions of the basin, including information on groundwater levels, groundwater quality, subsidence and groundwater-surface water interaction. GSPs also will include historical and projected data on water demands and supplies, as well as monitoring and management provisions.

To date several efforts have been initiated in the basin to form GSA's. Early on the City of Visalia, City of Tulare, and Tulare Irrigation District formed the Mid-Kaweah Groundwater Subbasin Joint Powers Authority,



**Why a Healthy Bay Delta Matters to East Side Water Users**

Despite California’s four years of historic drought conditions, Valley water managers watched proposed federal drought legislation go down in flames. All eyes were on the legislation, which would have provided more reliable water supplies from the Bay Delta for west side farmers, and afforded some needed relief for water users in the Friant service area. So, how exactly does more water in the Bay Delta equate to more water for Friant since the water for east- and west-side farmers comes from distinct and separate water systems?

The answer simply is this: Future Friant Division water supplies depend on the U.S. Bureau of Reclamation (USBR) meeting its obligations to deliver water to the San Joaquin River Exchange Contractors from the Delta.

The Exchange Contractors, located in the Central San Joaquin Valley, have water rights on the San Joaquin River but “exchanged” them for a substitute supply. That supply is water in the CVP system that originates behind Shasta Dam. That water must flow through the Delta and can be delivered to the Exchange Contractors through the San Luis Canal.

Because of this exchange agreement, the USBR can use wa-



ter stored behind Friant Dam to irrigate farmland on the east side of the San Joaquin Valley. But the Exchange Contract is an exchange, and if the USBR is unable to deliver Exchange Contract water supplies through the

Delta, those contractors can return to the San Joaquin River.

The Exchange Contractors’ water rights predate both the CVP and the SWP and they are priority rights. In other words, when the CVP has restricted water deliveries to its users, Exchange Contractors can never receive less than 75 percent of their historic river supply.

When Congress passed the Central Valley Project Improvement Act of 1992, it set up certain water obligations for wildlife refuges.

That combined with subsequent biological and court opinions, and salinity standards have created a Delta norm that severely impacts the USBR’s ability to serve the Exchange Contractors from the Delta. Consequently, the Friant Division’s water supply certainty is lost and for the first time in history, Friant Division contractors received zero water allocations from the CVP in water years 2014 and 2015.

The federal drought bill would have provided direction and authority to improve managing water supplies by both the CVP and State Water Project, making Delta water supplies more reliable. Actions also would have been authorized to achieve both the restoration and water management goals of the San Joaquin River Restoration Program agreed upon at the end of a decades-old lawsuit concerning the San Joaquin River.

Since the proposed legislation died, another year without optimal operations of the CVP and SWP is coming. How that will affect water deliveries for Friant water, as well as operations in the Delta, still are unknown. Hopefully, Mother Nature can lend a big hand.



**San Francisco Bay Delta**

**Water Management Committee Supports Groundwater Sustainability Efforts**

Groundwater sustainability are the buzz words for 2016 as local water agencies begin to wrestle and comply with the various components of the Sustainable Groundwater Management Act, or SGMA. Signed into law just more than a year ago, the act will most definitely change the manner in which groundwater is managed in California.

One entity already pursuing different groundwater management strategies is the Visalia Water Management Committee. Formed in 2001, the Water Management Committee is an agreement between the City of Visalia and the Kaweah Delta Water Conservation District. Representatives from both agencies work together to maintain existing water rights and to acquire additional water supplies to benefit City of Visalia residents. Due to close relationship in location and water interests, Tulare Irrigation District and California Water Service Company also partake in the Committees planning efforts. Additionally, any activities pursued by the Committee must result in the maintenance and enhancement of groundwater levels in and around the City.

As part of its 2016 Annual Plan, the Committee will continue to investigate and pursue groundwater recharge improvement projects, including studies for delivery system improvements and optimization.

One project, the Packwood Creek Water Conservation Project, already has already been funded for the design and construction of in-channel improvements to Packwood Creek for groundwater recharge purposes.

