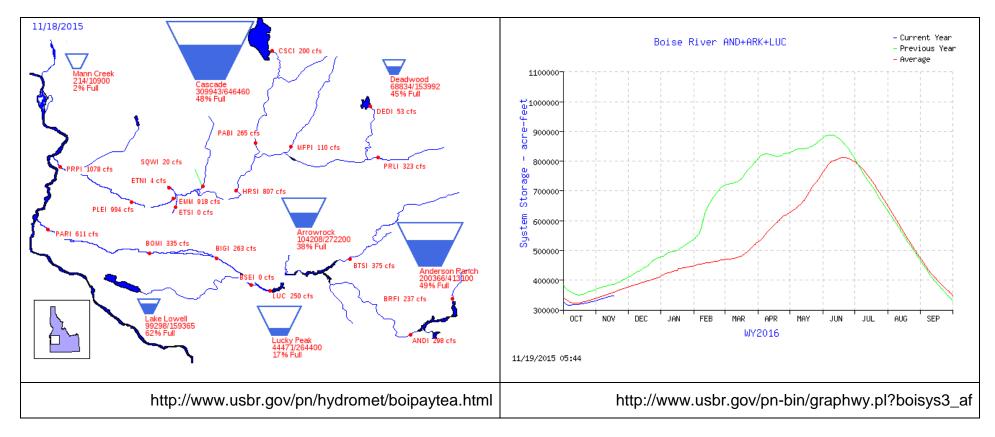
## Boise System Review For the Week of Nov. 16, 2015

## **Boise River Teacup**



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 37 % of capacity.

Total space available: Total storage capacity: Natural Flow: 600,655 AF 949,700 AF 761 CFS

## NRCS Water & Climate Center Snow-Precipitation Update

United States	Natural Resources	Water	and Climate Center
Department of	Conservation		Portland, Oregon
Agriculture	Service		

SNOW - PRECIPITATION UPDATE

Based on Mountain Data from NRCS SNOTEL Sites As of THURSDAY: NOVEMBER 19, 2015

BASIN	ELEV.	SNOW WAT	ER EQUIV	ALENT	TATION		
Data Site Name	(Ft)			00			olo
		Current	Median	Median	Current	Avera	age Avg
IDAHO							
BOISE BASIN							
Atlanta Summit	7580	1.9	3.2	59	3.9	5.8	67
Bogus Basin	6340	2.9	1.8	161*	4.7	4.5	104
Camas Creek Divide	5710	.6	.3	200*	2.8	2.9	97
Dollarhide Summit	8420	2.2	. J -M	200	4.3	4.7	91
					110	- • ·	-
Graham Guard Sta.	5690	.3	.6	50*	3.3	4.6	72
Jackson Peak	7070	1.8	2.7	67*	4.5	5.7	79
Mores Creek Summit	6100	2.1	2.7	78*	5.2	6.0	87
Prairie	4800	.0	.0	*	1.3	2.9	45
Trinity Mtn.	7770	2.5	4.9	51	5.8	6.8	85

<u>Vienna Mine</u>	8960	4.2	4.3	98	6.2	5.6	111	
	Basin Index (%)			80*			85	
						ftp://ftp.w	cc.nrcs.us	da.gov/data/snow/update/id.txt

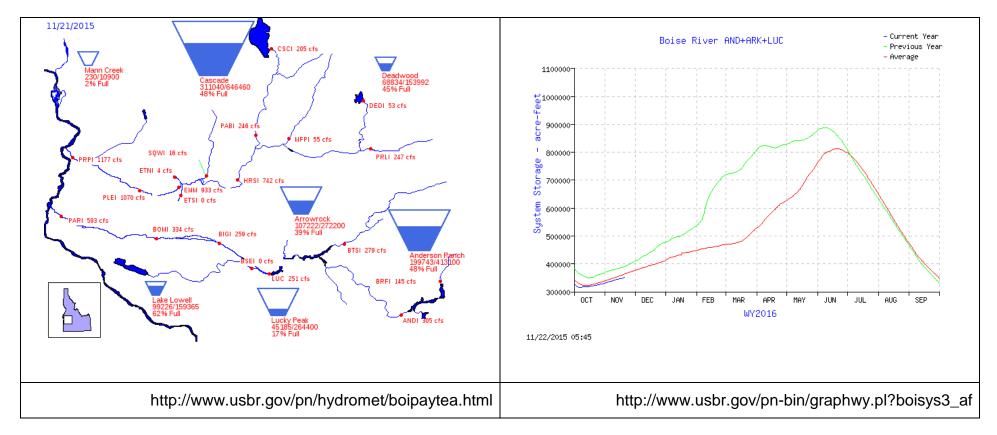
We're back for another season of watching what's up in them that hills, fretting about a lurking "Super El Niño" & impacts, and waiting for the official forecasts with the New Year, six weeks out.

Storage in the Boise Basin is a smidgeon behind average for this time of year and snow pack, @ 80% of normal for this time of the year, lags.

At the present time, the likelihood of a significant runoff season appears to be 50/50 – we'll either see a big year or we won't. Stay tuned.

Steve Sweet

### **Boise River Teacup**



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 37 % of capacity.

Total space available: Total storage capacity: Natural Flow: 597,550 AF 949,700 AF 575 CFS

## NRCS Water & Climate Center Snow-Precipitation Update

United States	Natural Resources	Water	and	Climate	Center
Department of	Conservation		Pc	ortland,	Oregon
Agriculture	Service				

SNOW - PRECIPITATION UPDATE

Based on Mountain Data from NRCS SNOTEL Sites As of SUNDAY: NOVEMBER 22, 2015

BASIN	ELEV.	SNOW WAT	ER EQUIV	ALENT	TOTAL PI	RECIPITA	TION
Data Site Name	(Ft)			00			010
		Current	Median	Median	Current	Averag	e Avg
IDAHO							
BOISE BASIN							
Atlanta Summit	7580	2.7	3.7	73	4.7	6.5	72
Bogus Basin	6340	3.3	2.0	165*	5.1	4.6	111
Camas Creek Divide	5710	.7	.6	117*	3.4	3.3	103
Dollarhide Summit	8420	3.2	-M	*	4.9	5.2	94
Graham Guard Sta.	5690	1.0	.9	111*	4.0	5.1	78
Jackson Peak	7070	2.6	3.1	84	5.3	6.5	82
Mores Creek Summit	6100	3.3	3.2	103	6.4	6.7	96
Prairie	4800	.2	.2	100*	2.2	3.2	69

Trinity Mtn.	7770	3.4	5.7	60	6.6	7.8	85	
Vienna Mine	8960	5.4	5.0	108	7.8	6.2	126	
	Basin Index (%)			93			91	
						ftp://ftp.w	cc.nrcs.usd	la.gov/data/snow/update/id.t

Last week, reservoir storage accumulated a skosh (nearly a smidgen!) with an additional 3,100 ac-ft of storage. The system remains at 37% full - the same as last week. The pesky blue line (this year's storage) continues to trail the 30-year average (the red line).

