



The mission of KRCDD is to provide flood protection, cooperate with other agencies to achieve a balanced and high quality water supply, and develop power resources on the Kings River for the public good.

Speakers' Bureau Programs Available

Kings River Conservation District has established a speakers' service to discuss the innovative energy solutions that KRCDD has been pursuing to address the critical issue of reliability of electrical service for the central San Joaquin Valley.

This half-hour program highlights KRCDD's activities to increase energy reliability and implement Community Choice.

There is no charge for the program and we would be happy to schedule a presentation.

If interested, please phone Melissa Hunter at 559-237-5567, ext. 116 or request via email to mhunter@krcdd.org.

Summer 2006

KRCDD News

Work Begins To Permit And Construct Much Needed Power Plant In Region

KRCDD has begun the permitting process for constructing a power plant in the Parlier area. This plant would be the first base-load power plant built in the region since the commissioning of Pacific Gas and Electric Company's Helm's Plant in 1984.

While summer 2006 electricity supplies are expected to be adequate in California to meet growing electricity demand, according to the California Energy Commission's (CEC) Summer 2006 Outlook report, industry data shows long-term reliability of electrical service is still a critical issue. Development of new energy supplies in the state and in the central San Joaquin Valley is not keeping pace with increasing demand.

Since November 2003, the CEC has permitted 11 new power plants totaling 5,750 megawatts (MW) of capacity. Unfortunately, California has 7,318 MW of approved power plant projects that have no current plans to begin construction because they lack the power purchase agreements needed to secure their financing. Meanwhile, statewide electric loads have increased an average of 2 percent per year over the last two years (greater than 1,000 MW each year).

The total local energy capacity requirement for the Greater Fresno Area, according to the

California Independent System Operator's 2006 Local Capacity Technical Analysis, is 2,837 MW. Local generation (assuming everything is available) results in a 146-MW generation deficiency. As a generation-deficient area, the Greater Fresno Area (as defined by the 6-county area comprised of Merced, Mariposa, Madera, Fresno, Kings and Tulare counties) needs to either construct additional power plants or continue to rely heavily on imports through an increasingly constrained

continued on 4

Community Choice Website Is Launched

With the launching of a new website, www.communitychoice.info, project updates and background about Community Choice, an innovative energy program being pursued for this region, are now available online.

The Community Choice website includes information about the regional partners involved, status and timeline of the program, and background information on our local energy conditions.

Preparation Pays Off, KRCDD Flood Staff Finds

Kings River Conservation District flood operations staff members are usually busy preparing for the next high water event, but after spending several weeks shepherding flood releases through the lower Kings River channels, they know for a fact that maintenance and flood preparedness pay off.

"We are very pleased with the flood management work by all concerned," said David Orth, KRCDD general manager. "KRCDD's flood operations staff had the channel and levees in tip-top condition, and very high flows were handled with no significant incident in the areas protected by the District. Our flood crew and the many others on KRCDD's staff who helped with our 24/7 flood patrols did an outstanding job."



Flood operations staff monitors boils along land-side toe of levy.

continued on 4

Spring's Surprising Storms Fill Pine Flat

A water year full of surprises has finally turned the corner to normal Kings River operations and deliveries after months of flood releases and high flows caused in large part by extraordinary and largely unexpected spring storm events.

Kings River Conservation District flood operations staff, Kings River Water Association hydrologists and the U.S. Army Corps of Engineers have had their hands full managing high water conditions that until March were not even expected, but which ended up providing Kings River water users with an outstanding irrigation season.

"Statistically, snowpack accumulation and water content peak each year on April 1," said Kings River Watermaster Steve Haugen. "This year, our watershed picked up about 600,000 acre-feet of water supply four days later from several inches of rain and huge amounts of high-elevation snow across the watershed. We were still accumulating snowpack on April 10 and had to take an aggressive stance to move all that water."

As a result, runoff conditions that earlier had appeared headed at best for modestly above-average amounts of flow into Pine Flat Reservoir suddenly soared due to a wet and cool March, compelling the Corps of Engineers to make its biggest Pine Flat Dam flood releases in years. It ended June 30.

California Department of Water Resources forecasters now say the peak April-July period produced runoff that is 191 percent of average after a 158 percent water year in 2004-05.

"We have full irrigation operations all along the river," Haugen said. "Even as the flood release ended, we had irrigation demands of well over 8,000 cubic feet per second."

At one point, flood releases and irrigation demand added up to more than 13,000 cubic feet per second.



General Manager's Report David Orth

Water, Our Past And Present

Fresno County's sesquicentennial celebration is well under way. With it, naturally, is a great deal of introspection over where the county has been over these 150 years and how it reached the point where it is today through all sorts of complexities and historical conditions.

