

<b>NWS Form E-5</b> U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE  <b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>	<b>HYDROLOGIC SERVICE AREA:</b> Pocatello, Idaho
	<b>REPORT FOR:</b>  <b>MONTH:</b> April <b>YEAR:</b> 2011
<b>TO:</b> Hydrologic Operations Division, W/OH2 National Weather Service National Oceanic and Atmospheric Administration Silver Spring, Maryland 20910	<b>SIGNATURE</b>  Troy Lindquist Service Hydrologist
<b>DATE:</b> May 13, 2011	
When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts and hydrologic products issued (NWS Instruction 10-924).	

**X** An X in this box indicates that no flooding has occurred for the month within this hydrologic service area.

### Overview

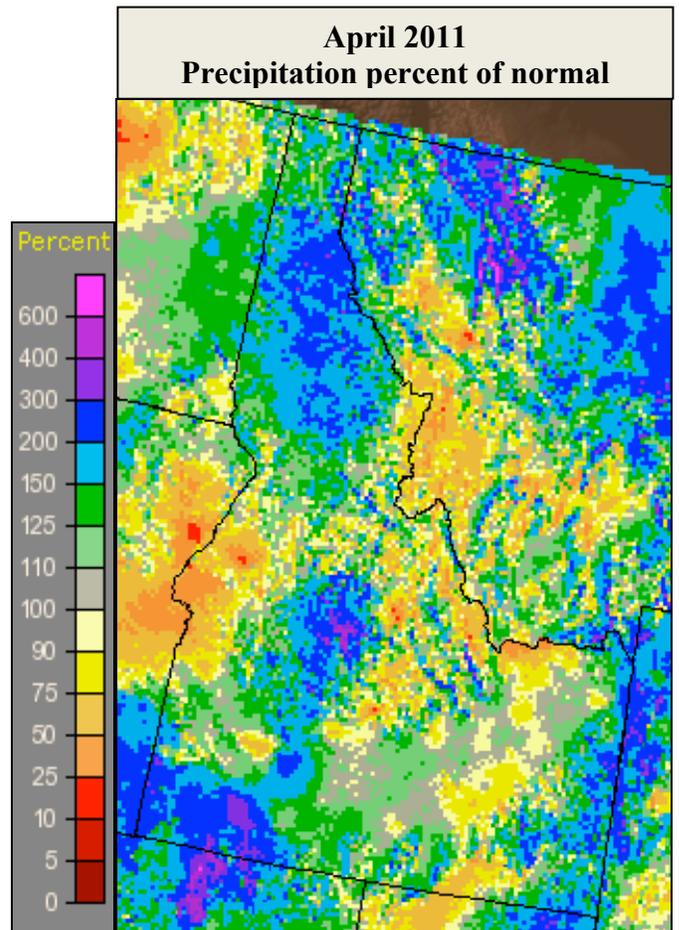
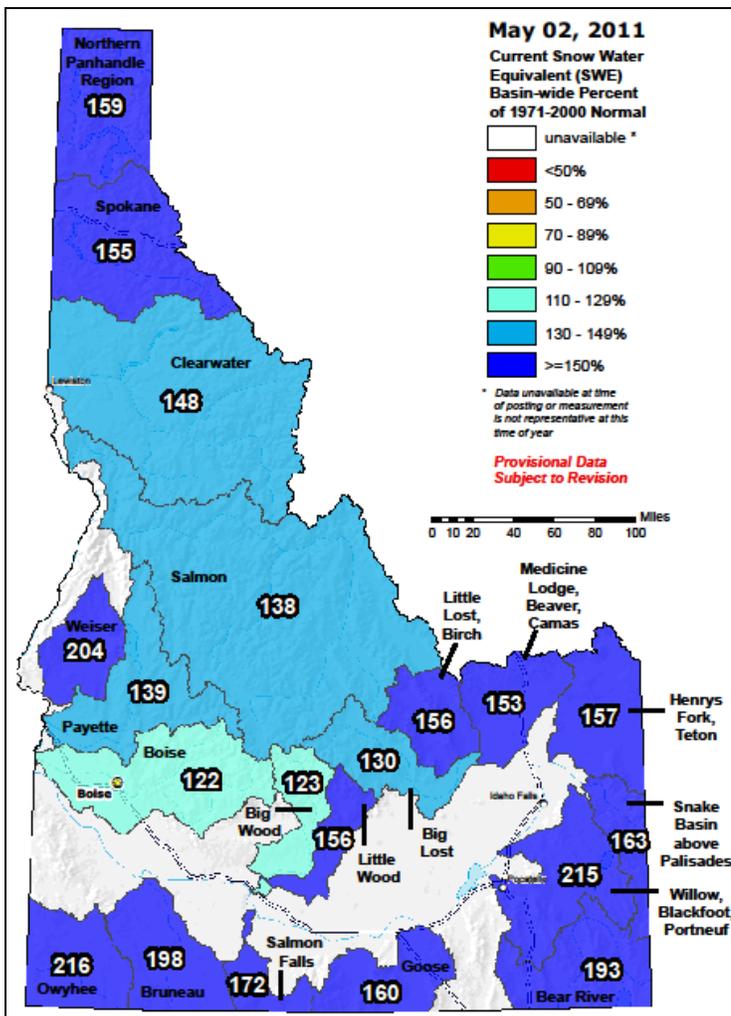
Cool and wet summarizes the month of April 2011 across the Hydrologic Service Area. An active and moist flow off the Pacific Ocean dominated resulting in above normal precipitation for the majority of the HSA. Snow water equivalent in the mountain snowpack rose to record or near record levels across much of the Snake River Headwaters, Willow Creek, Blackfoot River, and the Portneuf River basins and the Bear River Basin. About 25% of the snowpack normally melts off during the month of April but that did not happen this year. Basin snowpack typically peaks from about April 1<sup>st</sup> to the middle of April but the cool and wet conditions caused a much later peak. In fact, many snow measuring sites had not peaked as of May 1<sup>st</sup>. Cool temperatures and limited snowmelt also kept flows on many rivers and streams below normal. End of month runoff volume forecasts increased about 10 to 20 percentage points compared to the previous month. Forecast runoff volumes range from about 115% to 140% of normal for the April through July period. Expectations are that there will be plenty of water for all users across eastern Idaho the rest of the water year. Spring flood potential increased considerably, particularly along the Snake River above American Falls Reservoir, Willow Creek, the Blackfoot River, the Portneuf River, and the Bear River. Small tributaries to these rivers will be at a much greater than average risk of flooding as well. Flood control releases were performed at major reservoirs on the Snake River to create room for the large runoff inflows later this spring.

