

Henry's Fork Watershed Council Meeting Minutes

April 12, 2022

Introductions and Community Building

Aaron Dalling, co-facilitator from Fremont-Madison Irrigation District (FMID) welcomed everyone to the hybrid meeting. The group went around with introductions and then called for a moment of silence before opening for announcements and community building.

Upper Snake Basin Water and Reservoir Operations Update

Jeremy Dalling, US Bureau of Reclamation

The Upper Snake Reservoir system is currently 58% full, which is 79% of average. Island Park Reservoir is 93% full and Palisades Reservoir is 39% full. Jackson Lake is 22% full. April to July runoff is forecast for Heise at 65% of average and for Island Park at 55% of average (bottom 3 back to the 1940s). The forecast total natural flow for above Milner is 71% of average.

In a broader water supply perspective, the forecast natural flow and storage is the 3rd lowest since 1988. 2001-2004 had similar conditions to this year. We are sitting well below average. Physical storage for the Henry's Fork Watershed is 105% of average and paper storage is 104% of average. That's a compliment to improvements in conservation, management and conditions last year.

The flow augmentation outlook: not expecting to make any rentals from Water District 01. Only using Palisades powerhead water. There is a Jackson Public information meeting on May 19th at the Teton County Library at 5 pm.

Henry's Fork Watershed Water Supply Update

Rob Van Kirk, Henry's Fork Foundation

We are seeing much drier conditions since 2001 than we've seen since the 1930s. This is long-term drought. We entered into drought officially last summer. Two-thirds of the country is designated in some form of drought. April 1 snow water equivalent (SWE) is among the lowest three years with 2001 and 2015. October-March Henrys Lake to Island Park inflow is 75% of average, 2nd lowest only to 1935. April-September Henry's Fork Watershed natural flow is 60% of average (1978-present) and our prediction ties 2001 for the lowest, but there is a greater than 50% probability of being worse than 2001. It depends on whether or not we get rain the rest of the spring and summer. April to September inflow from Henrys Lake to Island Park Reservoir is 64% of the long-term average (1934-present), and the prediction is for the 2nd lowest only to 1935. Similar years to this water year are 2013, 2003, 1990, and 2001. Island Park outflow will likely remain in the 200-500 cfs range to fill the reservoir. Then it will likely stay between 450-500 until there is need for draft, which may be the 1st of June.

It seems very likely that the reservoir will end up at a minimum 15,000-20,000 ac-ft full. And there is currently a 96% chance that maximum outflow from Island Park Reservoir will exceed last year's maximum of 1,500 cfs. This is all based on current conditions. We're not looking at exactly 1935 conditions, but it could happen next year if we don't get well above average precipitation this fall and winter.

Water Rights Accounting and Administration

Tony Olenichak, Water District 01

Water rights account fill vs physical fill for reservoirs are two different things. US Bureau of Reclamation (USBR) teacup diagram shows physical fill and the water rights accounting "tea cup" shows priority dates. The two earliest storage priorities are Jackson Lake 1906 priority and Lake Wolcott 1909 priority (see slides). Water above Jackson Lake accrues there first, and everything below Jackson Lake accrues to Lake Wolcott first. The typical strategy is if we capture water up high, we can move it downstream later, if needed. Once the oldest priorities fill, junior rights can start accruing, but can only accrue what comes in from above it.

Earlier dates have to be completely filled "on paper" before the next earliest date in line can start filling (see example slides). Water right accounting fill doesn't always match physical contents of individual reservoirs, but when we look at them all, they line up. For example, by the last day of accrual June 13, 2021, Island Park Reservoir had 100,294 ac-ft of water rights accounting fill vs 134,958 ac-ft of physical content for a difference of +34,664 ac-ft. As of April 10, 2022, we still haven't filled the 1921 American Falls storage space, so we can't fill Island Park's 1935 rights or Palisade's 1939 rights. It is doubtful that those will fill based on current conditions, unless we receive a lot of rain. Island Park may end up with only 70% of accrual for water rights accounting (no full storage allocation). Another example: just because Palisades is 80% full doesn't mean Palisades space holders have 80% of their water rights accrual (allocation).

Idaho Agriculture, Water, and Economics

Garth Taylor, University of Idaho

With drought, the pandemic, and supply chain disruptions, agriculture in Idaho still broke a record high in cash receipts in 2020; up 9%. Last year, five record highs were set: potatoes, beets, hay, cattle and calves. Prices were up, not the yields. Since 1997, real cash receipts have grown 60% in Idaho. Idaho adds 10,000-20,000 cows per year to the herd and there are an estimated 650,000 cows in Idaho. Net farm income has grown by 115% in Idaho since 1997. Idaho Farm GDP grew by 200% since 1997. Volatility does not translate or transmit back to local economies.

Ukraine exports 12-15% of world's wheat and if Ukraine's production goes down, famine-stricken parts of the world will be affected. Doubtful it will affect food prices in the United States. There are five cents of wheat in US bread. Inflation is what will kill farmers, and impacts food prices.

Idaho is the 3rd largest state in the nation in irrigation withdrawals and 5th largest in irrigated acres as of 2015. In Idaho, 86% of water withdrawals are for irrigation (cities are about 2-3%). Idaho water withdrawals peaked in 1985 and have been declining since.

Community Building and Wrap Up

No comments.