



Jayson Jacoby/Baker City Herald

This image taken from a drone on Tuesday, Aug. 17, shows Mason Dam and the expanse of shoreline exposed as Phillips Reservoir has receded this summer.

RESERVOIR

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Numbers also illustrate the severity of the drawdown.

As of Wednesday Aug. 18, the reservoir's "active storage" volume was 479 acre-feet, which is less than 1% of its storage capacity. That's the lowest volume since the fall of 1988, when the reservoir reached a minimum of 449 acre-feet on Nov. 1.

There is, however, more water in the reservoir.

The active storage figure is the amount of water potentially available for irrigation. The reservoir's official capacity for irrigation is 73,570 acre-feet, according to the U.S. Bureau of Reclamation, which built Mason Dam.

The reservoir can hold another 17,000 acre-feet — up to a total of 90,570 — for flood control.

But the reservoir was also designed with what's known as "dead storage." That's water that won't drain from the reservoir by gravity. The dead storage for Phillips is 5,000 acre-feet, and that water is the reason the reservoir still looks like, well, a reservoir.

Chandler said that although the dead storage capacity has likely been reduced some by silt accumulation over the past 53 years, that water, since it won't drain by gravity, means the reservoir's level can't drop much farther.

On Tuesday, the main source of water entering the reservoir — the Powder River — was flowing at a rate of 39 cubic feet per second.

Some reservoirs, including Thief Valley along the lower Powder River near North Powder, have no dead storage, so when they're drained — as Thief Valley has been most years in the past decade — all that's left is the river in its original channel.

But dead storage capacity in Phillips isn't available to nourish crops.

And that means irrigation from the reservoir, with the exception of small volumes for livestock, is over for the year, and a meager year it was, said Mark Ward, a Baker Valley farmer and, like Chandler, one of the Baker

Low water doesn't deter anglers

By JAYSON JACOBY
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PHILLIPS RESERVOIR — A brisk wind that feels more like October than August is whipping up whitecaps and pushing the two lengths of fishing line into curves, but the Foersterling brothers are unperturbed.

They're concentrating on the rod tips, waiting for the telltale twitch.

And hoping that the fish on the other end of the line, below the choppy surface of Phillips Reservoir, is a yellow perch.

Fred Foersterling, 78, and his brother, Terry, 72, both of Baker City, don't begrudge the autumnal chill on this Tuesday morning, Aug. 17.

Not during a summer of record-breaking heat.

With the torrid temperatures that have predominated since late June, the brothers haven't hauled a boat to Phillips Reservoir, their favorite fishing hole, even once.

"It's so doggone hot we haven't thought about getting out in the boat and cooking in the middle of the day," Terry said.

"And come up here today and almost wish you had more clothes on," said Fred, who's clad in a plaid flannel shirt as the brothers sit in a pair of folding chairs a few feet from water's edge.

The Foersterlings, who are fishing with worms, hope to attract perch rather than rainbow trout because, they say, the hatchery-raised rainbows tend to have rather flaccid flesh in the warm water of late summer.

Fred said he prefers perch and other warmwater species, including crappie and bass.

One day last week he said he reeled in 25 perch, two trout, two bass and two squawfish.

Although the Oregon Department of Fish and Wildlife has suspended daily fish catch limits through Oct. 10 for Phillips and Thief



Jayson Jacoby/Baker City Herald

Terry Foersterling, right, with a just-caught yellow perch at Phillips Reservoir on Tuesday morning, Aug. 17. Terry and his brother, Fred, also of Baker City, are frequent anglers at the reservoir.

Valley reservoirs, as well as the Powder River in between, due to warm water and low water levels that threaten fish, the Foersterlings say that hasn't affected their angling.

There's no limit on perch anyway.

Neither the persistent heat, nor the drought that has contributed to the reservoir dropping to its lowest level in more than 30 years (see related story on this page), has dissuaded the Foersterlings from driving to Phillips a couple times per week.

They said the severe drawdown of the reservoir hasn't had any noticeable effects on fishing.

"Sometimes they bite, sometimes they don't," Terry says with the nonchalance of the frequent angler. "You just never know."

The brothers have noticed that there are fewer motorboats on the reservoir, since the main boat ramps are all stranded well about the water.

"We have seen a lot of paddleboards and kayaks," Fred said.

Valley Irrigation District's five directors.

When water is plentiful — a rarity over the past 15 years, Ward said — Phillips can supply 3.5 acre-feet of water for each of the more than

30,000 acres of land, mostly in Baker Valley, with rights to stored water.

(One acre-foot of water would cover one acre of flat ground to a depth of one foot. The measurement is equal to

almost 326,000 gallons.)

But in 2021 the reservoir provided just 0.4 of an acre-foot per acre, Ward said.

"That's the lowest allocation we've ever had," he said.

The previous record was 0.5

"I don't like cold weather but I hope we get a lot of snow. I'll plow snow every day if I have to."

— George Chandler, Baker Valley rancher, who's hoping for a snowy winter, which would help replenish Phillips Reservoir

of an acre-foot, about 15 years ago, Ward said.

Although Ward said farmers who grow higher-value crops such as potatoes typically have wells for irrigation rather than relying solely on reservoirs, the paltry supply from Phillips trimmed yields from some of his family's crops, including peppermint.

