

Water

The West enters March with ample snow

Staff and wire report

Wet weather through the winter has left mountain snowpacks in California and the Pacific Northwest with plenty of moisture for summer crops.

California

SACRAMENTO — The chances of an abundant water supply for California growers this summer keep improving as the water content in snowpack remains far above normal.

The state Department of Water Resources third manual snow survey of the season found a snow-water equivalent of 43.4 inches on March 1 — well above the average of 24.3 inches for the date.

“It’s not the record, the record being 56.4 (inches), but it’s still a pretty phenomenal snowpack,” state snow survey chief Frank Gehrke told reporters after the survey at Phillips Station, about 90 miles east of Sacramento. “January and February came in with some really quite phenomenal atmospheric river storms, many of which were cold enough to really boost the snowpack.”

In all, California has been hit with 30 “atmospheric river” storms this winter, DWR spokesman Doug Carlson said. The storms have left a statewide snowpack holding 45.5 inches of water, or 185 percent of the March 1 average of 24.6 inches, according to electronic readings from the agency’s 98 stations scattered throughout the Sierra Nevada.

The southern Sierra has more than double its normal snowpack for this time of year, at 46.4 inches, the DWR reports.

The snowpack was a key factor in the U.S. Bureau of Reclamation’s decision to allocate 100 percent of contracted supplies to many farmers in the Central Valley, including settlement and exchange contractors along the Sacramento and San Joaquin rivers, respectively, and the Friant Division in the eastern San Joaquin Valley.

Federal officials said March snow measurements will help determine how much water they’ll deliver to other Central Valley Project customers, including growers on the San Joaquin Valley’s west side.

The State Water Project promises to deliver at least 60 percent of contracted supplies to its 29 member water agencies. The state issued an initial allocation of 20 percent in late November and has raised it twice; the decision of whether it will be raised again is still under review, Carlson said.

Idaho

BOISE — February was an extremely wet month throughout Idaho, with the driest part of the state, the Owyhee Basin, still receiving 150 percent of its usual monthly snow accumulation, according to the USDA Natural Resources Conservation Service.

The greatest February snowpack gains were in south-central Idaho — 458 percent of normal in the Big Lost Basin, 438 percent of normal in the Little Wood and 394 percent of normal in the Big Wood.

Factoring in early March storms, every region of Idaho has now bested its average snowpack for the date, with basins such as the Big and Little Wood exceeding their usual annual moisture totals within the first five months of the water year.

“February really put the icing on the cake,” said Ron Abramovich, USDA-NRCS water supply specialist for Idaho, “Last month, with the precipitation being so much above average, we saw a tremendous jump in our streamflow forecasts.”

Corey Loveland, water operations manager for the Bureau of Reclamation’s Upper Snake region, said the Upper Snake reservoir system is already 70 percent full, with 152 percent of normal snowpack remaining in the mountains. He said BOR has been making large releases from the Milner, Lake Walcott, Palisades and American Falls reservoirs, and



Rich Pedroncelli/Associated Press

Frank Gehrke, right, chief of the California Cooperative Snow Surveys Program for the Department of Water Resources, plunges the survey tube into the snowpack as he conducts the third manual snow survey of the season at Phillips Station, March 1, near Echo Summit, Calif. The survey showed the snowpack at 179 percent of normal. At left is Armando Quintero, chairman of the California Water Commission.

plans to soon commence with releases from Jackson Lake. He said releases were also made from Ririe Reservoir in early February, with additional releases planned to resume soon. With 220 percent of the average snowpack in the Little Wood Basin, Loveland said BOR plans to drain Little Wood Reservoir to near-empty to free space for runoff.

“As far as water supply goes, we’re pretty optimistic about having the water to fill the reservoirs at this point in time,” Loveland said. “We’re in flood-control mode as far as needing to evacuate space in the Upper Snake system.”