Other ways the Committee works to help with local groundwater conditions is the acquisition of water from other surface water suppliers, and the development of groundwater recharge basins.

Kaweah Delta Water Conservation District continues to support the City’s efforts to stabilize the groundwater basin. The District’s Board of Directors recently adopted the Committee’s 2016 Annual Plan and looks forward to working with the City in the new year.

**Terms to Know:**

Groundwater overdraft - a decline in groundwater level that occurs when groundwater use exceeds the amount of recharge into an aquifer.

Recharge - the process by which groundwater aquifers are replenished; for example, pending basins.

Sustainability - a state of balance that is achieved in an aquifer when groundwater overdraft is eliminated.

**Federal Drought Bills Keep Important Friant Issues at Center**

As California weathers its fourth year of historic drought, local water interests' eyes are on federal drought legislation in Washington, D.C.

With the House of Representatives already passing its version, H.R. 2898, the Senate now is discussing some central issues before its version, S. 1894, reaches the Senate floor.

Since Kaweah Delta Water Conservation District (KDWCD) receives a portion of its surface water supply from the Friant Division of the Central Valley Project (CVP), the federal legislation could provide some needed relief for its water users and others in the Friant service area. How? By providing more reliable water supplies from the Delta.

Future Friant Division water supplies depend on the U.S. Bureau of Reclamation (USBR) meeting its obligations to deliver water to the San Joaquin River Exchange Contractors from the Delta.

The Exchange Contractors, located in the Central San Joaquin Valley, have water rights on the San Joaquin River but "exchanged" them for a substitute supply. With this agreement, the USBR could use water stored behind Friant Dam to irrigate farmland on the east side of the San Joaquin Valley. If the USBR is unable to deliver Exchange Contract water supplies through the Delta, those contractors can return to the San Joaquin River.

"The drought has had an impact on the water supplies, certainly," said Mark Larsen, the General Manager for KDWCD. "But just as important is how the water systems have, or in this case, have not been operated optimally."

When Congress passed the Central Valley Project Improvement Act of 1992, it set up certain water obligations for wildlife refuges. That combined with subsequent biological and court opinions, and salinity standards have created a Delta norm that severely impacts the



USBR's ability to serve the Exchange Contractors from the Delta. Consequently, the Friant Division's water supply certainty is lost and for the first time in history, Friant Division con-

tractors received zero water allocations from the CVP in water years 2014 and 2015.

To address some of these challenges in California water management, the final drought bill must provide appropriate direction and authority to improve managing water supplies by both the CVP and State Water Project, making Delta water supplies more reliable. Actions also must be authorized to achieve both the restoration and water management goals of the San Joaquin River Restoration Program agreed upon at the end of a decades-old lawsuit concerning the San Joaquin River.

"We'll see what happens," said Larsen. "Time is short for passing the legislation, but one that addresses these issues would be a definite plus."

**SGMA cont' from pg. 1**

a GSA to cover their collective boundaries in the southwestern corner of the Kaweah basin. Their effort has been officially recognized by the State as a GSA and the group is moving forward in organizing and working towards developing their GSP for their region.

The Kaweah basin through the County of Tulare received some State Water Resources Control Board funds providing for a facilitator to work with the Kaweah basin to initiate discussions towards the formation of GSA's to cover the entire Kaweah basin. From that effort three GSA's have been seriously considered by the local agencies. At the north eastern end of the basin several public agencies around the Ivanhoe area and a few private water interests are reviewing options to form. Additionally at the south eastern end of the Kaweah basin there has been a lot of agencies in the Lindsey area working on formation of a GSA.



Kaweah Delta Water Conservation District has partnered with the County of Tulare, Kings County Water District, Lakeside Irrigation Water District, and California Water Service Company to work towards forming a GSA for the balance of the Kaweah basin uncovered by the Mid-Kaweah and the northern interests. These five agencies have opened their doors to any other agencies in the Kaweah basin to join their efforts and so far three different agencies have requested to

join the effort. Once plans are in place, the GSA has 20 years to fully implement its plan and achieve the sustainability goal. If for some reason the GSA is unable to fulfill the law, the State Water Resources Control Board may intervene.

