

Fall 2011

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Kaweah Delta Water Conservation District

For more than 80 years, the Kaweah Delta Water Conservation District has been working to fulfill its mission by conserving and storing waters of the Kaweah River, maintaining channels for flood control, and by conserving and protecting the underground waters of the Kaweah River Basin. Through its efforts, and the efforts of other coordinating local agencies, Kaweah Delta WCD helps ensure reliable and adequate water supplies for its service area now and into the future.

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Water Conservation DISTRICT



Irrigated Lands Regulatory Program (ILRP) - More changes to come

Increased grower fees, nutrient and farm management plans, and the addition of discharge to groundwater requirements are part of the new long-term Irrigated Lands Regulatory Program approved by the Central Valley Regional Water Quality Control Board earlier this year.

The Irrigated Lands Regulatory Program, or ILRP, was implemented by the State of California in 2003 as a means to regulate water quality protection laws. The ILRP targets irrigated agricultural operations and practically all such operations face regulation under this State program.

In 2002, four local watersheds came together to form the Southern San Joaquin Valley Water Quality Coalition (Coalition). In addition to the Kaweah Delta watershed, other members include the Tule, Kern, and Kings River watersheds.

The Coalition serves as a conduit between landowners and the Central Valley Regional Water Quality Control Board, which oversees the ILRP locally. The Coalition works to provide an affordable alternative to landowners who were, or who may be, subject to ILRP regulation because of discharges, or potential discharges, or pollutants to surface waters of the State.

"Area landowners need to be aware that the proposed changes now include discharges to groundwater," said Mark Larsen, General Manager of the Kaweah Delta Water Conservation District. "Because of this change, virtually every irrigated agricultural operation now falls under the regulation program. Everyone is affected."

Following are the major components of the revised ILRP.

➔ A new **three tier structure** of surface water and groundwater for irrigated agricultural operations will designate each constituent in a given area, as well as the areas themselves as Tier 1 (low threat), Tier 2 (unknown threat), or Tier 3 (high threat).

➔ All irrigated agricultural operations will be required to complete a **farm-specific evaluation** that includes identification of all manage-



ment practices, including those that may be considered proprietary.

➔ **Farm-specific nutrient management plans** must be prepared and certified by a crop consultant and/or advisor in Tier 3 groundwater areas in which nitrate is the constituent of concern.

➔ **The continued use of coalitions** is recommended. Coalitions would be required to develop and submit Surface Water Quality Management Plans, and Groundwater Quality Management Plans, as well as track other information as required.

➔ The Regional Board must meet with **third party groups**, such as advocacy groups formed to address drinking water quality for small communities, to evaluate the sufficiency of both surface and groundwater management plans.

In addition to the above, the State Board approved a fee increase in September for the ILRP from \$0.12 per acre to \$0.56 per acre. This assessment fee will continue to be paid not only by the landowners in the Kaweah River Basin, but also the landowners in all watersheds throughout California.

Look for more information to come from the Southern San Joaquin Valley Water Quality Coalition. For more information, please contact Mark Larsen, 559-747-5603.

Energy Efficiency—Summer's End Signals Pump Testing Season

As another summer fades away, there's no better time than now to consider a pump efficiency test and evaluation.

Properly performed pump testing can help ensure that you get the most out of your valuable water supply. Evaluations can help determine if any improvements to your pump or system are needed to help you increase energy efficiency, reduce pumping costs and improve your irrigation system's reliability.

Kaweah Delta Water Conservation District encourages its member districts and their farmers and landowners to take advantage of the available programs from CSU, Fresno's Center for Irrigation Technology, Southern California Edison and PG&E.

The **Advanced Pumping Efficiency Program**, formerly the Agricultural Pumping Efficiency Program, is funded through 2012.

Funding comes from Pacific Gas & Electric Company using the Public Purpose Programs Fund. The program operates under the auspices of the California Public Utilities Commission.

The goals of the APEP are twofold: to get highly efficient hardware in the field, including pumping plants, irrigation systems, and water distribution systems; and to ensure that this hardware is managed correctly.

Eligibility extends to all owners or users of a non-residential, PG&E electric or natural gas account that is used to pump water for production agriculture; landscape or turf irrigation; municipal purposes, including potable and tertiary-treated (reclaimed) water. Customers must pay the Public Purpose Programs Fund charge on their utility bill.



As of Jan. 1, 2011, program eligibility requirements have changed:

APEP no longer accepts well rehabilitation or TDH-reduction projects for incentive applications. The project must involve retrofit or replacement of either or both the impeller or bowl.

The pre-project pump efficiency test year must have occurred after June 1, 2002, but within five years of project start.

Only one incentive will be provided for any one pump in a six-year period.

APEP offers pump test subsidies of \$200 per test if the pump hasn't been tested in the last four years, and \$100 per test if it hasn't been tested in the last two years. APEP provides only one subsidized test in any two-year period; other restrictions may apply.

To obtain a pump efficiency test, contact a participating pump test company. A list of companies is available at www.pumpefficiency.org

PG&E offers other energy efficiency programs for residential, commercial, industrial and agricultural customers. Information is available at www.pge.com.

Southern California Edison offers free pump tests to its agricultural customers. Since 1911 the energy company has provided the service and it continues to test thousands of pumps each year. SCE has expanded its program to include several fee-based predictive maintenance services. These include infrared panel inspection and cleaning, vibration detection analysis, meg-ohm testing, and industrial services.

To schedule a pump test, fill out an on-line form at www.sce.com.