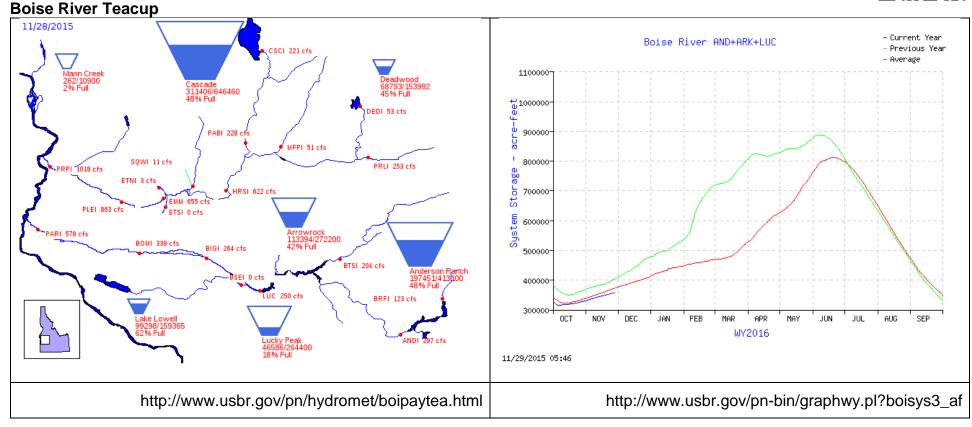
Basin precipitation moved out of the 80% range and into the 90's with last week's winter weather. More is on the way. Hope springs eternal.

The runoff odds are holding at 50/50 – we'll either see a big year or we won't. Staying tuned.

Steve Sweet

Boise System Review For the Week of Nov. 30, 2015





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 38 % of capacity.

Total space available:592Total storage capacity:949Natural Flow:345

592,269 AF 949,700 AF 345 CFS

### NRCS Water & Climate Center Snow-Precipitation Update

United States Department of Agriculture	Natural Resources Conservation Service	Water and Climate Center Portland, Oregon
SNOW - P	RECIPITATION U	PDATE
	Mountain Data from NRCS SNOTEL of SUNDAY: NOVEMBER 29, 2015	Sites

BASIN Data Site Name	ELEV. (Ft)	SNOW WAT	ER EQUIN	ALENT ۶	TOTAL PRECIPITATION %		
		Current	Median	Median	Current	Aver	age Avg
IDAHO							
BOISE BASIN							
Atlanta Summit	7580	3.3	4.7	70	5.2	7.9	66
Bogus Basin	6340	3.9	3.4	115	5.8	5.7	102
Camas Creek Divide	5710	1.2	1.1	109*	4.0	4.0	100
Dollarhide Summit	8420	3.7	-M	*	5.4	6.3	86
Graham Guard Sta.	5690	1.2	1.7	71	4.2	6.1	69
Jackson Peak	7070	3.0	4.4	68	5.7	8.0	71
Mores Creek Summit	6100	3.7	4.3	86	6.7	8.5	79
Prairie	4800	.5	. 4	125*	2.4	3.9	62
Trinity Mtn.	7770	4.1	7.3	56	7.2	9.6	75

Vienna Mine	8960	4.0	6.4	62	8.1	7.5	108
	Basin Index (%)			74			81

ftp://ftp.wcc.nrcs.usda.gov/data/snow/update/id.txt

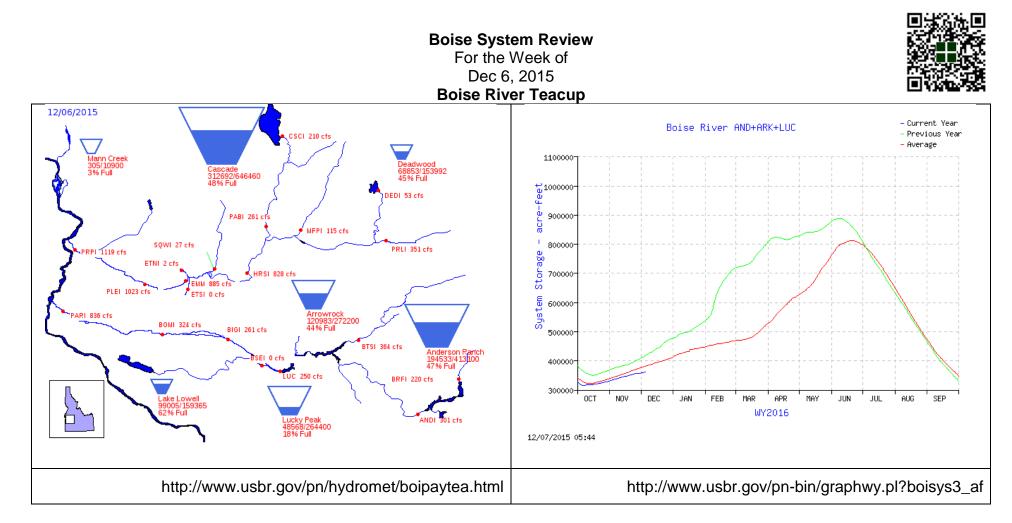
Last week, reservoir storage accumulated an additional 5,300 ac-ft of storage. The system nudged to 38% full – as natural flow diminishes with the building snowpack. The pesky blue line (this year's storage) continues to trail the 30-year average (the red line), and upon a close inspection, the red line is rising faster than the blue – we're not keeping up in with historic averages in filling the reservoirs.

Basin precipitation fell from last week's encouraging 90% of median. Of particular note is that the high snow seems to be slacking, and the next prediction for precipitation is trending a week out.

No change in runoff odds - still 50/50. Staying tuned.

Steve

PS - This week we introduce a Quick Response Code (QRC) in the top right corner. Scan the QRC with your smart phone and you'll be directed to a site containing e-copies of all this season's reviews.



Portland, Oregon

Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 38% of capacity.

