

Pacific Northwest Region Water Supply Update September 15, 2010

Summer seemed to come and go in a flash in the Pacific Northwest; it arrived late, was punctuated by several cold spells that prevented hot temperatures from becoming entrenched, and now fall is already in the air. Crisp nights and pleasant sunny days currently rule, but the weather pattern will remain changeable as we transition to autumn. The moderate summer kept irrigation demands near normal and water supplies were sufficient to meet all needs, including full delivery of flow augmentation water for the benefit of ESA listed anadromous fish. Irrigation season wraps up by about mid October, and reservoir carryover storages at the end of the season are expected to be near average. Climactic forecasts for the upcoming winter call for a moderate to strong "La Nina" condition to persist, which has a tendency for greater than average winter precipitation for the Northwest. We look forward to that coming true.

	Snowpack % of avg	Water Year Precipitation % of avg	Water Year Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	n/a	97	84	48	100%
Flathead/Hungry Horse (MT)	n/a	97	81	90	n/a
Crooked (OR)	n/a	98	75	68	n/a
Boise (ID)	n/a	90	76	59	n/a
Payette (ID)	n/a	88	82	60	n/a
Upper Snake (ID)	n/a	85	77	50	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	93	79	n/a	n/a



Pacific Northwest Region Water Supply Update July 14, 2010

Typical summer weather (hot and dry) has finally arrived in the PN Region. A cool and wet spring dramatically improved the water supply conditions over what had been anticipated. Despite the below average runoff volumes listed below, the timing of the runoff (fed by heavy rains late in the season) was very favorable and filled the major reservoir systems. Flow augmentation water for the benefit of ESA listed anadromous fish has been released on the Boise and Upper Snake this year with the Payette continuing its augmentation through August. This water improves migration conditions for salmon and steelhead that spawn, rear, and migrate in the lower Snake, Columbia, and tributary rivers below Idaho Power Company's Hells Canyon Dam.

Releases to meet irrigation demands are being made throughout the PN Region, with adequate water supplies available. Reservoir carryover storages at the end of the summer are expected to be near average.

	Snowpack % of avg	Water Year Precipitation % of avg	Water Year Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	n/a	96	83	93	100%
Flathead/Hungry Horse (MT)	n/a	95	79	99	n/a
Crooked (OR)	n/a	100	77	99	n/a
Boise (ID)	n/a	91	76	93	n/a
Payette (ID)	n/a	89	82	90	n/a
Upper Snake (ID)	n/a	82	77	91	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	93	79	n/a	n/a



Pacific Northwest Region Water Supply Update June 10, 2010

The PN Region has experienced a dramatic turnaround in water supply over the two months, going from low snowpack and below average runoff forecasts to a very wet period leading to flood conditions in some basins. The setup was a cool and wet April and May; this combination preserved snowpack and created very low irrigation demand, allowing the reservoirs to continue filling. Then came June and the rain! Several very large rain events have impacted most basins in Oregon, and in particular the Snake River basin in Idaho and Wyoming. Reservoirs in the Payette basin were operated to prevent major flooding, although some flooding did occur. Likewise, reservoirs in the Boise basin stored large inflows during the events but are now approaching full and controlled releases are being made but are expected to remain below flood stage; a similar situation exists in the Snake River headwaters at Jackson Lake and Palisades Reservoir. All basins in the PN Region have seen a marked improvement in water supply, and many reservoirs have either refilled or are much higher than had been projected earlier this spring. No water supply shortages are expected.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	n/a	98	88	92	90%
Flathead/Hungry Horse (MT)	n/a	93	86	93	n/a
Crooked (OR)	n/a	91	80	99	n/a
Boise (ID)	n/a	93	73	97	n/a
Payette (ID)	n/a	90	86	103	n/a
Upper Snake (ID)	n/a	82	62	92	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	94	70	n/a	n/a