**New Tools for Agencies:**

Local agencies will have new tools to manage groundwater sustainability because of SGMA. Some of these tools may include:

- Requiring registration of groundwater wells and measurement of extractions
- Requiring annual extraction reports
- Imposing limits on extractions from individual groundwater wells
- Assessing fees to implement local groundwater management plans
- Requesting a revision of basin boundaries, including establishing new sub-basins.

**Timeline for Sustainability:**

- ⇒ June 30, 2017 - Local groundwater sustainability agencies (GSA's) must be formed.
- ⇒ January 31, 2020 - Groundwater sustainability plans (GSP's) must be adopted for critically overdrafted basins.
- ⇒ By 2040 - All high- and medium-priority groundwater basins must achieve sustainability.



2975 N. Farmersville Blvd.  
Farmersville, CA 93223  
Phone (559) 747-5601

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VISIT OUR WEBSITE AT [WWW.KDWCD.COM](http://WWW.KDWCD.COM) FOR MORE INFORMATION!

*Kaweah Delta Water Conservation District hopes that you have found the information in this issue of the KDWCD Water Report helpful. It is our goal to provide water resource information that is relevant and useful to those who live, work and farm in the District. As our District strives to protect and enhance the groundwater resources of the Kaweah River Basin, we also would like the landowners, water users and the general public to be informed and knowledgeable about our water resources, so that together we can make the best use of our water now and into the future.*

#### Water/Weather Related Web Links

California Irrigation Management Information System (CIMIS) - <a href="http://www.cimis.water.ca.gov">www.cimis.water.ca.gov</a>	Friant Water Authority (FWA) - <a href="http://www.friantwater.org">www.friantwater.org</a>
National Oceanic Atmospheric Administration (NOAA) - <a href="http://www.noaa.gov">www.noaa.gov</a>	United States Bureau of Reclamation (USBR) - <a href="http://www.usbr.gov">www.usbr.gov</a>
United States Army Corps of Engineers (USACE) - <a href="http://www.usace.army.mil">www.usace.army.mil</a>	Association of California Water Agencies (ACWA) - <a href="http://www.acwa.com">www.acwa.com</a>
California Department of Water Resources (DWR) - <a href="http://www.water.ca.gov">www.water.ca.gov</a>	Water Education Foundation (WEF) - <a href="http://www.watereducation.org">www.watereducation.org</a>
Regional Water Quality Control Board (RWQCB) - <a href="http://www.waterboards.ca.gov">www.waterboards.ca.gov</a>	Water Education Foundation—Aquapedia— <a href="http://www.aquapedia.com">www.aquapedia.com</a>

#### Agricultural Water Management Resources

**CA Agricultural Technology Institute** - A non-profit, educational institution dedicated to improving California agriculture  
**Irrigation and Training Research Center** - An irrigation teaching program through outside activities specializing in training, research, and technical support  
**National Weather Service** - Provides forecasts and warnings for the central U.S.  
**CA Water Institute** - Offers seminars and classes dealing with Regional Water Issues, Irrigation Technology, and Research  
**UC Ag Extension** - Includes farm, nutrition, family and consumer science advisors based in more than 50 county offices, reaching millions of farmers, businesses and residents every year  
**Center for Irrigation Technology (CIT)** - As an independent research and testing facility, CIT assists designers, manufacturers and users of irrigation equipment to make the technological advances required for our growing and ever changing world. Provides pump efficiency testing  
**USDA Farm Service Agency** - Provides contact information as well as a listing of the programs and offices that make up the Farm Service Agency  
**USDA/ARS Water Management Research Laboratory** - The development of water and weed management technologies and practices for irrigated agriculture in water deficit areas that use water efficiently, improve agricultural productivity, sustainability and reduce negative environmental impacts  
**Farm Advisors Office, Agricultural Commissioners' Offices, Tulare and Kings Counties**