Total space available:	585,616 AF
Total storage capacity:	949,700 AF
Natural Flow:	833 CFS

# **NRCS Water & Climate Center**

**Snow-Precipitation Update** United States Water and Climate Center Natural Resources Department of Conservation Agriculture Service SNOW - PRECIPITATION UPDATE Based on Mountain Data from NRCS SNOTEL Sites As of MONDAY: DECEMBER 7, 2015

BASIN	ELEV.	SNOW WAT	ER EQUIN	TOTAL 1	PRECIPITA	LION	
Data Site Name	(Ft)			00			00
		Current	Median	Median	Current	t Average	e Avg
IDAHO							
BOISE BASIN							
Atlanta Summit	7580	-M	6.7	*	-M	9.9	*
Bogus Basin	6340	-M	4.4	*	-M	6.6	*
Camas Creek Divide	5710	1.8	1.8	100	4.5	5.0	90
Dollarhide Summit	8420	-M	-M	*	-M	7.8	*
Graham Guard Sta.	5690	2.2	2.3	96	5.2	7.5	69
Jackson Peak	7070	-M	5.6	*	-M	9.8	*
Mores Creek Summit	6100	-M	5.2	*	-M	10.6	*
Prairie	4800	-M	.6	*	-M	4.7	*
Trinity Mtn.	7770	-M	8.7	*	-M	11.9	*
Vienna Mine	8960	8.5	7.5	113	9.1	9.2	99
Basin	Index (%)			108*			 87*
					f	ftp://ftp.wcc.r	nrcs.uso

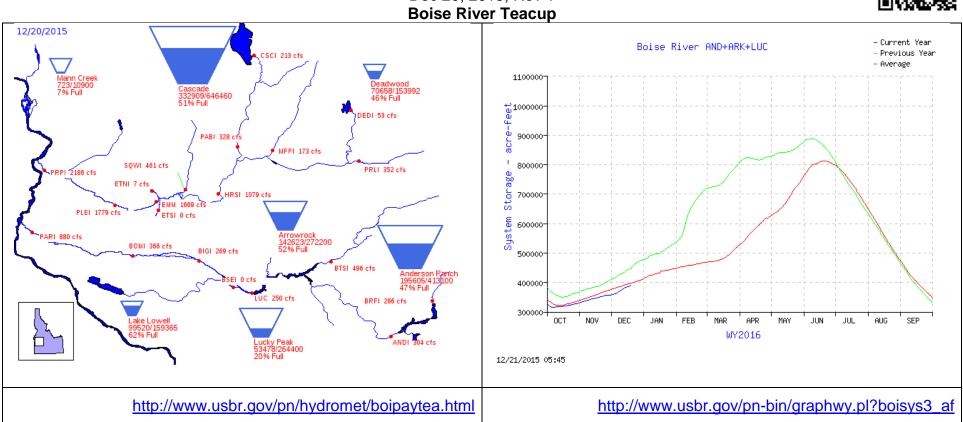
The system remains at 38% full – as natural flow is ticking up. The pesky blue line (this year's storage) continues to trail the 30-year average (the red line). Lots of missing snowpack data on this round. We'll need to wait until next week for more reliable info, so you probably don't want to take the increased basin index to the bank right yet.

We've recently been introduced to Ron Abramovich's regular weather updates, and his info will be worked into these regular reports. If you want to hear his news straight from the horse's mouth, send him an email at: ron.abramovich@id.usda.gov. Otherwise, you'll just be saddled with hearing it from the other end of the horse by staying tuned here.

Ron had an interesting call for all you back country skiers: "expect this year's snowpack to bark, growl, and possibly bite as the snow piles up." It's a dangerous world out there, kiddies.

No change in runoff odds - still 50/50. Staying tuned.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 41% of capacity.

Total space available:	557,994 AF
Total storage capacity:	949,700 AF
Natural Flow:	1,163 CFS

## NRCS Water & Climate Center

**Snow-Precipitation Update** United States Natural Resources Water and Climate Center Portland, Oregon Department of Conservation Agriculture Service SNOW - PRECIPITATION UPDATE Based on Mountain Data from NRCS SNOTEL Sites As of Monday: December 21, 2015 BASIN ELEV. SNOW WATER EQUIVALENT TOTAL PRECIPITATION Data Site Name (Ft) % % Current Median Median Current Average Avg \_\_\_\_\_ IDAHO BOISE BASIN 16.0 Atlanta Summit 7580 13.6 9.4 145 12.8 125 6340 11.6 7.6 153 13.7 8.9 154 Boqus Basin 5.5 172 9.1 6.8 Camas Creek Divide 5710 3.2 134 Dollarhide Summit \* 8420 -M-M-M 10.0 Graham Guard Sta. 6.1 3.9 156 11.4 9.2 124 5690 Jackson Peak 7070 12.3 9.0 137 16.2 12.6 129 18.6 Mores Creek Summit 6100 14.8 9.2 13.6 161 137 Prairie 4800 3.9 1.2 325 8.1 6.0 135 Trinity Mtn. 7770 14.8 11.9 124 19.1 15.4 124 Vienna Mine 8960 10.5 \* 16.8 145 -M 11.6

Basin Index (%)

ftp://ftp.wcc.nrcs.usda.gov/data/snow/update/id.txt

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133

The reservoir system is hanging in around at 41% full – as natural flow ticks up again. The pesky blue line (this year's storage) is making

\_ \_ \_ \_ \_

149

a run at closing on the 30-year average (the red line). With the slightly increasing inflows, we could soon see ol' Pesky-Blue cross over ol' Red for the first time this water year.

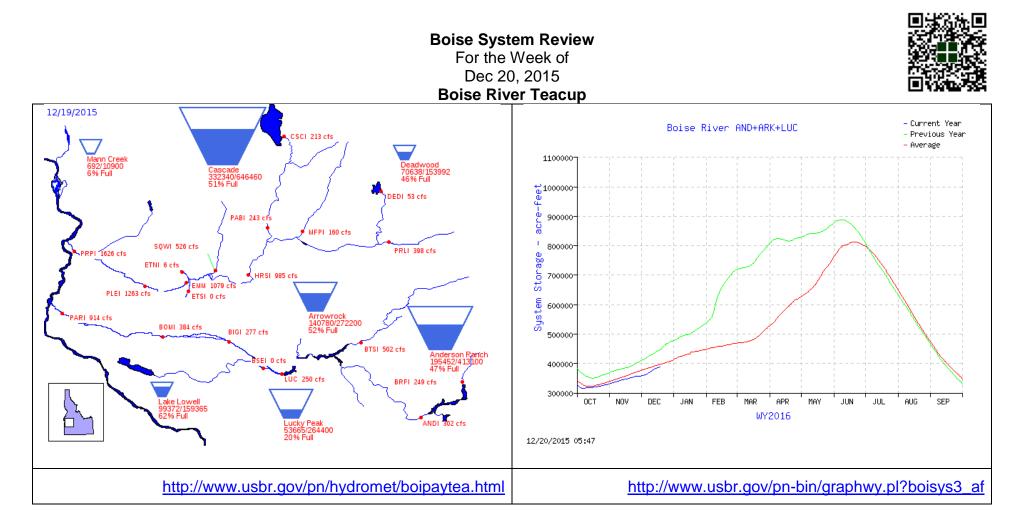
Ron Abramovich has apparently got the Christmas elves to pay attention to the NRCS reporting needs – Data's back and being reported. We've gone from 5 out of 10 sites missing, to only 2 missing today. Significantly, NRCS is apparently more comfortable in calling a 149% Snow-Water Equivalent, without flagging the results as potentially invalid for the upper basin. Snow is nicely filling our "Fifth Reservoir" (after Lucky Peak @ 20% full, Arrowrock - 52%, Anderson - 47% and Lowell - 62%).