### Precipitation

Forty-six National Weather Service COOP and automated stations with climate data reported monthly precipitation for April. Twenty-six of the stations received greater than 100% of normal precipitation. NRCS SNOTEL data showed precipitation amounts from 110% of average across the Little Wood and Big Lost basins to near 200% of average across the Upper Snake and Bear basins.

ASOS Daily Precipitation Records		
Station	New or Tied Record	Previous Record
Burley Airport	April 13 - .20" rainfall	.20" - 2001
Stanley Airport	April 13 - .29" rainfall	.19" - 2009
Stanley Airport	April 16 - .62" rainfall	.29" - 2006

COOP Monthly Precipitation Records		
Station	New or Tied Record	Previous Record
Bern	2.29" (high)	2.40" - 1993
Tetonia	3.53" (high)	2.44" - 1957
Wayan	3.71" (high)	3.42" - 1963

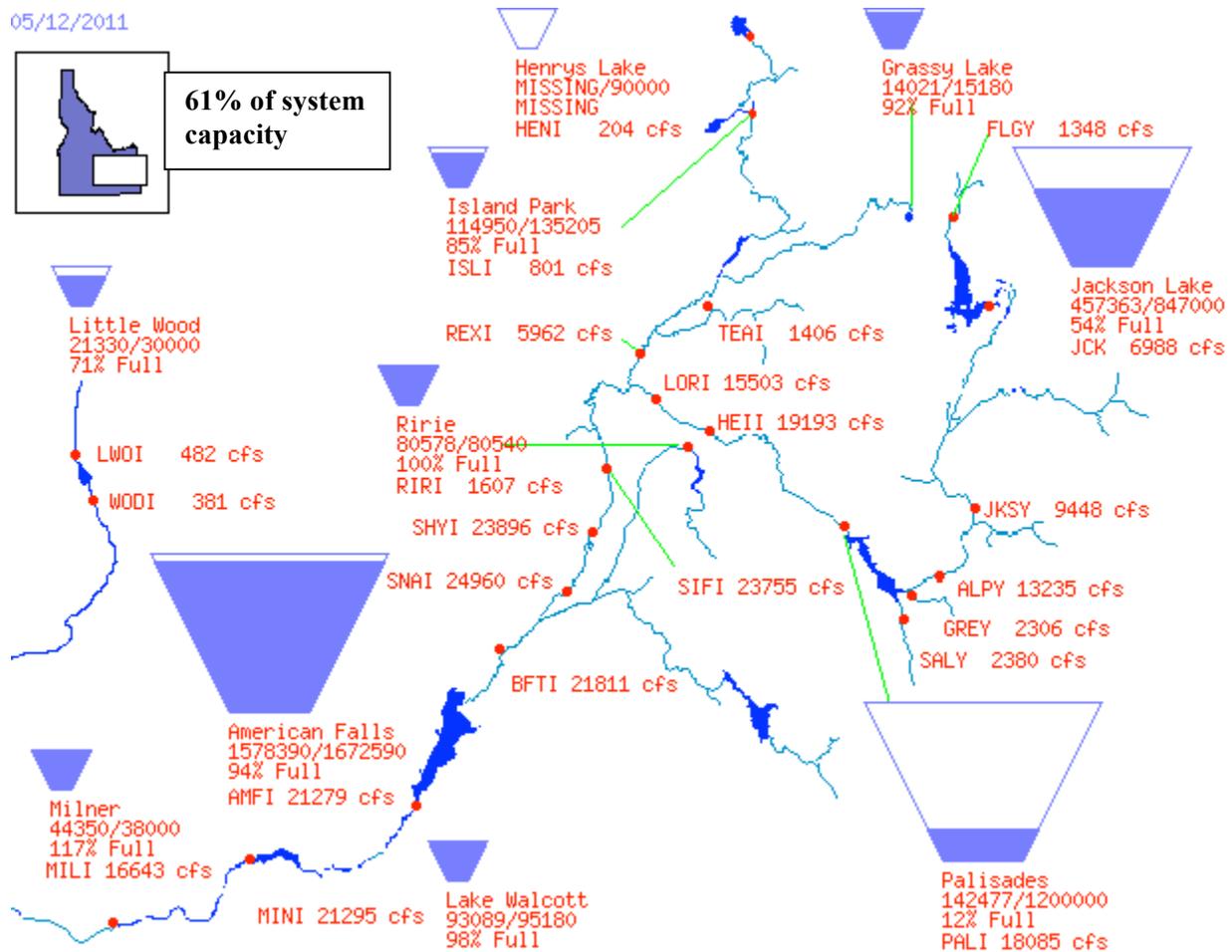


## Reservoirs

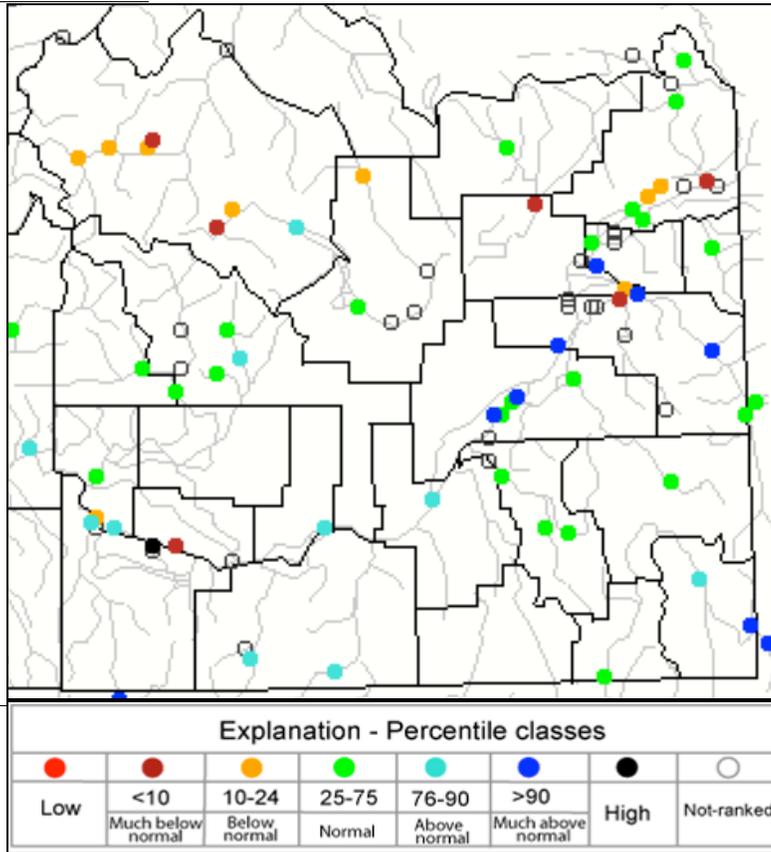
Reservoir	% Capacity Mar. 31 <sup>1</sup>	% Capacity Apr. 30 <sup>2</sup>	Percent Change	% of Average <sup>2</sup>	% of Last Year <sup>2</sup>
American Falls	79	92	13	103	92
