

Pacific Northwest Region Water Supply Update September 24, 2008

The Pacific Northwest has experienced beautiful fall weather in September, with sunny warm days and crisp nights for the most part. A large low pressure system did move through the region last weekend and brought areas of heavy rainfall, particularly over southern Idaho where some amounts exceeded 1.5 inches in the mountains. This fall precipitation is welcome as it begins to recharge soil moisture heading into the winter. The 10 day forecast calls for a more active pattern to set up near the end of the period which should bring in more storms. The irrigation season is winding down, with good reservoir carryover levels in most basins. The exceptions are reservoirs in the Malheur and Owyhee basins of eastern Oregon, which did not refill completely this year and have used most of their storage.

	Water Year Precipitation % of avg	WY 2008 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	95	92	48	full
Flathead/Hungry Horse (MT)	102	109	83	n/a
Crooked (OR)	98	63	62	n/a
Boise (ID)	98	85	47	n/a
Payette (ID)	100	98	58	n/a
Upper Snake (ID)	100	98	40	n/a
Columbia Basin (Columbia R at the Dalles)	102	91	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update September 3, 2008

The Pacific Northwest has seen a beautiful summer this year, with no extended periods of abnormally hot weather, and just enough rain events to reduce the risk of large wildfires. Cooler temperatures are beginning to usher in fall and reduce irrigation demands. The irrigation season will wind down in October, with good reservoir carryover levels in most basins. The exceptions are reservoirs in the Malheur and Owyhee basins of eastern Oregon, which did not refill completely this year and will use most of their storage to meet demands. Flow augmentation water for the benefit of ESA listed anadromous fish concluded in August to improve migration conditions for salmon and steelhead that spawn, rear, and migrate in the Snake, Columbia, and tributary rivers below Idaho Power Company's Hells Canyon Dam. Additional water was provided from Hungry Horse, Grand Coulee, and Banks Lake for Columbia River listed stocks under the terms of the FCRPS BiOp.

	Water Year Precipitation % of avg	WY 2008 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	97	92	61	full
Flathead/Hungry Horse (MT)	101	109	87	n/a
Crooked (OR)	99	63	69	n/a
Boise (ID)	97	85	59	n/a
Payette (ID)	100	98	63	n/a
Upper Snake (ID)	104	98	49	n/a
Columbia Basin (Columbia R at the Dalles)	102	92	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update August 6, 2008

Typical summer weather (hot and dry) continues in the PN Region. Large wildfire activity has been low so far this season due to abundant high elevation moisture last winter and low lightning activity. The risk will continue to rise however if moisture remains limited and fuels dry out in August. Flow augmentation water for the benefit of ESA listed anadromous fish continues to be released during August to improve migration conditions for salmon and steelhead that spawn, rear, and migrate in the Snake, Columbia, and tributary rivers below Idaho Power Company's Hells Canyon Dam. Additional water is provided from Hungry Horse, Grand Coulee, and Banks Lake for Columbia River listed stocks under the terms of the FCRPS BiOp. Water supplies will be adequate in 2008, and reservoir carryover levels at the end of the season will be much improved over last year.

	Water Year Precipitation % of avg	WY 2008 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	95	92	82	full
Flathead/Hungry Horse (MT)	98	108	95	n/a
Crooked (OR)	101	65	79	n/a
Boise (ID)	99	85	79	n/a
Payette (ID)	101	98	80	n/a
Upper Snake (ID)	104	97	68	n/a
Columbia Basin (Columbia R at the Dalles)	102	93	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update July 23, 2008

Typical hot and dry conditions prevail for the PN Region. The exception was a round of severe thunderstorms over southern and central Idaho on July 22, which created isolated flash flooding and debris flows in isolated mountain locations. No impacts to Reclamation projects were noted. Flow augmentation water for the benefit of ESA listed anadromous fish continues to be released during July and August to improve migration conditions for salmon and steelhead that spawn, rear, and migrate in the Snake, Columbia, and tributary rivers below Idaho Power Company's Hells Canyon Dam. Additional water is provided from Hungry Horse, Grand Coulee, and Banks Lake for Columbia River listed stocks under the terms of the FCRPS BiOp. Water supplies will be adequate in 2008, and reservoir carryover levels at the end of the season will be much improved over last year.