If development of Fresno County's heritage and the forms and structures of the region's life since April 19, 1856 - the day upon which the Legislature authorized the formation of the county - had to be summarized in a single word, there is no question what it would be.

Water is the single overriding reason that Fresno County developed as it did. Water development made it possible for farms and every valley-floor community to exist. Water is why Fresno County is nearly always No. 1 in the nation in gross agricultural receipts. Water availability to this day makes it possible for a rapidly growing population to take root alongside crops in this land of little rain.

Much of this most vital and valuable resource finds its way to the valley floor through the stream that the Kings River Conservation District is privileged to help oversee, the Kings River.

Perhaps the most telling evidence of just how important water has been in establishing and sustaining central San Joaquin Valley life can be seen in the conditions that existed when Fresno County was formed and how they compare with the look and effect that irrigated agriculture provided across the land.

Then, the valley floor was barren and generally considered a desert (although in reality it was a prairie of poor seasonal grasslands). The turning point was reached about 1870, when Moses J. Church began building the Fresno Canal for A.Y. Easterby. Over the next 30 years, virtually every canal serving all parts of the one million acres within the Kings River service area was developed and most of the land was cultivated. In many ways, the Kings River's fascinating water history is the backbone of our region's heritage.

KRCD is much too young (the District was organized in 1951) to have played any role in how the Kings River shaped Fresno County and valley life. Our District, however, has been a big contributor to contemporary Kings River history.

KRCD negotiated the original Pine Flat Reservoir repayment and storage contracts. The District developed and successfully operates the lower Kings River flood management program. We have built a respected reputation for our studies and related work to better understand the Kings River's environment. KRCD has also continued to add value to California's power system through our efforts to develop and efficiently operate hydroelectrical energy generation resources.

Today, KRCD and its municipal partners are poised to open a new chapter in Kings River and regional history through a program that is even more ambitious than our 22-year-old Jeff L. Taylor Pine Flat Power Plant and our brand new 97-megawatt Malaga Peaking Plant.

We are on the brink of establishing a program known as Community Choice, under which cities and counties can elect to obtain generated electricity from other suppliers than their local utility company. KRCD plans to be that supplier, with a new 500-megawatt, highly efficient, gas-fired generation facility, to meet well-recognized power generation needs throughout the central San Joaquin Valley and provide cost savings to the consumer.

KRCD, our colleagues at the Kings River Water Association and its member agencies are proud of the role we have played in shaping Fresno County's history. We're even more excited about the future.

Graham Named To KRCD Board

Long-time Kings County and Central Valley water leader Brent Graham of Hanford has been appointed to KRCD's Board of Directors.



Graham, general manager of the Corcoran-based Tulare Lake Basin Water Storage District, succeeds Hugh Johns who retired after more than three decades of service to KRCD.

His appointment came May 2 during a special KRCD Board of Directors meeting. Graham will represent KRCD's Division 5, which includes much of northern Kings County.

Graham is a 1964 graduate of Fresno State College. He began his career in the agricultural water supply business in January 1967 when he joined the Kings River Water Association - the agency that

oversees the river's water entitlements and diversions - as a hydrographer.

He joined the Tulare Lake Basin Water Storage District in June 1968, becoming general manager in January 1969 and has since become one of the valley's most active water industry participants. He chairs the Lower (Kings River) Board of Directors and the Kings County Water Commission and is the long-time secretary of the San Joaquin Valley Agricultural Water Committee. He is also secretary-treasurer of the Valley Ag Water Coalition as well as vice chair of both the California Farm Water Coalition and the State Water Project Contractors Authority.

He helps administer water deliveries into the Tulare Lake bed region from the Kings, Kaweah and Tule rivers as well as the State Water Project. Graham heads the Tule River Improvement Joint Powers Authority, which is currently working with the U.S. Army Corps of Engineers for the replacement of Success Dam.

Director Johns Retires From Board

Long-time Director Hugh Johns retired from KRCD's Board of Directors in March after 37 years of service to the



District. Hugh Johns joined the KRCD Board of Directors in 1969. Johns farms along the Kings system's Old River channel north of Hanford.

During his tenure on the board, KRCD grew from a very small organization with limited responsibilities into a public agency that for years has effectively served agricultural, business, and community residents within 1.2 million acres in portions of Fresno, Kings and Tulare counties.

KRCD Having A Big Power Supply Season

This spring's big flood releases along with a full summer irrigation water supply have added up to record hydroelectric power production at KRCD's Jeff L. Taylor Pine Flat Power Plant.

At the same time, heavy demands for energy during warmer-than-normal spring and summer temperature events have kept KRCD's new Malaga Peaking Plant busy generating electricity.

"The Malaga plant is working well," said James Richards, KRCD's director of power resources. He said the plant's operators "did an excellent job maintaining the Malaga plant output" during the mid-July, record-setting heat wave that was accompanied by high humidity and record power demands.