Word on the street has the BoR system guru looking at data for past El Nino years. One previous year was a boomer, one was an average runoff year and one was a bust. Using this new data, the runoff odds have been reevaluated, and the odds remain 50/50 – for 2016, we could either see a big year or not.

These recent precipitation events have been heartening. Further, the Watermaster advises that we should all consider paying a little more attention. Message heard, loud and clear.

Merry Christmas to All.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 41% of capacity.

Total space available:	559,803 AF
Total storage capacity:	949,700 AF
Natural Flow:	1,107 CFS

## **NRCS Water & Climate Center**

**Snow-Precipitation Update** United States Water and Climate Center Natural Resources Department of Conservation Portland, Oregon Service Agriculture SNOW - PRECIPITATION UPDATE Based on Mountain Data from NRCS SNOTEL Sites As of Sunday: December 20, 2015 ELEV. SNOW WATER EQUIVALENT BASIN TOTAL PRECIPITATION Data Site Name (Ft) % Current Median Median Current Average Avg \_\_\_\_\_

IDAHO								
BOISE BASIN								
Atlanta Summit	7580	-M	9.3	*	-M	12.6	*	
Bogus Basin	6340	11.5	7.5	153	13.6	8.8	155	
Camas Creek Divide	5710	5.4	3.2	169	9.1	6.7	136	
Dollarhide Summit	8420	-M	-M	*	-M	9.9	*	
Graham Guard Sta.	5690	5.9	3.8	155	11.2	9.1	123	
Jackson Peak	7070	-M	8.9	*	-M	12.4	*	
Mores Creek Summit	6100	-M	9.1	*	-M	13.4	*	
Prairie	4800	3.8	1.2	317	8.0	6.0	133	
Trinity Mtn.	7770	-M	11.9	*	-M	15.2	*	
Vienna Mine	8960	-M	10.4	*	16.6	11.5	144	
Basin	Index (%)			169*			139	
						e. 11e.		

ftp://ftp.wcc.nrcs.usda.gov/data/snow/update/id.txt

%

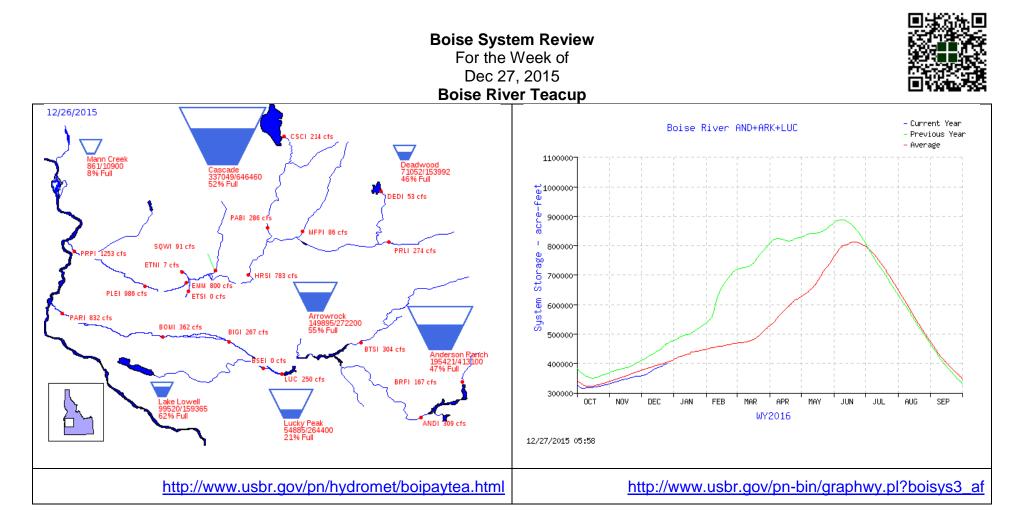
The system nudged up to 41% full – as natural flow ticks up again. The pesky blue line (this year's storage) is making a run at closing

on the 30-year average (the red line). Lots of missing snowpack data on this round, again. We'll still need to wait until next week for more reliable info, so once more, you probably don't want to take the increased basin index to the bank right yet.

Ron Abramovich's recent report noted: "SNOTEL data has been slow to come in for about 25 SNOTEL sites, while another 25 sites are not reporting at all. We apologize for this and any inconvenience. The Boise Master Station which receives the data has been down. We are working to resolve this and hope to have it back on line (shortly)."

No change in runoff odds - still 50/50, although these recent precipitation events have been heartening. Staying tuned.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 42% of capacity.

Total space available:	549,499 AF
Total storage capacity:	949,700 AF
Natural Flow:	589 CFS

## **NRCS Water & Climate Center**

**Snow-Precipitation Update** United States Water and Climate Center Natural Resources Department of Conservation Portland, Oregon Agriculture Service SNOW - PRECIPITATION UPDATE Based on Mountain Data from NRCS SNOTEL Sites As of Sunday: December 27, 2015 BASIN ELEV. SNOW WATER EQUIVALENT TOTAL PRECIPITATION Dat \_ \_ \_ . IDAF BOIS At] Boo Can Do]

Data Site Name	(Ft)			00			<b>%</b>	
		Current	Median	Mediar	n Curre	ent Aver	age Avg	
IDAHO								
BOISE BASIN								
Atlanta Summit	7580	16.3	10.6	154	17.6	14.0	126	
Bogus Basin	6340	15.0	8.6	174	15.3	10.1	151	
Camas Creek Divide	5710	7.4	4.1	180	11.0	7.5	147	
Dollarhide Summit	8420	13.5	-M	*	12.3	10.8	114	
Graham Guard Sta.	5690	7.5	4.5	167	12.8	10.1	127	
Jackson Peak	7070	15.1	9.6	157	18.7	13.7	136	
Mores Creek Summit	6100	17.6	10.1	174	20.6	14.8	139	
Prairie	4800	5.1	1.9	268	9.4	6.6	142	
Trinity Mtn.	7770	18.6	13.6	137	22.5	16.9	133	
Vienna Mine	8960	-M	11.7	*	19.2	12.5	154	
Basin I	Index (%)			163			136	
						<u>ftp://ftp.w</u>	cc.nrcs.usda.gov/data/snow/u	pdate/id.txt

The reservoir system nudges up to 42% full - as the cold weather kicks in and natural flow drops off 50% compared to last week. The