Here in the Central Valley, there are different types of Irrigation Methods. The four main types are Precision, Furrow, Basin/Border and Sprinkler. And depending if you have an Annual Crop or Permanent Crop, you will have to decide which method of delivering water to your crops works best for you. It has been determined as well as documented that as many as 67% of the agricultural farmers in the Central Valley with Permanent Crops are using Precision Irrigation. And as many as 53% of all agricultural farmers with Annual Crops are using Furrow Irrigation.

Efforts Aim for “Big Picture” Solutions

There is no question that long-term planning for water supply is a key issue for many agricultural water districts and municipalities. Simply put, without water, both cease to exist in a meaningful way.

That is why Kaweah Delta Water Conservation District (KDWCD) has become a key player in Integrated Regional Water Management (IRWM) efforts currently underway. The District has essential knowledge and expertise to help orchestrate long-term planning, for the benefit of everyone involved.

So what is IRWM? Essentially, it is a collaborative effort to manage all aspects of water resources in a region. IRWM involves many agencies and stakeholders; and crosses political, jurisdictional and watershed boundaries. In short, those involved in an IRWM are committed to working together to address various water issues with solutions that benefit all involved.

The State government in 2002 passed Senate Bill 1672 creating the Integrated Regional Water Management Act to encourage local agencies to work cooperatively to manage local and imported water supplies to improve the quality, quantity, and reliability of water to the region. Seeing this as a positive step in the water industry, the District began looking for partners to form an IRWM plan.

The **Kaweah River Basin Integrated Regional Water Management Plan** was established through a Memorandum of Understanding in 2007. In addition to the District, other members include the County of Tulare, Exeter Irrigation District, Lakeside Irrigation District, Tulare Irrigation District and the cities of Lindsay, Tulare and Visalia. The group’s objectives include: groundwater management; water supply; water quality; flood control; and ecosystem restoration.

The Kaweah River Basin IRWM meets every month and is in the process of developing a scoring structure for evaluating projects for grant applications. Projects can include a number of water resource strategies, including a number of IRWM grant program funding opportunities exist through the state Department of Water Resources.

Projects can include groundwater management and banking, flood control, storm water management, habitat creation, drought planning and the like. There are a variety of grant funding opportunities available through the state Department of Water Resources. Current IRWM grant programs include planning, implementation and storm water flood management. The Kaweah IRWM group has recently been awarded \$4,643,000 through the Prop. 84 Implementation Grant program which will be used to fund numerous projects within the Kaweah IRWM.

Kaweah River Basin Objectives and Strategies

Objectives

Groundwater Management. Proceeding from the Kaweah Delta Water Conservation District’s Groundwater Management Plan first established in 1995, and updated in 2006, and due to a historical groundwater overdraft, the Kaweah River Basin IRWMP will continue to focus on groundwater management and projects that address the cause and impacts of the overdraft in the Plan area.

Water Supply. Water supplies of the Kaweah River Basin are continually under threat from issues such as water rights conflicts, the possible impacts of climate change, exportation, loss of flood flows, and water quality issues. The Kaweah River Basin IRWMP will promulgate management activities and projects that sustain water supplies, improve water use efficiency and flexibility, and address known impacts to the Basin.

Water Quality. In order to protect the water supplies of the Basin for their beneficial uses, the Kaweah River Basin IRWMP has identified the need to support activities that maintain water quality, identify threats, and remediate water quality issues in the Basin.

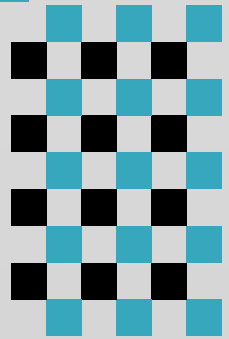
Flood Control. Flood threats still exist in the area with limited surface storage and uncontrolled creeks which present potential impacts to urban and agricultural interests. The Kaweah

River Basin IRWMP will endeavor to encourage the development of flood control projects that reduce and eliminate the impacts of flood flows to the Basin.

Ecosystem Restoration. Where water issues impact, or can enhance, the protection or restoration of riparian, wetland, or upland habitats, and preserve or protect native land use in the Basin, the Kaweah River Basin IRWMP will support such projects for their multiple benefit goals.

Strategies

- Groundwater management and banking
- Conjunctive use programs
- Groundwater level monitoring and modeling programs
- Water conservation programs
- Water recycling
- Water reliability enhancement
- Water quality monitoring and studies
- Land preservation
- Surface water storage projects
- Wastewater treatment projects
- Water conveyance facilities improvement
- Water protection programs
- Floodplain management
- Floodwater capture
- Drought planning
- Habitat creation, protection and enhancement.
- Water management programs; transfers, exchanges, importation
- Land use planning



Kaweah River Basin IRWM Members

Kaweah Delta Water Conservation District

County of Tulare

City of Tulare

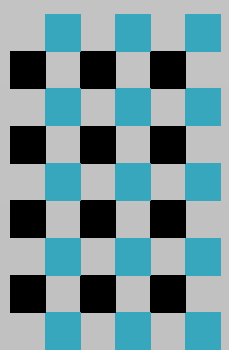
City of Visalia

City of Lindsay

Tulare Irrigation District

Exeter Irrigation District

Lakeside Irrigation Water District





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

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We here at the Kaweah Delta Water Conservation District hope 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 and work in our service area. As our district strives to protect and enhance the groundwater resources of the Kaweah River Basin, we also would like our 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)
www.cimis.water.ca.gov

United States Bureau of Reclamation (USBR)
www.usbr.gov

National Oceanic Atmospheric Administration (NOAA)
www.noaa.gov

United States Army Corps of Engineers (USACE)
www.usace.army.mil

California Department of Water Resources (DWR)
www.water.ca.gov

Friant Water Authority (FWA)
www.friantwater.org

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