BOR officials say the Boise River reservoirs are at 57 percent of capacity, but with 156 of normal snowpack to date in the surrounding mountains, they started making flood-control releases on March 6 from Lucky Peak Dam, ramping up the volume incrementally until it reaches 7,000 cubic feet per second.

The spring flood-control releases have provided an opportunity for Wes Hipke, who manages the state’s managed aquifer recharge program, to test new recharge infrastructure in the Upper Snake. Recharge involves intentionally injecting surface water into the aquifer through unlined canals or spill basins to replenish declining groundwater levels. The state’s Upper Snake recharge right only comes in priority when water is released for flood control and would otherwise pass through the system unused.

Hipke said the opportunity to conduct Upper Valley recharge should help him come close to his initial goal of recharging 100,000 acre-feet of water this season, thereby helping regional groundwater users who have entered a water call settlement requiring a reversal over time in aquifer declines. Hipke said the recharge right should remain in effect even after the start of the

irrigation season, as it’s likely reservoir releases will continue at flood-control levels.

Oregon

PORTLAND (AP) — The average statewide snowpack for Oregon is well above normal for March after a harsh winter that featured heavy snow across much of the state.

However, hydrologists warn that an early thaw could quash hopes for above-average summer stream flows.

Snowpack levels as of March 1 were 138 percent of normal, according to numbers released Tuesday by the USDA Natural Resources Conservation Service.

The service conducts the surveys monthly during the water year, which runs from Oct. 1 to Sept. 30, said Scott Oviatt, a snow survey supervisory hydrologist for the USDA service.

The last time Oregon’s snowpack was well above normal on March 1 was in 2008, when it was 157 percent of normal. Last year, the snowpack was 94 percent of normal at the end of February.

The news came as a boon for farmers, ranchers and irrigators who have weathered several years of drought in much of Eastern Oregon. If the weather remains cool and the snow doesn’t melt until late spring, above-average stream levels could replenish drinking water supplies and also mean good news for migrating salmon, Oviatt said.

“Snow accumulation during February was twice the normal amount at many monitoring locations,” he said.

Last year, excitement about near-average snowpack levels evaporated when unusually warm April weather melted the snow early, depriving farmers, salmon and reservoir operators of late-season

runoff they needed.

All basins in the state have received well-above-average precipitation for the 2017 water year.

Lake County and Goose Lake basins have gotten the most, at 152 percent of average, while Mt. Hood, Sandy and the Lower Deschutes basins have had 111 percent of normal precipitation, the service said.

Lake Owyhee Reservoir, near the Idaho border, is now at 128 percent of average after several years of water levels that were well below average. The lake is now storing more than 500,000 acre-feet of water for the first time since 2012, Oviatt said.

Washington

WENATCHEE — Washington’s mountain snowpack is much improved since a month ago and streamflow forecasts for April through September are up 10 to 20 percent.

It bodes well for farmers dependent upon mountain snowpack for summer irrigation.

“It all turned around the first week of February with that winter storm blast and more that rolled in from off shore. It was definitely what we needed,” said Scott Pattee, water supply specialist of the Washington Snow Survey Office of the USDA Natural Resources Conservation Service in Mount Vernon.

Statewide snowpack was 112 percent of normal on March 6, up from 102 percent of normal in early February and 91 percent in early January.

“We picked up a lot of good snow. We saw more snow in February than we usually do and that was the only way we could catch back up and get ahead of where we

were,” Pattee said.

January was cold and dry. February was warmer and wetter.

The short-term outlook is for below-normal temperatures and above-normal precipitation, which should bring more snow, Pattee said. A sudden warm-up causing rapid runoff, as happened last April, does not look likely, he said.

Snow water equivalent snowpack in the Spokane basin was 93 percent of normal on March 6. The upper Columbia (Okanogan and Methow rivers) was 112 percent. The central Columbia (Chelan, Entiat and Wenatchee) was 98, the upper Yakima was 91 and the lower Yakima 101.