	Water Year Precipitation % of avg	WY 2008 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	96	92	92	full
Flathead/Hungry Horse (MT)	97	108	98	n/a
Crooked (OR)	101	65	84	n/a
Boise (ID)	98	85	88	n/a
Payette (ID)	100	98	89	n/a
Upper Snake (ID)	106	97	77	n/a
Columbia Basin (Columbia R at the Dalles)	102	93	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update July 9, 2008

Summer has arrived in the PN Region with typical hot and dry weather. The last of the high elevation snow has essentially melted out and all rivers are in recession as they drop toward base flows. The late runoff pattern has delayed the drafting of the major reservoir systems, which have reached their maximum contents for the season and will now begin to draft as they meet demands. The PN Region was able to secure the entire 487,000 acre-feet of water obligated for flow augmentation from its Snake River projects for the benefit of ESA listed anadromous fish. This water will be released during July and August to improve migration conditions for salmon and steelhead that spawn, rear, and migrate in the Snake, Columbia, and tributary rivers below Idaho Power Company's Hells Canyon Dam. Additional water is provided from Hungry Horse, Grand Coulee, and Banks Lake for Columbia River listed stocks under the terms of the FCRPS BiOp. Water supplies will be adequate in 2008, and reservoir carryover levels at the end of the season will be much improved over last year.

	Water Year Precipitation % of avg	WY 2008 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	98	92	99	full
Flathead/Hungry Horse (MT)	101	107	99	n/a
Crooked (OR)	101	65	91	n/a
Boise (ID)	100	86	96	n/a
Payette (ID)	102	99	96	n/a
Upper Snake (ID)	105	95	85	n/a
Columbia Basin (Columbia R at the Dalles)	103	92	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update June 23, 2008

Hot and dry describes the current weather in the PN Region. The above normal temperatures are driving off the last of the snow from the high elevation basins and the major reservoir systems are approaching “final fill”, or the peak storage for the season. The Upper Snake is the only major system not likely to refill completely, but is still in much better condition than 2007. Cool weather this spring preserved snowpacks in the highest elevations, leading to this last surge of runoff and a delay in the snowmelt recession. This will also delay the drafting of reservoirs this year as more irrigation demands are met from natural flows rather than storage releases. Water supplies will be adequate in 2008, and reservoir carryover levels at the end of the season will be much improved over last year.

	Water Year Precipitation % of avg	WY 2007 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	98	88	98	full
Flathead/Hungry Horse (MT)	104	98	94	n/a
Crooked (OR)	101	65	96	n/a
Boise (ID)	102	85	97	n/a
Payette (ID)	103	99	99	n/a
Upper Snake (ID)	108	87	81	n/a
Columbia Basin (Columbia R at the Dalles)	106	89	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update June 11, 2008

A “cool drought” essentially describes this spring for the Pacific Northwest. Despite normal to above normal snowpacks in the region, cool temperatures and below normal rainfall has been the dominate weather pattern over the last several months. The exception was a week of hot weather in mid May that led to rapid snowmelt and flood (or near flood) conditions in many basins. No major damage was noted however. A return to cool weather has preserved snowpack in the highest elevations, which will help to preserve the freshet later into summer and reduce or delay reservoir drawdowns. In fact, a rare late season snow storm is currently impacting much of the Region, particularly in the Clearwater and Flathead basins, where up to 2 feet of new snow has fallen. Temps will return to near normal over the next week and lead to another round of snowmelt. The below average runoff figures indicate 2 things: the cool and dry pattern has led to less yield from the ample snowpacks than was expected; and some runoff is delayed into later in the season. Nonetheless, water supplies will be adequate in 2008.

	Water Year Precipitation % of avg	WY 2007 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	100	87	92	full
Flathead/Hungry Horse (MT)	104	94	89	n/a
Crooked (OR)	102	65	99	n/a
Boise (ID)	103	85	92	n/a
Payette (ID)	105	99	96	n/a
Upper Snake (ID)	108	85	76	n/a
Columbia Basin (Columbia R at the Dalles)	106	87	n/a	n/a

Note: Runoff percentages now reflect observed runoff since October, rather than forecasted runoff.

Pacific Northwest Region Water Supply Update May 7, 2008

It appears that spring has finally arrived in the PN Region. The 10 day forecast calls for little or no precipitation, and high temperatures gradually rising to normal for this time of year. The mountain snowpack has begun to melt and flows will rise throughout the period. April was cool and unsettled, but precipitation was sub-par and ranged from about 40% to 80% of average. The cool weather preserved snowpack and kept April's runoff at minimum levels. Irrigation demand has also been below normal but will pick up. The region is set up for potential flood control operations in some basins because the cold temperatures of the past month have compressed the spring runoff into two months rather than three. A period of hot temperatures and/or significant rainfall would be necessary for any real threat to be realized, and those conditions are not evident in the next couple weeks. A slower melt pattern will preserve the freshet later into summer and reduce or delay reservoir drawdowns. Most reservoirs should fill or come close to filling in 2008.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Spring Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	129	98	117	48	100%
Flathead/Hungry Horse (MT)	119	95	104	65	n/a
Crooked (OR)	n/a	101	134	97	n/a
Boise (ID)	101	102	102	65	n/a
Payette (ID)	123	104	109	60	n/a
Upper Snake (ID)	109	102	98	61	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	104	99	n/a	n/a