Ward said they used "the bare minimum" of irrigation water on their mint, which contributed to a lower-than-usual yield of mint oil — the most valuable part of the crop.

(He said they also made hay from mint.)

The bigger culprit in the low oil yield, though, was not a lack of water but rather an abundance of another element — heat.

"We learned that mint does not like 100-degree heat in June," Ward said, referring to the record-setting heat wave in that month's final week, when the temperature topped out at 103 degrees at the Baker City Airport.

Although Chandler also laments the scant amount of irrigation water this year, he also remembers the era before Mason Dam was built.

Chandler, who graduated from Baker High School in 1965, recalls a summer when the Powder River ceased flowing through Baker City.

Multiple factors contribute to reservoir's depletion

Both Chandler and Ward blame a combination of factors, which happened to coincide over the past year, for the possibly unprecedented depletion of the reservoir.

The trouble started almost a year ago.

In the fall of 2020, Phillips dropped to about 5,500 acre-feet in November, so there was a lot of space to fill.

The biggest source of water to refill the reservoir isn't water at all — it's snow.

Winter snowpack in the mountains is the largest reservoir in the region. As that snow melts in the spring it flows into the streams and rivers that replenish reservoirs.

The snowpack was actually about average in the upper Powder River basin, the headwaters for its namesake river and other streams that feed Phillips Reservoir.

The problem, Chandler and Ward agree, is that most of that melted snow soaked into the ground rather than trickling into the reservoir.

"The creeks never ran like they normally do," Chandler said.

He and Ward attribute this in part to cold nights that predominated this spring, which slowed the snowmelt and allowed much of the water to leach into the soil.

Another factor was the lack of significant rainstorms. Heavy rain, especially when coupled with relatively mild temperatures, can cause a

rapid, albeit temporary, glut of meltwater that flows into rivers.

Their anecdotes are corroborated by statistics.

Phillips Reservoir reached a maximum active storage volume this spring (not including the 5,000 acre-feet of dead storage) of just 16,632 acre-feet, on April 26.

In many years the reservoir holds more than 40,000 acre-feet in late April. Even in 1988, when the reservoir's level plummeted in the fall, it was holding about 26,000 acre-feet the final week of April.

"It doesn't take long to get rid of that" amount of water, Chandler said, and that was indeed the case in 2021.

Worse still, farmers needed reservoir water earlier than usual due to the aforementioned lack of spring rain, and persistent wind that leached much of the sparse moisture from the topsoil.

Rainfall at the Baker City Airport for the first six months of the year — a period that includes what are statistically the two wettest, May and June — totaled 2.44 inches. That's 43% of average.

"We just don't seem to get the rains like we used to," Ward said.

Then came the June heat wave.

"It was the perfect storm," Ward said — although in this case it was the absence of storms that caused the problems.

With much more water flowing through Mason Dam than was coming in from the Powder River, the reservoir receded rapidly, dipping below 10,000 acre-feet by June 29, which happened to be the 103-degree day at the airport.

By the end of July the reservoir's active storage volume was below 3,000 acre-feet.

In that bellwether year 1988, the reservoir didn't drop below that threshold until Sept. 6.

Banking on blizzards

With the reservoir so diminished, even a bountiful snowpack this coming winter probably won't be sufficient to refill Phillips.

But a skimpy snowpack could make for even more dire conditions in 2022.

"I don't like cold weather but I hope we get a lot of snow," Chandler said. "I'll plow snow every day if I have to."

Ward also wouldn't complain about a repeat of the 2016-17 winter, when snow depths topped two feet in Baker City and the temperature at the airport plummeted to 24 below zero in early January.

But he'd like to see heavy rain fall in October or November, before snow starts piling up.

That would start refilling the reservoir, making for a smaller hole to fill come the spring of 2022.

LOCAL BRIEFING

Locals earn dean's list honors at Eastern Oregon University

LA GRANDE — More than a dozen Baker County students were among the 556 named to the dean's list for the spring 2021 term at Eastern Oregon University.

To qualify, students must maintain a grade point av-

erage of 3.5 or higher on a 4.0 scale while completing at least 12 hours of graded coursework.

Baker City

Kayley AhHee, Alayne Bennett, Koedi Birmingham, Boston Colton, Ashley Dyke, Kirsten Esposito, Isabella Evans, Elijah

Lien, Paige Pearce, Laura Price, Jayme Ramos, Corrina Stadler, Mitchell Stephens

Halfway

Madison Morgan

Baker students graduate from EOU

LA GRANDE — Baker County students earned degrees during the 2020-21 academic year at Eastern

Oregon University.

Baker City

- Rochelle Adams, Bachelor of Science in Early Childhood Education
- Kayley AhHee, Bachelor of Science in Business Administration
- Erin Blincoe, Bachelor of Science in Anthropology/Sociology
- Makenna Huggins, Master of Business Admin

in Business

- Laura Price, Bachelor of Science in Health and Human Performance
- Joanie Sells, Bachelor of Science in Early Childhood Education
- Alexandria Wachtel,

Bachelor of Science in Multidisciplinary Studies and Elementary Education

Haines

Chelsea Blatchford, Bachelor of Science in Liberal Studies/2 EOU Minors

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WHAT'S INSIDE MATTERS

NOTICE
The Eagles Lodge Dinner & Dance on August 20th at 2935 H St. has been cancelled due to new COVID restrictions
Sorry Members

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