The lower Snake near Walla Walla was 105, lower Columbia was 133, south Puget Sound (from Cascade crest to lowlands) was 105, central Puget Sound 109, north Puget Sound 98 and the Olympics 111.

Those numbers were all improved from a month earlier.

Streamflow forecasts for April 1 through September are: Spokane basin 92 to 97 percent of normal, upper Columbia 86 to 110, central Columbia 88 to 93, upper Yakima 82 to 90, lower Yakima 93 to 131, lower Snake 102 to 126, lower Columbia 104 to 112, south Puget Sound 102 to 107, central Puget Sound 100 to 110, north Puget Sound 90 to 98 and the Olympics 101 to 103.

The five mountain reservoirs critical for one-third of the water needed to irrigate 464,000 acres of farmland in the Yakima Basin are at 51 percent of capacity and 91.6 percent of average for this time of year. Inflows are 97 percent of average and releases 106 percent of average.

Reporters Tim Hearnden, John O’Connell and Dan Wheat contributed to this report.

Columbia-Snake River Irrigators Association Media/Press Release — For March 9, 2017 More Information: 509-783-1623

Killing Fish — Columbia River ESA Litigation and 2015 Fish Operations

One tragic scene from the Vietnam War came from a U.S. Army Officer who conveyed that “to save the village, they would have to destroy it.” The Columbia-Snake River Endangered Species Act (ESA) litigation, now belaboring for twice as many years as the Vietnam Era, induced a similarly destructive image in 2015, when state/federal fish managers engaged in lethal, in-river juvenile fish passage actions instead of relying on the Lower Snake River fish transportation program. Today, an injunction motion was heard in U. S. District (Oregon) Judge Michael Simon’s Court to perpetuate killing fish, and the ESA fish survival objective is being turned around backward by environmental groups and the state of Oregon.

The long years of Columbia-Snake River Biological Opinion (BiOp) legal wrangling have cost the region billions-of-dollars, and nourished some fanatics within the “salmon recover industry” who seek solely to breach the Lower Snake River dams rather than acknowledge the projects’ substantial benefits; including operation of a well-developed juvenile fish transportation system that can protect fish in years when low water and high temperature conditions prevail—a year like 2015.

CSRIA’s legal counsel methodically described the legal and operational management principles that should have guided fisheries operations in 2015, but were either overlooked or deliberately altered. Citing a forensic management review prepared by Seattle-based Columbia Research Corp., it was apparent that important warning signs and protocols were ignored:

- The 2015 in-river conditions were the worst since 2001, and low water flows were forecast well before the start of the fish migration period. The early spring water temperatures were high.
- At a minimum, state and federal fish managers should have been following a BiOp (Court) mandated fish passage policy known as “spread the risk,” where roughly equal numbers of juvenile fish are diverted by spillway passage or placed in water temperature controlled transport barges.
- But the fish passage managers, some unyielding supporters of project passage fish spill, delayed the start of the juvenile fish transportation program.
- Not everyone agreed with delaying fish transport, and twice, NOAA Fisheries’ key scientists called for immediate fish transport operations. They were rebuffed by the on-site fish passage managers.
- In a year when juvenile fish transport should have been maximized (and called for under the BiOp), fish transport numbers were reduced to an all-time low, with only 13% transport. River water flows and temperatures were comparable to 2001, where the documented fish survival benefits from the transport program totally overshadowed in-river fish passage survival.
- Fish managers had to have known the danger. The 2015 fish passage operations will contribute significantly to impaired adult salmon/steelhead returns to the Columbia-Snake River system in 2017 and 2018.

The 2015 fish operations stand as a testament to CSRIA’s call for invoking the Endangered Species Act Committee (God Squad) to settle, with reasoned judgment, the required fish protection measures for the Columbia-Snake River system. The 25-years of BiOp litigation have failed the fish.