Pacific Northwest Region Water Supply Update April 2, 2008

The second half of March brought a return of winter, particularly in the Upper Snake where it was needed most. Snowpack in the Upper Snake climbed from 92% of average on March 1 to the current reading of 104%. This moisture boost means the entire PN Region will enter April with near to above normal snowpack and runoff forecasts. A warm and dry April and May would reduce yields, but adequate water supplies are a virtual lock at this point. A cool unsettled weather pattern has prevailed so far this spring, and this pattern is forecast to continue into next week. The cool temperatures have delayed the onset of runoff that would normally start occurring by late March, and will keep irrigation demands low as we enter the irrigation season that began in April 1. The 3 month outlook for precipitation calls for “equal chances”; that is, no discernable pattern is predicted at this time. No major flood control operations are anticipated at this time. Reservoirs in the PN Region should fill or nearly fill in 2008. April 1 runoff forecasts are still being computed; the values listed here are early bird estimates and subject to change.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Spring Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	114	101	117	46	n/a
Flathead/Hungry Horse (MT)	105	97	104	68	n/a
Crooked (OR)	127	106	134	78	n/a
Boise (ID)	103	108	102	54	n/a
Payette (ID)	105	109	109	61	n/a
Upper Snake (ID)	104	106	98	57	n/a
Columbia Basin (Columbia R at the Dalles)	131	106	103	n/a	n/a

Pacific Northwest Region Water Supply Update March 12, 2008

The PN Region remains near average for snowpack and projected runoff, despite receiving very little precipitation over the last 3 to 4 weeks. The lack of new snow in the mountains since mid-February has allowed most snowpack percentages to drop by about 10 to 15% since a month ago. However, the drier and milder pattern has allowed orderly melting of low elevation snow and lessened the flood potential posed by the abnormally large snowfall of late January and early February, particularly west of the Cascade mountains. A pattern shift back to a wetter regime is forecasted over the next week. Mountain snowpacks typically reach their maximum accumulation in early to mid April, so a few more weeks of winter weather is still needed to shore up water supplies. Most reservoirs in the PN Region should fill or nearly fill in 2008, barring a repeat of last year's warm and exceptionally dry spring. The 3 month outlook for precipitation calls for "equal chances"; that is, no discernable pattern is predicted at this time.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Spring Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	110	98	114	45	n/a
Flathead/Hungry Horse (MT)	101	97	102	70	n/a
Crooked (OR)	106	114	120	65	n/a
Boise (ID)	96	107	100	48	n/a
Payette (ID)	102	111	109	64	n/a
Upper Snake (ID)	92	100	95	52	n/a
Columbia Basin (Columbia R at the Dalles)	120	104	101	n/a	n/a

Pacific Northwest Region Water Supply Update February 7, 2008

Snow, snow, and more snow continues to pile up in the Pacific Northwest. Following a short break in mid-January, a seemingly unending string of large snow-producing storms has impacted the region. Temperatures have remained cold, resulting in very impressive snow accumulations throughout much of the region. Particularly deep snowpacks are found in the Oregon and Washington Cascades, the Coast Range of Oregon, and in Northern Idaho. Mountain highways have been closed on numerous occasions due to avalanches and snow removal, as have interior roads from blowing and drifting. The Flathead and Upper Snake basins have benefitted to a lesser degree from the recent storms, although snowpacks there have improved to near average. The forecast for the next two weeks calls for an unsettled pattern with more breaks between storms and slightly moderating temperatures. Water supplies are shaping up to be adequate or better for 2008; a continuation of the wet weather into March may begin shifting the focus toward potential flood control operations this spring.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Spring Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	119	105	110	42	n/a
Flathead/Hungry Horse (MT)	98	94	101	74	n/a
Crooked (OR)	135	122	134	53	n/a
Boise (ID)	108	123	105	41	n/a
Payette (ID)	115	121	114	62	n/a
Upper Snake (ID)	95	106	97	44	n/a
Columbia Basin (Columbia R at the Dalles)	130	110	98	n/a	n/a

