NWRFC Water Supply Forecasts

May 8th, 2024

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Takeaways: May 8

- Apr-Sep water supply forecasts generally ***decreased*** since April, with near normal in the Upper Snake and below normal for most of the rest of ID
- Water year to date precipitation is above normal in southern ID, and below normal for central and northern ID
- Water year to date air temperatures are warmer than normal
- Peak snowpack was above normal in southern ID, near normal in central ID, and well below normal in northern ID
- Water year to date runoff is normal to above normal in southern and central ID, and below normal in northern ID
- 10-day weather forecast calls for below normal precipitation

NWRFC Forecast Technique

April and Water Year to Date Precipitation

nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=2

April and Water Year to Date Air Temperature

nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=2

Snowpack: April 8 vs. May 7

Precipitation: Apr 8 vs May 7, Upper Snake

Snow data from NRCS, BC Hydro, and Alberta Environment and Parks.
Precip averages from PRISM OSU and PCIC.

Precipitation: Apr 8 vs May 7, Snake at Lower Granite Dam

Snow data from NRCS, BC Hydro, and Alberta Environment and Parks.
Precip averages from PRISM OSU and PCIC.

10 Day Precipitation Forecast used in ESP10

Quantitative Precipitation Forecast (QPF) Sources
Days 1 - 2 NWS Weather Forecast Offices (WFO) in the US, WPC in BC
Days 3 - 7 NWS Weather Prediction Center (WPC)
Days 8 - 10 NWS National Blend of Models (NBM)

Water Year to Date Adjusted Runoff

% Normal Runoff Oct 1 - May 7

Snake River Basin	Current	(chng*)
Island Park	95	(+4)
Snake near Heise	100	(+6)
American Falls	99	(+6)
Lucky Peak	92	(+4)
Payette nr Horseshoe Bend	94	(+2)
Dworshak	71	(-3)
Palouse near Potlatch	56	(-4)
Lower Granite	87	(+4)
North Idaho Basins	**Current**	**(chng*)**
Coeur D'Alene at Cataldo	74	(-8)
St. Joe at Calder	74	(-3)

* Change since Apr. 8

https://www.nwrfc.noaa.gov/natural/index.html?version=20190313v1

Water Supply Forecasts

% Normal Apr - Sep

Snake River Basin	Current	(chng*)
Island Park	90	(-1)
Snake near Heise	104	(3)
American Falls	104	(1)
Lucky Peak	80	(-13)
Payette nr Horseshoe Bend	86	(-1)
Dworshak	66	(-8)
Palouse near Potlatch	35	(-12)
Lower Granite	86	(-3)
North Idaho Basins	**Current**	**(chng*)**
Coeur D'Alene at Cataldo	54	(-19)
St. Joe at Calder	59	(-13)

* Change since Apr. 8

https://www.nwrfc.noaa.gov/natural/index.html?version=20190313v1

Water Supply Forecasts: April 8 vs May 7

https://www.nwrfc.noaa.gov/natural/index.html?version=20190313v1

ESP10 Water Supply Forecast

SNAKE - AT AMERICAN FALLS DAM (AMFI1)
Forecasts for Water Year 2024

Natural Forecast

ESP with 10 Days QPF **Ensemble:** 2024-05-07 **Issued:** 2024-05-07

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	5982	6387	104	7036	6167
APR-JUL	5060	5432	103	6023	5266
JAN-SEP	6919	7324	102	7973	7190
JAN-JUL	5997	6369	101	6960	6289
OCT-SEP	8019	8424	102	9073	8275

Experimental

HEFS with 15 days EQPF **Ensemble:** 2024-05-07 **Issued:** 2024-05-07

APR-SEP	6083	6438	104	7170	6167
APR-JUL	5123	5472	104	6108	5266
JAN-SEP	7020	7375	103	8107	7190
JAN-JUL	6060	6409	102	7045	6289
OCT-SEP	8120	8475	102	9207	8275

Reference

ESP with 0 Days QPF **Ensemble:** 2024-05-07 **Issued:** 2024-05-07

APR-SEP	6113	6675	108	7351	6167
APR-JUL	5204	5612	107	6310	5266
JAN-SEP	7050	7612	106	8288	7190
JAN-JUL	6141	6549	104	7247	6289
OCT-SEP	8150	8712	105	9388	8275

Move the mouse over the desired "Forecast Period" to display a graph.

https://www.nwrfc.noaa.gov/natural/plot/nat_forecasts.php?id=AMFI1

ESP10 Water Supply Forecast

SNAKE - LOWER GRANITE DAM (LGDW1)
Forecasts for Water Year 2024

Natural Forecast

ESP with 10 Days QPF **Ensemble:** 2024-05-07 **Issued:** 2024-05-07

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	19671	20692	86	23114	23929
APR-JUL	17398	18278	85	20654	21589
APR-AUG	18523	19555	86	21898	22827
JAN-SEP	25900	26920	86	29343	31446
JAN-JUL	23627	24506	84	26882	29106
OCT-SEP	29761	30781	86	33204	35973

Experimental

HEFS with 15 days EQPF **Ensemble:** 2024-05-07 **Issued:** 2024-05-07

APR-SEP	19720	20626	86	23355	23929
APR-JUL	17413	18343	85	20887	21589
APR-AUG	18619	19514	85	22161	22827
JAN-SEP	25949	26855	85	29583	31446
JAN-JUL	23642	24571	84	27115	29106
OCT-SEP	29810	30716	85	33444	35973

Reference

ESP with 0 Days QPF **Ensemble:** 2024-05-07 **Issued:** 2024-05-07

APR-SEP	19910	21355	89	25524	23929
APR-JUL	17654	19117	89	22936	21589
APR-AUG	18793	20278	89	24270	22827
JAN-SEP	26139	27583	88	31753	31446
JAN-JUL	23882	25345	87	29165	29106
OCT-SEP	30000	31444	87	35614	35973

Move the mouse over the desired "Forecast Period" to display a graph.

Max Scale | Scale To Data | Scale To Last 45 Days | Show Min/Max Ensemble Volume | Show Tooltips Help

https://www.nwrfc.noaa.gov/natural/plot/nat_forecasts.php?id=LGDW1

ESP10 Water Supply Forecast

https://www.nwrfc.noaa.gov/natural/plot/monthly/monthly_natural_forecasts.php?id=LGDW1