

Surplus water flowing to state's farms, reservoirs

Matt Weiser, Sacramento Bee, 7-31-11

California water agencies, after suffering three years of drought, are now enjoying an unusual benefit: a tide of cheap water declared "surplus" after a bountiful winter.

State and federal agencies made the water available this year, under special contract terms, for the first time since 2006. The aim is to find a productive use, in cities and on crops, for the weather anomaly that brought more water than state dams can hold.

The water is refilling reservoirs and aquifers all over the state, and putting thousands of acres of farmland back into production.

At times, there literally has been no place to put all the water nature brought to California this year. The surplus sales aim to find new places for that abundance. By dropping the price, state and federal water managers hope an urban water agency might decide to fill its local reservoirs, or that a farm irrigator will be tempted to temporarily flood some land to recharge groundwater.

To that end, they offer this water for a song, relatively speaking. In some cases, surplus water flowing through the Sacramento-San Joaquin Delta this spring was sold by the federal government for as little as \$9 an acre-foot, or about 75 percent off already low agricultural rates.

State and federal agencies together have sold more than 660,000 acre-feet of surplus water this year, all at steep discounts. That is about equal to the total annual demand of Los Angeles, the nation's second-largest city, with 3.8 million residents.

The abundant water has dramatically changed the fortunes of the San Joaquin Valley farm economy.

Shawn Coburn, a farmer near Firebaugh, planted processing tomatoes this year on 500 acres that had been fallowed the last two years due to water shortages.

This will yield about 40,000 tons of a relatively high-value crop, which also required a substantial investment on his part, including the purchase of a new tractor and harvesting equipment.

"In essence, it's another \$2 million that I'm going to spend (on equipment) that I wouldn't spend if I didn't have the water," said Coburn, who also grows almonds and wine grapes. "It's definitely a year where it's pretty easy to convince us that water equals prosperity, and not just for the farmer but the overall farm economy."

The surplus water also acts as a buffer against the next drought. For example, the Kern County Water Agency, which provides irrigation to a vast, arid farm region, is using the bonus water to recharge its groundwater banking aquifer, which was drawn down during the drought.

The agency purchased 245,000 acre-feet of surplus water this year, or about a third of all the surplus water sold.

"This is an extremely important supply for the water users in Kern County and, frankly, for all the water users throughout the state," said Jim Beck, general manager of the water agency.

Westlands Water District has used the surplus for its immediate irrigation needs, allowing some of the water purchased under its regular contracts – at full price – to be stored in reserve at San Luis Reservoir in case of dry conditions next year, said general manager Tom Birmingham.

Native fish still at risk

Yet some of the arguments over water that play out in dry years continue to resonate amid abundance.

Conservation groups agree that capturing excess flows in wet years is important to help the state endure droughts.

But some express concern that this water may not be truly "surplus" to the needs of the environment, especially amid an unresolved population decline of numerous fish species in the Sacramento-San Joaquin Delta. They assert the state simply hasn't done the research to know.

About three-fourths of the surplus water this year was pumped out of the Delta. The rest came via Friant Dam on the San Joaquin River and did not pass through the Delta.

"If you look at the population graphs for just about any fish species over the past 30 years, it looks like a pretty continuous decline," said Jon Rosenfield, a conservation biologist at the Bay Institute. "That's because when times are tight, we really hammer them. And when times are good, we don't let them get off the mat."

Bill Kier, a fisheries consultant and former assistant secretary of the state Resources Agency, noted surplus pumping this year contributed to shockingly large fish kills at the state and federal water diversion systems in the Delta.

According to data from the U.S. Fish and Wildlife Service, the pumps "salvaged" or killed 8.9 million Sacramento splittail from Oct. 1, 2010, to July 17 this year. Nearly 37,000 chinook salmon and 90 sturgeon also met their demise.

All are native species whose survival remains a subject of ongoing concern.

"Are we really taking an ecosystem advantage of an abundant water year, or are we simply pouncing on that water to meet out-of-stream demands?" said Kier. "I don't doubt for one minute that we are missing the opportunity to do some substantial rebuilding (of fish populations)."

Peter Moyle, a fisheries biologist at the University of California, Davis, said the large numbers of fish killed at the Delta pumps this year don't necessarily indicate danger to the species. Rather, they indicate larger populations, another result of ample river flows.

This is especially true for those 8.9 million splittail deaths, Moyle said. He called the splittail a "very resilient" species that tends to surge in population in wet years when it can access floodplains, like the Yolo Bypass, for breeding and feeding activity.

"It's a big number, but it's not a big deal to splittail," Moyle said. "Basically, the number of splittail salvaged at the pumps is a direct reflection on the success of spawning."

Record year for pumping

The U.S. Bureau of Reclamation manages the federal surplus program, while the state program is managed by the Department of Water Resources. Both agencies hold legal contracts with water buyers.

Those buyers include farm and urban water agencies, small and large, that collectively serve 25 million Californians and more than 1 million acres of farmland.

After Kern County, the biggest buyers this year are the Metropolitan Water District of Southern California, which serves the Los Angeles and San Diego metro areas; and Westlands, which serves farms in a huge swath of the San Joaquin Valley.

In addition to surplus sales, water agencies are also taking delivery of more water under regular contracts than they have seen in several years.

Spreck Rosekrans, an economic analyst at the Environmental Defense Fund, estimates total Delta water pumping will set an all-time record this year of 6.6 million acre-feet.

That compares to levels near 4 million acre-feet over the past three years, mostly a result of drought.

The terms of each surplus program are different, as are the discounts available.

The state program is offered only to existing state water contractors, which include the Kern County and Metropolitan agencies. These contractors pay only the energy cost required to move surplus water. They pay nothing for the water itself, and none of the capital costs of the diversion system, which are covered by payments under their regular contracts.

Kern County pays about \$12 per acre-foot for the surplus water. Its regular contract water costs \$57. Metropolitan, which must pay the stiff cost of pumping over the Tehachapi Mountains, purchased surplus water at \$100 an acre-foot, compared with its normal contract price of \$281.

The federal program is offered first to current contractors, such as Westlands, and then to non-contractors only if there is an extraordinary amount of water available. This was one of those years.

The Bureau of Reclamation also offered special deals on limited amounts of Delta water. Westlands was able to buy nearly 18,000 acre-feet of Delta diversions at just \$9.34 an acre-foot. That is almost 80 percent off its regular contract rate.

Two other agencies, the San Benito County Water District and the Santa Clara Valley Water District, got similar deals.

"There was so much water hitting our system, we wanted to move it out," said Valerie Curley, chief of the contracts branch in the bureau's San Joaquin Valley unit. "We offer it to more and more people, and if that still doesn't help us, then we start adjusting the price scheme."

Rosekrans objects to such deep discounts. Customers of the bureau's Central Valley Project, he said, still owe federal taxpayers more than \$900 million from the subsidy that built the system, which occurred mostly in the 1950s and '60s.

A portion of their regular water contract rates go toward repaying this debt. The cheaper surplus water rates discount this capital repayment charge.

This year, during April and May, the Bureau of Reclamation went even further and eliminated the capital charge to boost sales from Friant Dam on the San Joaquin River, which was literally overflowing with storm runoff.

Birmingham defended the discounts, noting their important dual benefit: a relief valve for water officials during rare high flows, and a buffer for farmers in case next winter is not so grand.

"We have to take advantage of every opportunity we can," he said.