Pacific Northwest Region Water Supply Update January 9, 2008

Winter finally arrived with a passion to the Pacific Northwest. A string of winter storm events, some quite substantial, has impacted the region starting about a week before Christmas and continuing through the end of this week. Mountain snowpacks have grown from substandard to near or above average over most of the region; they still lag behind in the Flathead and Upper Snake basins however. Weather forecasts call for a respite from the storms as high pressure will settle in by the weekend and last into the 10 to 14 day period. Despite the encouraging pattern over the last couple weeks, it is important to note that about 50 to 60% of the winter is still to come, and we're not protected from drought conditions yet. To illustrate this, we are very near the snowpack conditions of last year at this time, when the precipitation basically turned off for rest of the season. Hopefully the La Nina pattern will continue to pump moisture into the region.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Spring Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	110	102	103	42	n/a
Flathead/Hungry Horse (MT)	84	88	100	78	n/a
Crooked (OR)	103	110	80	51	n/a
Boise (ID)	97	116	93	37	n/a
Payette (ID)	110	123	102	60	n/a
Upper Snake (ID)	86	104	92	36	n/a
Columbia Basin (Columbia R at the Dalles)	96	106	95	n/a	n/a

Pacific Northwest Region Water Supply Update December 13, 2007

The cold has arrived to the Pacific Northwest, but we're still waiting for the precipitation and snowpack. The exception was an extremely large storm event in early December that led to severe and record flooding in portions of western Washington and Oregon. Most of the impacts were limited to west of the Cascade Mountains and only moderate precipitation reached the interior mountains, where it mostly fell as snow to begin building the 2008 snowpack. Although it is still early in the season, snowpack is lagging behind average. Weather forecasts for the next two weeks call for a progressive pattern with minor storm events. The region will be heavily reliant on this winter's precipitation to avoid a repeat or worsening of drought impacts in 2008. The first runoff forecasts will be available in early January.

	Snowpack % of avg	Water Year Precipitation % of avg	Forecasted Spring Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	58	101	n/a	39	n/a
Flathead/Hungry Horse (MT)	65	82	n/a	80	n/a
Crooked (OR)	55	104	n/a	50	n/a
Boise (ID)	59	103	n/a	34	n/a
Payette (ID)	74	115	n/a	57	n/a
Upper Snake (ID)	73	106	n/a	30	n/a
Columbia Basin (Columbia R at the Dalles)	n/a	101	n/a	n/a	n/a

Pacific Northwest Region Water Supply Update November 7, 2007

The 2008 water year started out wet in October, but most of that moisture was confined to the southern half of the PN Region. November has been clear and dry so far. However, the precipitation in October saturated the soils in many of the mountain locations in the Snake River basin, which will lead to more efficient runoff next spring. All that is needed now is a big snowpack to start forming. The two week forecast calls for a return to somewhat wetter conditions, but no major storms are predicted. It is still too early to accurately assess the prospects for WY 2008, but long range climate predictions call for a La Nina event, which tips the odds in favor of wetter conditions in the Northwest. But a La Nina is no guarantee of a wet winter. The Region will be heavily reliant on this winter's precipitation to avoid a repeat or worsening of drought impacts in 2008.

	WY 2008 Precipitation % of avg	WY 2008 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	79	93	28	full
Flathead/Hungry Horse (MT)	77	66	82	n/a
Crooked (OR)	115	61	49	n/a
Boise (ID)	144	97	28	n/a
Payette (ID)	124	109	51	n/a
Upper Snake (ID)	141	90	19	n/a
Columbia Basin (Columbia R at the Dalles)	102	91	n/a	n/a

Pacific Northwest Region Water Supply Update October 10, 2007

The 2008 water year is only 10 days old but is at least starting out on a positive note, with cool showery weather throughout much of the Pacific Northwest. More wet weather is forecast in the 8 to 14 day period. A wet autumn will help prepare mountain soils for another snow accumulation season and lead to more efficient runoff next spring. It is a couple of months too early to accurately assess the prospects for WY 2008, but long range climate predictions call for a La Niña event, which tips the odds in favor of wetter conditions in the Northwest. This climate signal has a stronger relationship in the western and northern parts of the PN Region (Yakima, Flathead, Upper Columbia basins), and lesser effect in the southern and eastern tier basin such as the Upper Snake, where a wet winter is needed most. The Region will be heavily reliant on this winter's precipitation to avoid a repeat or worsening of drought impacts in 2008; the December-February period is critical, when 60-70% of the winter snowpack typically accumulates.

	WY 2007 Precipitation % of avg	WY 2007 Runoff % of avg	Reservoir Storage % full	Allocations
Yakima (WA)	106	111	27	full
Flathead/Hungry Horse (MT)	92	88	84	n/a
Crooked (OR)	91	59	49	n/a
Boise (ID)	76	60	25	n/a
Payette (ID)	79	66	49	n/a
Upper Snake (ID)	79	66	12	n/a
Columbia Basin (Columbia R at the Dalles)	93	89	n/a	n/a