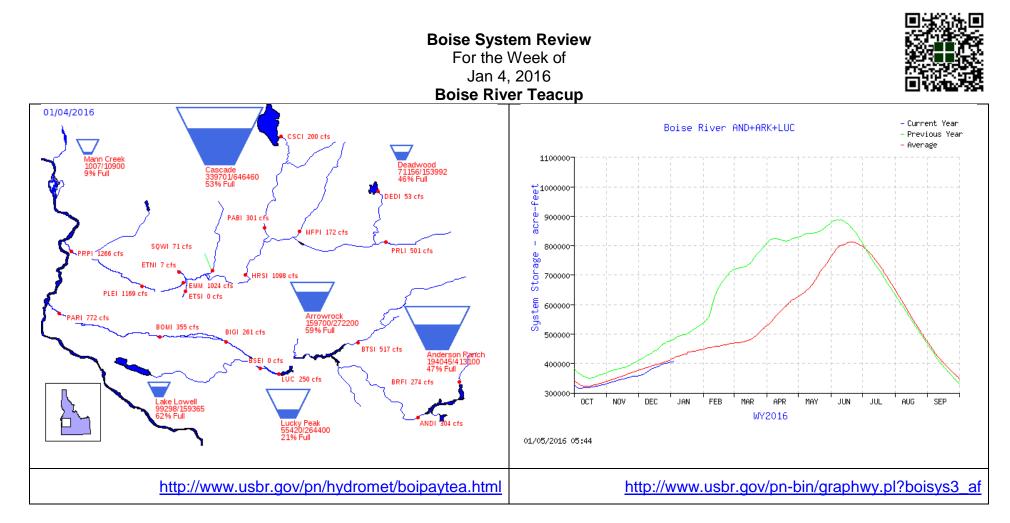
pesky blue line (this year's storage) is only a pixel width away from the 30-year average (the red line).

The snowpack moved up significantly from 149% to 163% for snow water equivalent at this date, while total precipitation remains right around 135% of normal. We're still missing reports on the high "High Snow," although it's a pretty safe bet that there's plenty of snow up on top.

With the Holidays upon us and cold settling in, it's pretty quiet out there. That's it for this calendar year. We'll see what 2016 will be bringing us next week.

Happy New Year!

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 43% of capacity.

Total space available:	540,535 AF
Total storage capacity:	949,700 AF
Natural Flow:	916 CFS

## NRCS Water & Climate Center

**Snow-Precipitation Update** United States Water and Climate Center Natural Resources Conservation Department of Portland, Oregon Agriculture Service SNOW - PRECIPITATION UPDATE Based on Mountain Data from NRCS SNOTEL Sites As of TUESDAY: JANUARY 5 , 2016 ELEV. SNOW WATER EQUIVALENT BASIN TOTAL PRECIPITATION Data Site Name (Ft) % % Current Median Median Current Average Avg \_\_\_\_\_ \_\_\_\_\_ IDAHO BOISE BASIN Atlanta Summit 7580 16.1 13.7 118 19.0 16.6 114 6340 15.1 11.6 130 15.6 12.2 128 Bogus Basin 5710 7.6 5.8 131 11.3 123 Camas Creek Divide 9.2 Dollarhide Summit \* 13.2 8420 13.8 -M 13.0 102 Graham Guard Sta. 5690 7.9 6.2 127 13.4 11.9 113 Jackson Peak 7070 14.8 12.1 122 19.4 16.4 118 Mores Creek Summit 6100 17.2 13.4 22.4 17.9 128 125 Prairie 4800 5.1 2.9 176 10.1 7.8 129 Trinity Mtn. 7770 18.7 17.6 106 23.0 20.0 115 Vienna Mine 8960 14.5 \* 19.7 15.0 131 -M

Basin Index (%)

ftp://ftp.wcc.nrcs.usda.gov/data/snow/update/id.txt

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119

The reservoir system creeps up to 43% full - as the cold weather moves out and natural flow bumps up nearly 60% compared to last

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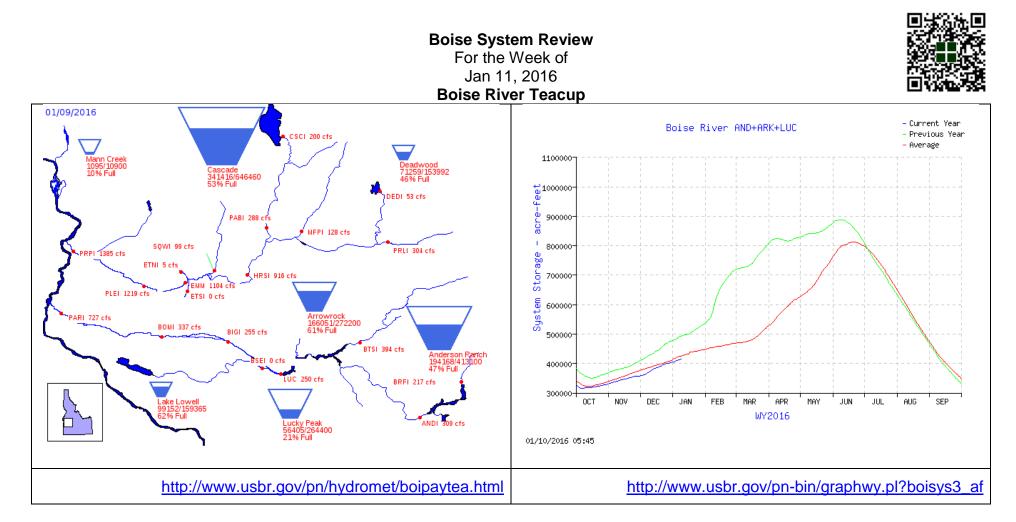
123

week. Despite the newly warming days, the pesky blue line (this year's storage) fades away from the 30-year average (the red line). So close to catching up with the 30-yr average, but no cigar tis time.

The snowpack snow water equivalent and total precipitation have dropped significantly, compared to a week ago. We're only 20% ahead of normal, and without more precipitation, we could be back to normal this month.

For all of you paying attention, this version of the summary is being sent out on the very day that The Curmudgeon (whom has my utmost respect) begins another orbit. He may find that his next orbit may be a bit more challenging, as we'll have an extra day to contend with in 2016. Happy Bee-Day, Your Honor!

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 44% of capacity.

