Water Supply Update

Water Resources Advisory Committee
Jeff Marti, Water Resources Program
June 14 2021

Photo Caption: Areas where wheat did not head
Location: Garfield County
Date: 05/21/2021
Source: Conditions Monitoring Observation System
Washington Precipitation
March–May

1901–2000 Mean: 9.23 in
Non-irrigated lands used for dryland and rangeland production are likely to be most affected. Non-irrigated producers in Eastern WA are expecting reduced yields as a result from this year’s precipitation deficit.

Irrigation users with junior water rights may be required to restrict their diversions to protect senior water rights later in the summer.

Small water systems dependent on shallow wells are most vulnerable to impacts in dry years.

Drought conditions can cause severe stress to fish coping with low streamflows and high water temperatures. Wildlife can struggle to find water sources and forage.

The Northwest Interagency Coordination Center forecasts that significant fire potential is expected to increase to above average in June across central Oregon into southeast Washington and continue through August.
Farms and communities receiving water from the Columbia River and Lake Roosevelt are not expected to experience shortages this year if current weather trends continue.

The federal Bureau of Reclamation forecasts that both senior and junior water users in the Yakima Basin are expected to receive their full water supply this summer.

Mid to large-size water systems plan to meet customer water requirements during critical years and are not expected to encounter shortage issues.
Drought-affected wheat (Columbia County)
A report from Walla Walla County
6/3/2021

Top image -- We generally get 90-120 bales of grass hay off this section. This year we had to mow it under and burn it as it was all foxtail, dried out.

Bottom image -- The sheep pasture has zero forage - the grass is gone and all that is growing is fox tail. We have had to move to feed morning and night as the is no forage. We generally only feed 1x a day. Hay usage is up.
How localized or widespread are the conditions you are reporting?

Very common in our area. All of my neighbors are experiencing the same issues. I am unable to buy cattle hay as all of our hay producers are experiencing the same shortage and are retaining the bulk of hay for their own cattle. There will be a severe hay shortage due to extended feeding for all cattle producers.

Our pastures have dried up and only had about 30% of their normal yield. Our pasture normally holds out till mid June. We are importing hay from outside the region to feed our cows. We were forced to sell all of this year's slaughter animals early due to lack of feed. The animals averaged only 350lbs hanging weight. They normally average 800lbs when slaughtered in early to mid June historically.

We have had several springs for our cattle under produce and we are hauling water every other day to supplement the springs.
Washington winter wheat production is forecast at 96.3 million bushels, down 28 percent from 2020. Harvested area, at 1.69 million acres, is down 60,000 acres from the previous year. Yield is forecast at 57.0 bushels per acre, down 7.0 bushels from the May 1 forecast and down 19.0 bushels from last year.

Index Value | 400 = All Excellent, 0 = All Very Poor

Charts courtesy of
Brad Rippey, USDA Meteorologist
Office of the Chief Economist
World Agricultural Outlook Board
Washington, D.C.
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Summing it up

• Washington state had an exceptionally dry spring.
• The impacts of the dryness are falling unevenly on different classes of water users (e.g., irrigated vs. non-irrigated), depending on their ability to benefit from our above normal snowpack.
• Federal disaster designation in effect for most of eastern Washington.
• Curtailment underway in the Walla Walla and soon to occur on the Little Spokane.
• We continue to monitor water supply.
• Elevating the advisory to a drought emergency not under consideration at this time, but this could change.
Thank you
2021-06-13 | ensemble forecast vs Okanogan at Malott regulation flows

The graph shows the volume (cfs) over time for different ensemble forecasts (e90, e75, e50, e25, e10) and the regulation line. The volume decreases rapidly at the beginning and then levels off towards the end.