2020 TMT YEAR END REVIEW SPRING 2020 FLOW CONDITIONS

02 DECEMBER 2020

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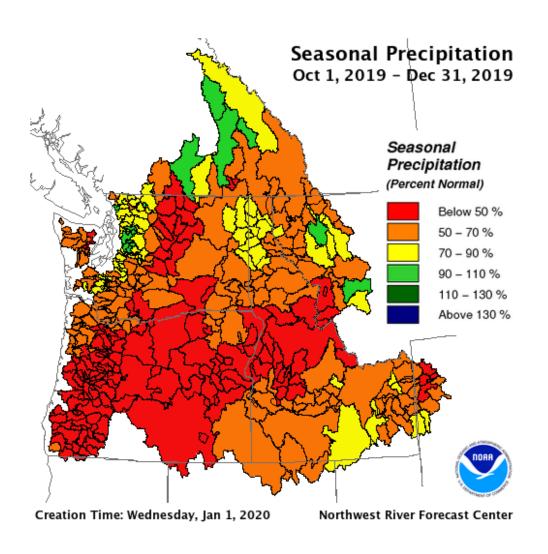


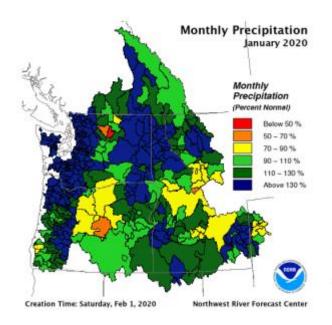
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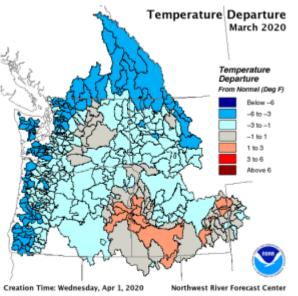


FALL/WINTER RECAP





Wet periods in late December, January and early February March was cool keeping snowpack up in the mountains