Total space available:	533,076 AF
Total storage capacity:	949,700 AF
Natural Flow:	940 CFS

# NRCS Water & Climate Center

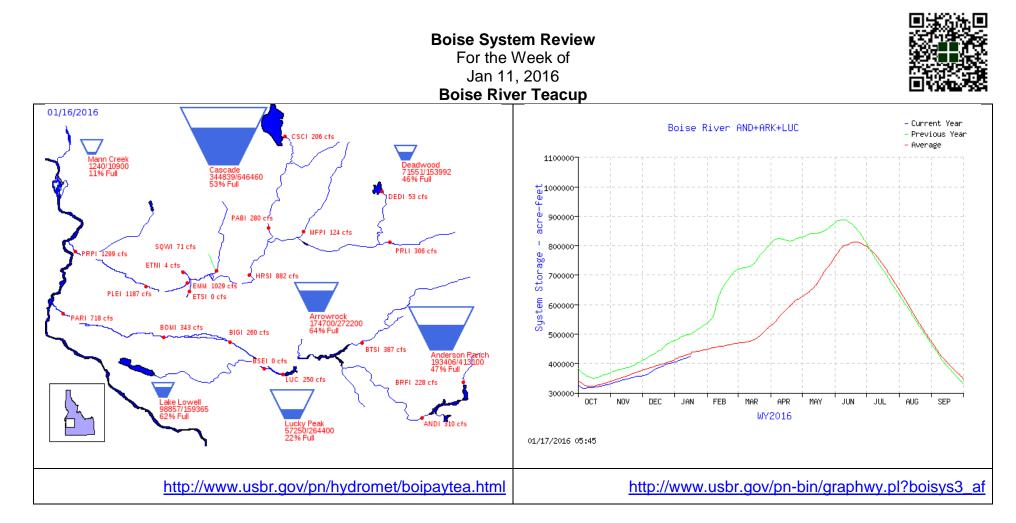
<b>Snow-Precipitation Update</b> United States Department of Agriculture	Natural	ation	S	W	ater and P		e Center , Oregon
	n Mountain s of SUND	Data fro AY: JANUA	m NRCS S RY 10 ,	NOTEL S 2016	ites		
	ELEV.		'ER EQUIV		TOTAL	PRECIPIT	TATION
Data Site Name				00			00
		Current					
IDAHO BOISE BASIN							
Atlanta Summit	7580	16.3	14.8	110	18.8	17.7	106
Bogus Basin	6340	15.1	13.0	116	15.7	12.9	122
Camas Creek Divide	5710	7.8	6.4	122	11.3	9.7	116
Dollarhide Summit	8420	14.0	-M	*	13.4	13.8	97
Graham Guard Sta.	5690	7.9	7.0	113	13.2	12.6	
Jackson Peak	7070	14.9	13.3	112	19.7	17.5	113
Mores Creek Summit							
Prairie		4.7					
Trinity Mtn.		19.0					
Vienna Mine	8960	-M	15.6		19.7	16.0	
Basin	Index (%)			113		ftn://ftn.wc	112 112 c. nrcs. usda. do

The reservoir system creeps up to 44% full – as the natural flow holds steady, when compared to last week. Reservoir storage continues to lag the 30 year average

The snowpack snow water equivalent and total precipitation have again dropped significantly, compared to a week ago. Now we're only a little over 10% ahead of normal, and without more precipitation, we could be back to normal this month.

No major precipitation lurking on the future. Pray for snow!

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 45% of capacity.

Total space available:	524,344 AF
Total storage capacity:	949,700 AF
Natural Flow:	951 CFS

## **NRCS Water & Climate Center**

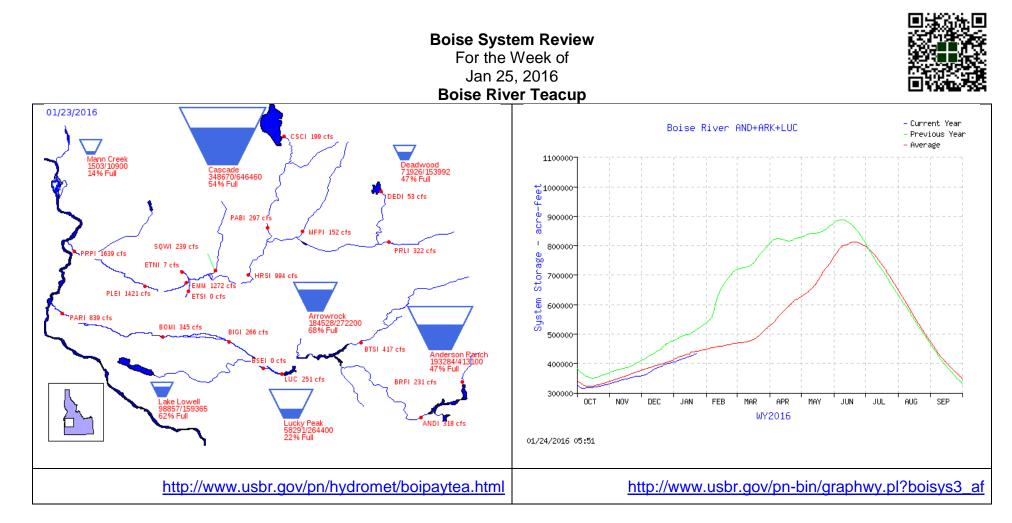
<b>Snow-Precipitation Update</b> United States Department of Agriculture	Natural Conserv	ation	S	Ŵ			e Center , Oregon
	PRECI Mountain s of SUND	Data fro	m NRCS S	SNOTEL S			
BASIN	ELEV.	SNOW WAT	'ER EQUIV	VALENT	TOTAL	PRECIPI	TATION
Data Site Name				olo			010
		Current					-
IDAHO BOISE BASIN							
Atlanta Summit	7580	18.0	15.7	115	20.9	19.1	109
	6340					13.6	124
Camas Creek Divide	5710	8.5	7.0	121	12.1	10.6	114
Dollarhide Summit	8420	15.1	-M	*	14.2	15.0	95
Graham Guard Sta.	5690	9.3	7.8	119	14.8	13.6	109
Jackson Peak	7070	16.4	14.4	114	21.3	19.0	112
Mores Creek Summit	6100	19.7	16.8	117	24.6	20.9	118
Prairie	4800	5.0	3.9	128		8.9	
Trinity Mtn.		20.5				23.0	
Vienna Mine	8960	-M	16.3		21.3	17.4	
Basin	Index (%)			113		ftp://ftp.w	 112 cc.prcs.usda.go

The reservoir system nudges up to 45% full – as the natural flow holds steady, as compared to last week. Reservoir storage continues to lag the 30 year average.

The snowpack snow water equivalent and total precipitation are hanging in at a little over 10% ahead of normal.

We're expecting some precipitation through the middle of the week, so we just might stay a little ahead on precipitation for the upcoming week.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 46% of capacity.