KRCD General Manager David Orth noted that the 97-megawatt Malaga facility has been called into service so frequently by the California Independent System Operator to meet peak demands that "it shows clearly how much need there is for additional power generation here in the Fresno area."

At Pine Flat, May's energy production was the second most productive month since the plant went into commercial service in 1984 and was the most productive month of May on record. The facility at the base of Pine Flat Dam produced 149,290 megawatt-hours. Only July 1995 had greater production.

Pine Flat also had its second-best June production on record with 144 million megawatt-hours. John Moore, chief of KRCD's hydro division, said all three of the plant's units were fully loaded throughout May and June.



KRCD's Malaga Peaking Plant ran 25 days during the month of July providing much needed energy to Valley residents during the record-setting heat wave.

From May through July, a total of 1,339,254 acre-feet of water were released through the turbines. An additional 459,898 acre-feet of water were spilled from the dam because flood release and irrigation demands exceeded the power plant's capacity.

Energy produced at Pine Flat is purchased by the California Department of Water Resources (DWR) for use in powering the State Water Project, but the power itself goes onto the local area's power grid to help meet valley needs with DWR receiving an equivalent amount of electricity from other sources.

New Power Plant In Region, *continued*

transmission system to meet the growing electricity demands of the residents and businesses in the area.

KRCD and its Community Choice partners believe an important part of the energy reliability solution is to build local generation resources, including a regional gas-fired power plant. A new power plant is getting closer to becoming a reality due to the new ability of cities and counties to aggregate the electrical loads of their constituents for the purpose of purchasing electricity through a program known as Community Choice married with KRCD's extensive experience in power generation.

Currently, KRCD and its Community Choice partners (the cities of Clovis, Corcoran, Dinuba, Fresno, Hanford, Kerman, Kingsburg, Lemoore, Parlier, Reedley, Sanger,

Selma, and Kings County) are negotiating the agreements and preparing a business plan for implementing Community Choice. Hand-in-hand with this effort, KRCD is moving forward with its efforts to build a 500-megawatt power plant (1 megawatt provides energy for approximately 750-1,000 homes). It is anticipated that the permitting process will take up to two years. Once the permitting is complete, it will take approximately two more years to construct the plant with a completion date in 2010.

Since this region faces increasing electrical demand growth, it is critical that there are enough long-term commitments to bring new generation online. This is necessary to meet both future reliability needs and ensure moderate prices.

Flood Operations, *continued*

The U.S. Army Corps of Engineers, which is in charge of Kings River flood operations overall, ordered flood releases to begin April 3, which triggered KRCD's flood patrols along the 140 miles of levee system that is maintained by KRCD. The 24/7 flood patrols ended June 12, and releases were gradually scaled back until they were discontinued June 30, returning the river to normal operations.

Rick Hoelzel, chief of KRCD's flood operations and maintenance, said the flood management effort went well and flood readiness work paid off.

"Downstream of Crescent Weir in the Riverdale area, it appeared the surface water elevation was about six inches lower at the same flow rate than it was last year," Hoelzel said. "At Excelsior Avenue, the water was lapping at the bridge last year at 4,750 cubic feet per second but was six inches

lower at the same rate this year. The velocities were faster because of channel maintenance and sediment removal."

The District was able to control the few problem spots that developed during the high flows. Those included some sloughing at a few locations along levee banks. A new ring dam was built to control seepage at another location.

Hoelzel said the 11-member, Riverdale-based flood operations team was aided during the round-the-clock flood patrols by two temporary workers and nine members of KRCD's Fresno office staff.

KRCD Director Mark McKean, who farms in the Riverdale area, complimented KRCD's staff for its efforts. "You did a great deal of work for our safety," he said.

In all, the Kings River Water Association reported that flood releases



A skip loader places rubble along the bank of the North Fork of the Kings River for protection from additional sloughing.

amounted to 810,500 acre-feet, the equivalent of 81 percent of Pine Flat Reservoir's capacity. There were 728,000 acre-feet directed over Crescent Weir near Riverdale into the North Fork system while 82,500 acre-feet were discharged into the Tulare Lake bed.

KRCD News

Published quarterly by the Kings River Conservation District, a political subdivision of the State of California serving 1.2 million acres in Fresno, Kings and Tulare counties.

Please send subscription requests to:
Kings River Conservation District
4886 E. Jensen Ave.
Fresno, California 93725

Telephone: (559) 237-5567
Website: www.krkd.org

Vol. 31, No. 2

Kings River Conservation District
4886 E. Jensen Avenue
Fresno, CA 93725

Nonprofit Org.
U.S. Postage
PAID
Fresno CA 93706
Permit # 1687