Bear Lake	41	50	9	73	119
Blackfoot	58	73	15	100	111
Henry's Lake	100	101	1	104	101
Island Park	74	80	6	88	82
Little Wood	76	64	-12	79	65
Mackay	87	70	-17	90	71
Magic	58	92	34	118	131
Oakley	34	46	12	85	115
Palisades	60	27	-33	43	27
Ririe	60	86	26	123	122
Lake Walcott	95 <sup>3</sup>	98 <sup>4</sup>	3	n/a	n/a
Milner	90 <sup>3</sup>	117 <sup>4</sup>	27	n/a	n/a

Source: (1) NRCS Mar. 31, 2011; (2) NRCS Apr. 30, 2011.

(3) US Bureau of Reclamation (BOR) Apr. 5, 2011 (4) BOR May 13, 2011



## Streamflow



Monthly streamflow compared to historical streamflow for April, 2011.



## April, 2011 Hydrologic Product Summary

Product	Number Issued
Flood Watch for Flash Flooding	0
Flash Flood Warning	0
Flash Flood Statement	0
Urban and Small Stream Flood Advisory	0
Flood Watch for Flooding	0
Flood Warning	0
Flood Statement	0
Flood Advisory	0
Hydrologic Statement (RVS)	2
Hydrologic Outlook (ESF)	8
Water Supply Outlook (State – ESFBOI)	1

cc: Jeff Zimmerman, Western Region HCSD  
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 Pocatello WFO Forecasters and HMTs