Total space available:	513,597 AF
Total storage capacity:	949,700 AF
Natural Flow:	1,103 CFS

# NRCS Water & Climate Center

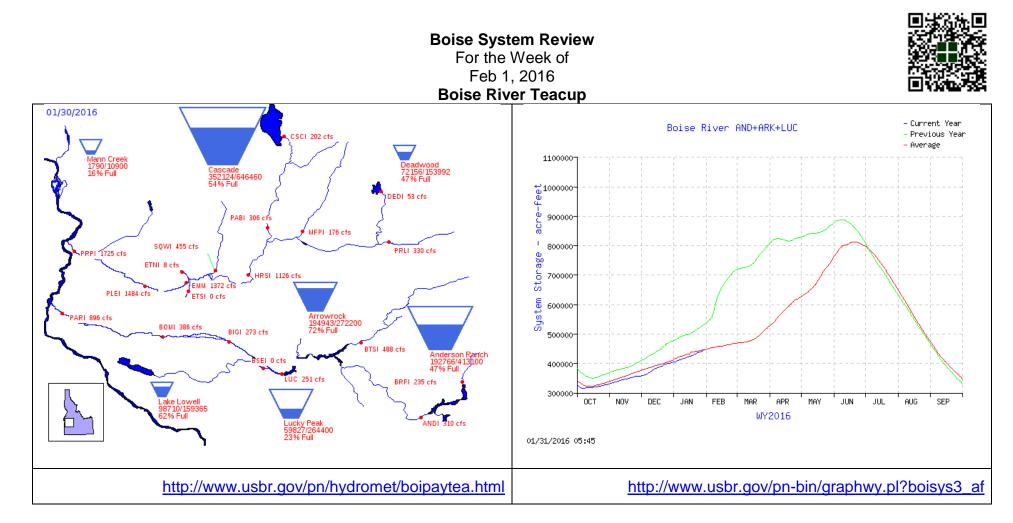
<b>Snow-Precipitation Update</b> United States Department of Agriculture	Conserv	ation	28	W			e Center , Oregon
	Mountain of SUND	Data fro AY: JANUA	om NRCS S ARY 24 ,	NOTEL S 2016	ites		
	ELEV.						TATION
Data Site Name				00			010
		Current					-
IDAHO BOISE BASIN							
Atlanta Summit	7580	21.2	17.0	125	24.1	20.2	119
Bogus Basin	6340	19.3	14.3	135	18.3	14.3	128
Camas Creek Divide	5710	10.7	8.0	134	13.9	11.3	123
Dollarhide Summit	8420	17.3	-M	*	15.8	15.9	99
Graham Guard Sta.	5690	11.0	8.6	128	16.4	14.3	115
Jackson Peak	7070	-M	16.4	*	23.9	20.2	118
Mores Creek Summit						22.3	122
Prairie	4800	5.9	4.0	148	10.9	9.5	115
Trinity Mtn.	7770	24.0	22.2	108	28.3	24.5	116
Vienna Mine	8960	-M	18.4		23.4	18.4	
Basin	Index (%)			125		ftp://ftp.w	 118

The reservoir system clicked up another percentage point to 46% full leaving room for ~ 514,000 acre feet of storage. Natural flow holds steady, as compared to last week. Reservoir storage continues to barely lag the 30 year average.

With this last flurry of precipitation, the snowpack snow water equivalent and total precipitation bumped up a plus 10% putting us now approximately 20% ahead of normal. There's word on the street that there's 1.9 million acre-feet of water in that snow in the upper basin. There are also suggestions that it's going to be tough to stuff 1.9 million acre feet into a 0.5 million acre-foot bag, and flood control is beginning to loom on the horizon. No indications yet on magnitude of any impending release. However, if you've got something going on in the River today, you might want to start figuring out what "Plan B" looks like sooner than later.

Stay tuned.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 47% of capacity.

Total space available:	502,164 AF
Total storage capacity:	949,700 AF
Natural Flow:	1,254 CFS

# NRCS Water & Climate Center

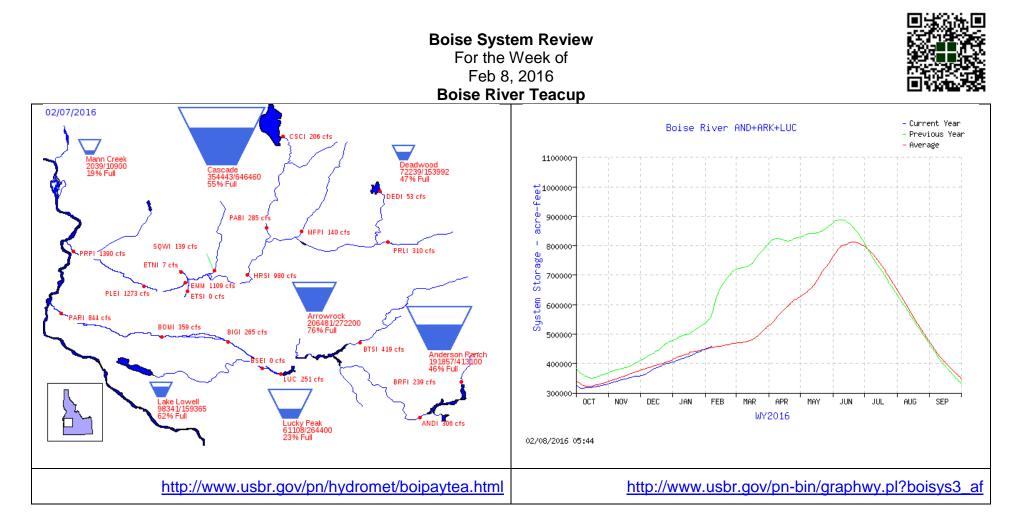
<b>Snow-Precipitation Update</b> United States Department of Agriculture		ation	s	W	ater and P	Climate Portland,	
	PRECI Mountain of SUND	Data fro	m NRCS S	NOTEL S			
	ELEV.				TOTAL	PRECIPIT	
Data Site Name		Current	Median				
IDAHO BOISE BASIN							
	7580					21.5	
-	6340						
Camas Creek Divide						12.1	
Dollarhide Summit							
Graham Guard Sta. Jackson Peak		12.5 20.6			17.6	15.1 21.4	
	6100					21.4	
Prairie		6.2				10.1	
	7770					26.0	
Vienna Mine		-M				19.7	
Basin	Index (%)			124			118

The reservoir system clicked up another percentage point to 47% full leaving room for a skoosh over half a million acre feet of storage. Natural flow ticked up 10%, as compared to last week, and reservoir storage finally caught up with the 30 year average.

The snow pack snow water equivalent and total precipitation remain approximately 20% ahead of normal. The NRCS field crew has recently been busy measuring snow in the hills. We look forward to their February snow report and snow pack projections.

Stay tuned.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 48% of capacity.

