

Drought prompts deep cuts in American River flows

Matt Weiser, Sacramento Bee, 1-7-14

By the end of this week, water flows in the American River will be lower than anyone has seen in a generation. And soon, many residents of suburban Sacramento could be banned from watering their lawns.

Unusual winter drought conditions are driving Sacramento-area water agencies to make difficult choices. Starting today, the effects will be visible to anyone who walks, fishes or boats along the American River, one of the largest in California.

Early this morning, the U.S. Bureau of Reclamation was expected to cut water releases from Folsom Dam into the river from 1,100 cubic feet per second to 800 cfs. This will drop the river's elevation within its bed by about 6 inches.

It won't stop there. Each night this week until Friday, dam releases will be cut in stages until flows reach 500 cfs. At that point, it will likely be easy to walk across the river in many locations.

Such flows have not been seen in the American River since January 1993, according to Reclamation, which operates Folsom and Nimbus dams on the river. In comparison, the median January flow in the river over the past 15 years was about 1,700 cfs.

The reduction is intended to prolong the water supply stored behind Folsom Dam, a source of drinking water for some 500,000 people in the suburban Sacramento area. With no rain in the forecast, and the water level behind the dam shriveled to 18 percent of capacity after a dry start to winter, officials said dramatic conservation efforts are necessary.

Reclamation officials reached the decision on Friday after meeting with area water providers and wildlife agencies.

"The watershed is so dry right now, there's such limited snowpack and the lake is already so low that we're trying to look ahead and be conservative," said Shana Kaplan, a Reclamation spokeswoman. "I think everybody's trying to be as proactive as we can."

Dropping the river so low will be deadly to some fall-run Chinook salmon eggs now waiting to hatch from nests, or redds, in the gravel riverbed. Tom Gohring, executive director of the Sacramento Water Forum, said flows of only 500 cfs could mean that 10 to 15 percent of the redds in the river will be lost because they will go dry as the river drops.

That loss had to be weighed against two other concerns: Running out of water for people in the Sacramento metro area, and harming Central Valley steelhead fish.

Steelhead are just now starting to spawn in the river. Unlike fall-run salmon, steelhead are protected by the Endangered Species Act. The goal of reducing flows now is to ensure steelhead don't spawn in areas that might be dried up later if releases from Folsom Dam have to be curtailed further, after spawning has concluded.

"We're trying to make sure we don't have a die-off," Kaplan said. "It's like we don't want to tempt them, so we're going to try to get it lower now so they can lay their eggs in areas where we're confident they can make it through the whole year."

Protecting municipal water supplies is also crucial. Without reducing water releases to the river, and without a return to normal winter weather, water agencies such as San Juan Water District would risk running out of water by March. At that point, the district's water intake at Folsom dam would be sucking air.

"This is an exceedingly difficult, yet critical situation we're in right now," said Shauna Lorange, general manager of San Juan Water District, which serves Roseville, Granite Bay, Folsom, Fair Oaks, Citrus Heights and Orangevale.

On Wednesday, San Juan's board of directors will be asked to adopt the most extreme water conservation measures possible. The so-called "Stage 5" drought restrictions would ban all outdoor watering, prohibit water from being used for construction activities, ban new connections to the water system, and call on customers to reduce indoor water use by 50 percent.

Lorange was unable to recall a prior instance in which such extreme conservation measures were adopted by the district.

Because district revenues are based on water bills, these conservation measures are expected to deliver a nearly \$1 million blow to the district's budget. At the same time, they will increase some costs. For instance, on Wednesday the district board will also be asked to approve an additional \$100,000 to spend on public information activities to educate customers about conservation.

Other area water agencies are in the midst of their own conservation actions. Folsom has already ordered residents to cut water use by 20 percent, and Roseville has asked residents to meet the same target. The city of Sacramento is expected to consider similar measures later this month.

The dry weather this winter is caused by a strong high-pressure ridge hovering over the Gulf of Alaska that has kept storms out of California. Although a couple of weak storms are predicted to make it through the ridge this week, they are expected to bring only clouds, and no rain, to most of the state. Long-range forecasts indicate dry conditions are likely to persist through the month. The last measurable rainfall in the region was .03 inches on Dec. 7.

The harm to wild-spawning salmon from the reduction in American River flows worries fishery advocates. It comes as the fall salmon run is experiencing a resurgence after years of population declines. The fall run is the primary species that supports commercial and recreational salmon fishing in the state.

It also comes just as state officials have concluded an annual fall survey of fish species in the Sacramento-San Joaquin Delta, which gathers runoff from numerous Sierra Nevada streams, including the American River. The survey found that many imperiled fish species remain near historic lows, including Delta smelt, longfin smelt and striped bass. History has shown that all these species do poorly in drought years, so the dry winter could worsen their plight.

Bill Jennings, executive director of the California Sportfishing Protection Alliance, said the damage to the fishery is another example of California living beyond its means. He pointed to recent research that shows the state has allocated five times more water rights than the Delta watershed has generated, on average, over the past 80 years.

"It's going to be a disaster for salmon," Jennings said. "Living beyond a sustainable level has consequences. We're going to have to bring the use of water into a reasonable balance with available supplies."