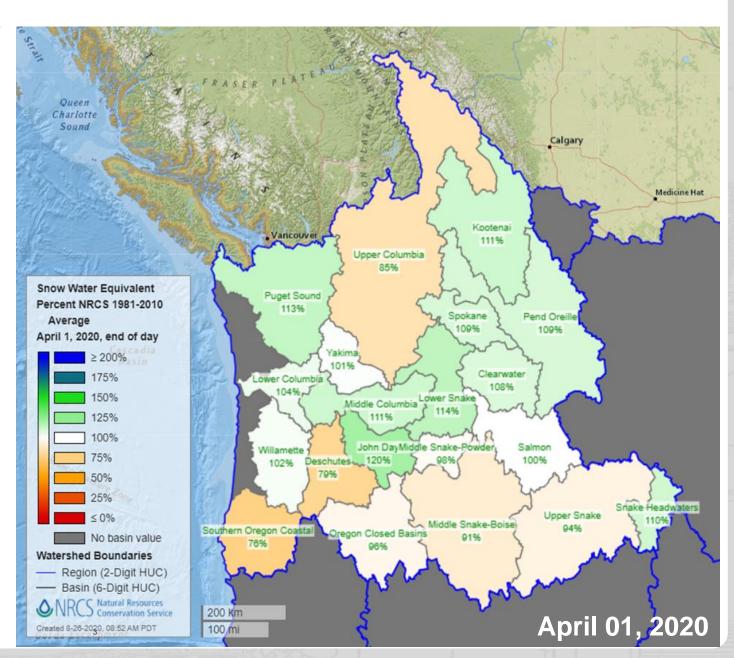




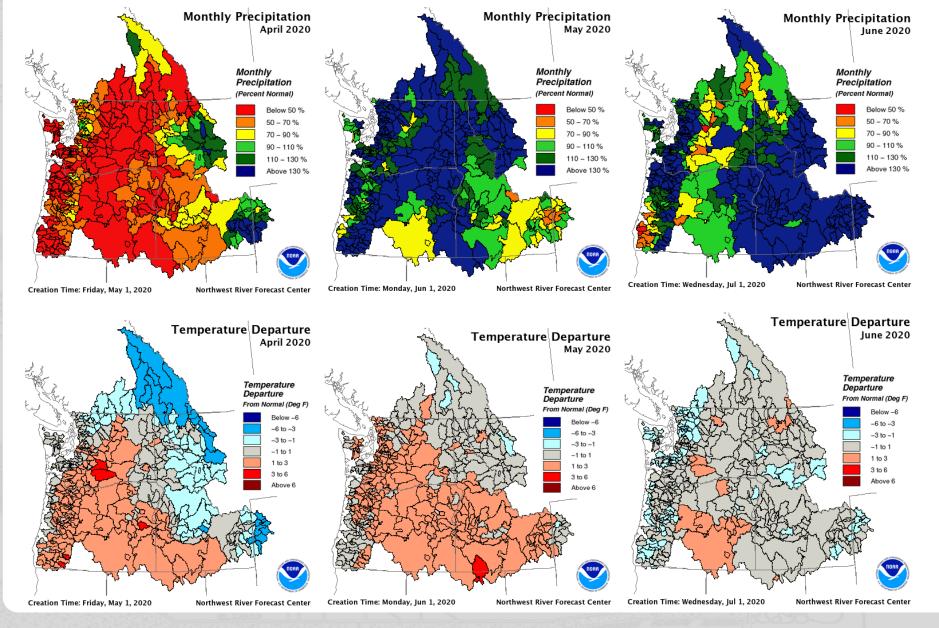
Fall was cool and dry

COLUMBIA BASIN SNOWPACK

- Snowpack generally average to above average in northern headwaters (except Upper Columbia)
- Upper Snake slightly below average



WEATHER CONDITIONS – SPRING 2020



APRIL

- Mostly dry and cool in headwaters
- Normal to above normal temps in lower basins
- · Low flows in early April

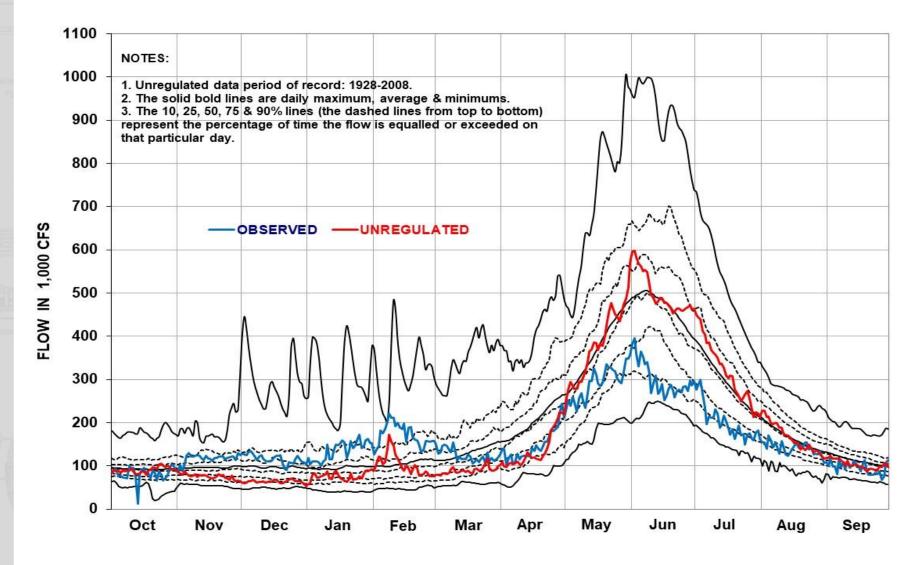
MAY

- Wet
- Series of unusually cold late winter storm events hit late April and early May
- Snowmelt