Pacific Northwest Region Water Supply Update April 16, 2010

The PN Region once again experienced a very dry month during most of March, continuing the trend of drought conditions throughout the region this year. However, a vigorous series of storms near the end of the month and first week of April was a welcome turnaround and hopefully signals a pattern change to a wetter spring. Snowpack percentages improved during these storms and most runoff forecasts improved slightly as well. The forecast for the next two weeks calls for continued cool and unsettled weather. The cool temperatures are favorable for keeping irrigation demand low; the primary snowmelt season in the higher elevations is yet to begin in earnest thanks to the cool temps. The longer range forecast calls for increased odds of above average temperatures during spring however. Water supplies will be tight but should be sufficient to make it through the summer, thanks to reasonably good reservoir carryover from last year. However, reservoirs will be taxed heavily and be very low by fall.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	98	89	70	57	71%
Flathead/Hungry Horse (MT)	78	80	71	76	n/a
Crooked (OR)	76	80	80	92	n/a
Boise (ID)	72	78	62	66	n/a
Payette (ID)	69	72	64	65	n/a
Upper Snake (ID)	63	66	54	91	n/a
Columbia Basin (Columbia R at the Dalles)	79	81	65	n/a	n/a



Pacific Northwest Region Water Supply Update March 03, 2010

The PN Region is experiencing a very lackluster winter and is facing below to much below average water supply conditions throughout the entire region. Hardest hit is the Snake River basin. The runoff forecast for the Upper Snake above Milner places it in the lowest 6 years of record, going back to 1920. Runoff prospects in the Clearwater basin, a major contributor to the lower Snake, are in a similar position. Snowpacks are running around 53% of average in these hardest hit basins, and typically range 60% to 70% in the rest of the PN Region. February precipitation was only 30 to 50% of average throughout most of the region. It is still possible for a turnaround to wet conditions this spring that could provide significant improvement, but nothing in the long range (3 month) forecasts suggest this will occur. Water supplies will be tight but should be sufficient to make it through the summer, thanks to reasonably good reservoir carryover from last year. However, reservoirs will be taxed heavily and be very low by fall.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	80	82	70 - 75	50	n/a
Flathead/Hungry Horse (MT)	71	76	70	77	n/a
Crooked (OR)	70	77	60 - 70	66	n/a
Boise (ID)	68	74	58	59	n/a
Payette (ID)	58	67	50 - 55	61	n/a
Upper Snake (ID)	54	60	54	82	n/a
Columbia Basin (Columbia R at the Dalles)	63	76	69	n/a	n/a



Pacific Northwest Region Water Supply Update January 06, 2010

The 2010 Water Year is off to a slow start so far in the PN Region, with early season snowpacks lagging behind average throughout the entire region. The best conditions are found in the northern tier basins where snowpacks typically range from 80 to 90% of average, and deteriorate to the 60 to 70% range further south in the Snake River drainage. More than half of the snow accumulating season is still to come, but we will be playing 'catch up' unless conditions turn around soon. Shorter range forecasts hint at wetter weather during the second half of January. Unfortunately the one to three month forecasts call for above average temps and below average precipitation, typical in years with El Nino conditions. Despite these forecasts, any outcome is still possible at this point in the season. Carryover storage is in good shape in most basins heading into 2010. January 1 runoff forecasts have not been completed at the time of this report, but expected results are listed.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	85	90	85 - 90	42	n/a
Flathead/Hungry Horse (MT)	91	96	85 - 90	84	n/a
Crooked (OR)	72	85	60 - 70	54	n/a
Boise (ID)	77	86	80 - 85	51	n/a
Payette (ID)	72	80	80 - 85	60	n/a
Upper Snake (ID)	60	67	80 - 85	73	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	87	83	n/a	n/a



Pacific Northwest Region Water Supply Update November 05, 2009

The 2010 Water Year is off to a fairly good start so far in the PN Region, with a mix of every kind of weather in October. Snow is yet to begin accumulating except in the very highest elevations, but above average precipitation has helped to improve soil conditions in the mountains as we head into winter. The weather forecast for the next 2 weeks calls for a progressive pattern to continue with several storms impacting the region. Longer range forecasts are being influenced by El Nino conditions setting up in the equatorial Pacific, which leads to warmer and dryer forecasts in the Pacific Northwest. However, these long range forecasts are by no means a 'slam dunk' and any outcome is possible this early in the season. Carryover storage is in good shape in most basins heading into 2010.

	Snowpack % of avg	Water Year Precipitation % of avg	Streamflow % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	n/a	119	112	31	full
Flathead/Hungry Horse (MT)	n/a	144	64	90	n/a
Crooked (OR)	n/a	116	62	54	n/a
Boise (ID)	n/a	171	106	46	n/a
Payette (ID)	n/a	141	107	59	n/a
Upper Snake (ID)	n/a	114	101	59	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	130	82	n/a	n/a