JUNE

- Early June storms kept flows high
- Snowpack depleted

WY2020 FLOWS AT THE DALLES

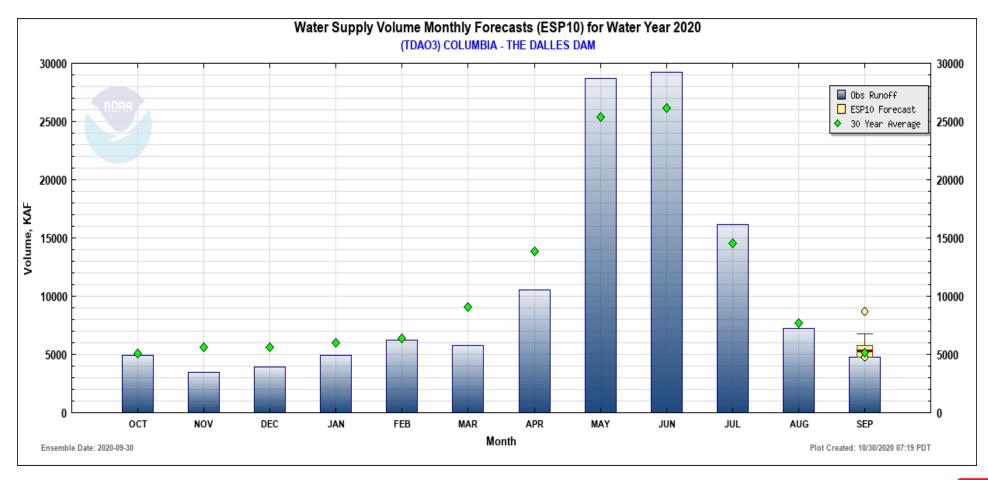


- Peak regulated flows ~400 kcfs early June
- Peak unregulated flows
 ~600 kcfs early June
- Peak unregulated flows at 75% exceedance levels
- WY2020 Apr-Aug runoff volume 105% of average
- WY2020 Oct-Sep runoff volume 96% of average





WY2020 FLOWS AT THE DALLES

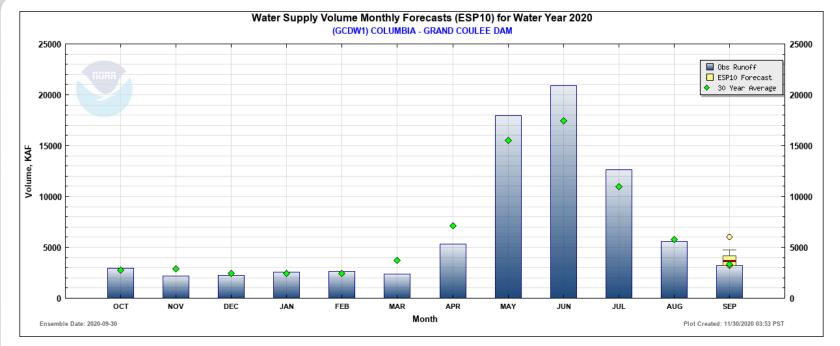


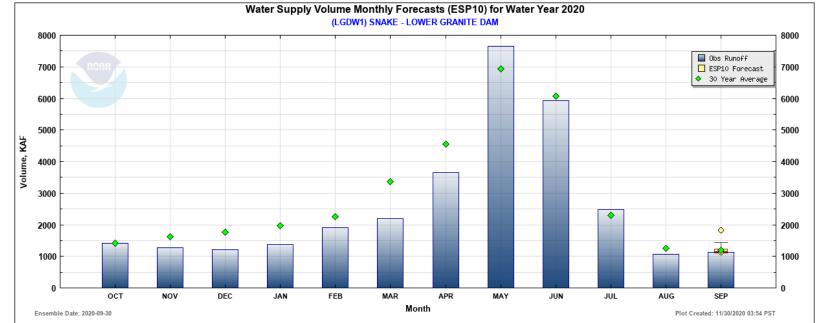
Monthly runoff volume at The Dalles

- Above average May-July
- Average to below average all other months









GRAND COULEE

 April-August observed runoff was 62.4 MAF, 110% of normal

LOWER GRANITE

- April-July observed runoff was 19.7 MAF, 99% of normal
- Peak daily outflow of 166 kcfs occurred on Jun 2