Total space available:	490,254 AF
Total storage capacity:	949,700 AF
Natural Flow:	962 CFS

## **NRCS Water & Climate Center**

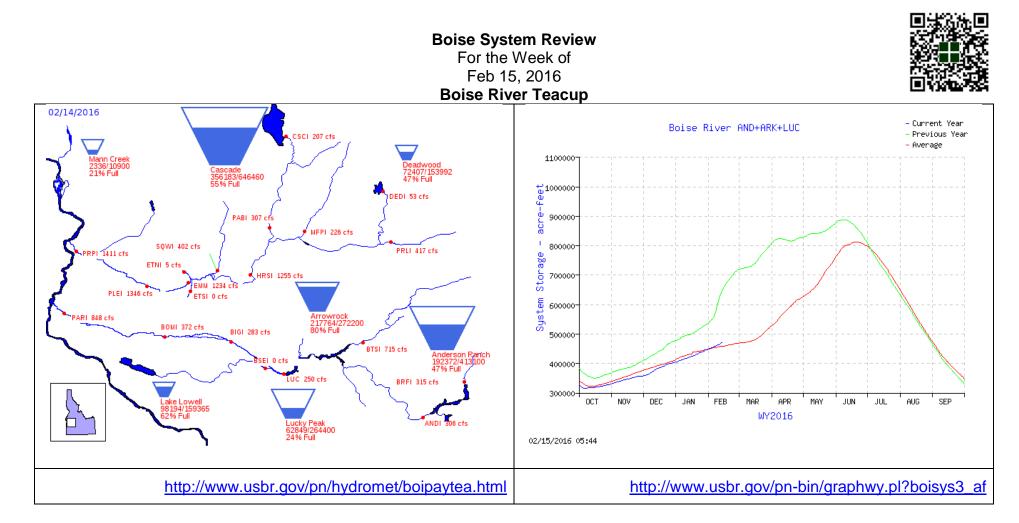
Snow-Precipitation Update							
	Natural		S	W	ater and	Climate	e Center
Department of					P	ortland	, Oregon
Agriculture	Service						
	Mountain of MOND	Data fro AY: FEBRU	m NRCS S ARY 8 ,	NOTEL S 2016	ites		
	ELEV.						FATION
Data Site Name	(Ft)			010			00
		Current					-
IDAHO							
BOISE BASIN							
Atlanta Summit	7580	22.8	19.7	116	25.9	22.5	115
Bogus Basin	6340	21.0	16.1	130	19.6	16.2	121
Camas Creek Divide	5710	12.3	9.6	128	15.3	12.8	120
Dollarhide Summit	8420	18.5	-M	*	16.9	17.9	94
Graham Guard Sta.	5690	13.1	10.0	131	17.8	15.9	112
Jackson Peak	7070	21.1	18.5	114	26.1	22.6	115
Mores Creek Summit	6100	25.2	20.7	122	28.3	25.0	113
Prairie	4800	5.9	4.4	134	11.8	10.6	111
Trinity Mtn.	7770	26.2	25.4	103	30.4	27.3	111
Vienna Mine	8960	-M	20.6		25.8	20.8	
Basin	Index (%)			119			114

The reservoir system clicked up another percentage point to 48% full leaving room for just under a half a million acre feet of storage. Natural flow dropped off 10%, as compared to last week, and reservoir storage nudges over the 30 year average.

The snow pack snow water equivalent and total precipitation is holding around 20% ahead of normal. The NRCS published the Idaho Surface Water Supply Index (SWSI, <u>http://www.nrcs.usda.gov/wps/portal/nrcs/detail/id/snow/waterproducts/?cid=nrcs144p2\_047808</u>) for February 1. The Boise basin SWSI for February is pegged at 1.3, which is on the high side of a normal water supply. The good news is that "the water supply outlook is slightly above normal" "and is likely to provide adequate irrigation supplies."

Stay tuned.

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 50% of capacity.

Total space available:	476,715 AF
Total storage capacity:	949,700 AF
Natural Flow:	1,691 CFS

# NRCS Water & Climate Center

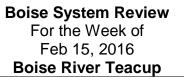
Snow-Precipitation Update							
	Natural		S	W			e Center
Department of					I	Portland	, Oregon
Agriculture	Service						
	Mountain of MOND	Data fro AY: FEBRU	m NRCS S ARY 15 ,	NOTEL S 2016	ites		
	ELEV.						TATION
Data Site Name	(Ft)			010			010
		Current					
 IDAHO							
BOISE BASIN							
Atlanta Summit	7580	23.2	20.8	112	26.7	23.9	112
Bogus Basin	6340	22.5	17.2	131	20.5	16.9	121
Camas Creek Divide	5710	12.4	10.0	124	15.6	13.2	118
Dollarhide Summit	8420	19.0	-M	*	17.1	18.8	91
Graham Guard Sta.	5690	13.7	10.7	128	18.3	16.7	110
Jackson Peak	7070	21.7	20.5	106	26.8	23.9	112
Mores Creek Summit						26.1	118
Prairie	4800	6.4	4.7	136	12.0	11.1	108
Trinity Mtn.	7770	26.8	27.5	97	30.9	28.9	107
Vienna Mine	8960	-M	21.4		26.0	21.9	
Basin	Index (%)			 114			112

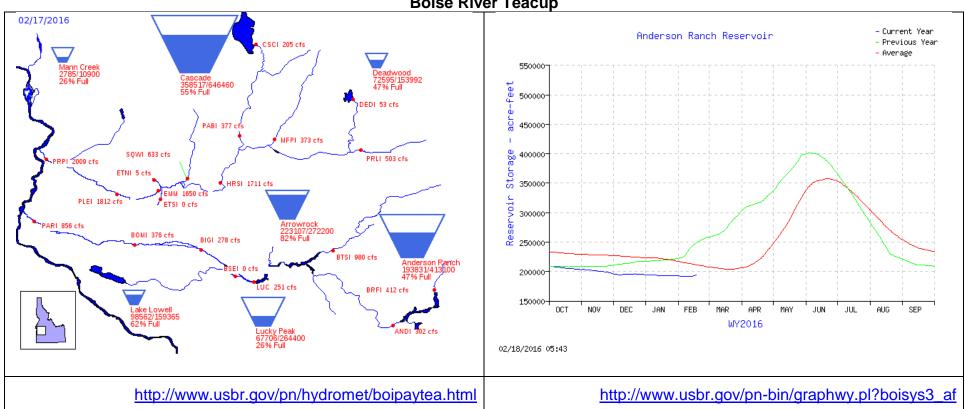
The reservoir system clicked up two percentage points to 50%. The glass is officially half full. Natural flow jumped over 50%, compared to last week, as a spate of warmer weather kicks in. Reservoir storage remains just over the 30 year average.

Despite a dash of precipitation at the end of last week, Snowpack and Total Precipitation are drifting back toward normal.

Stay tuned.

Steve



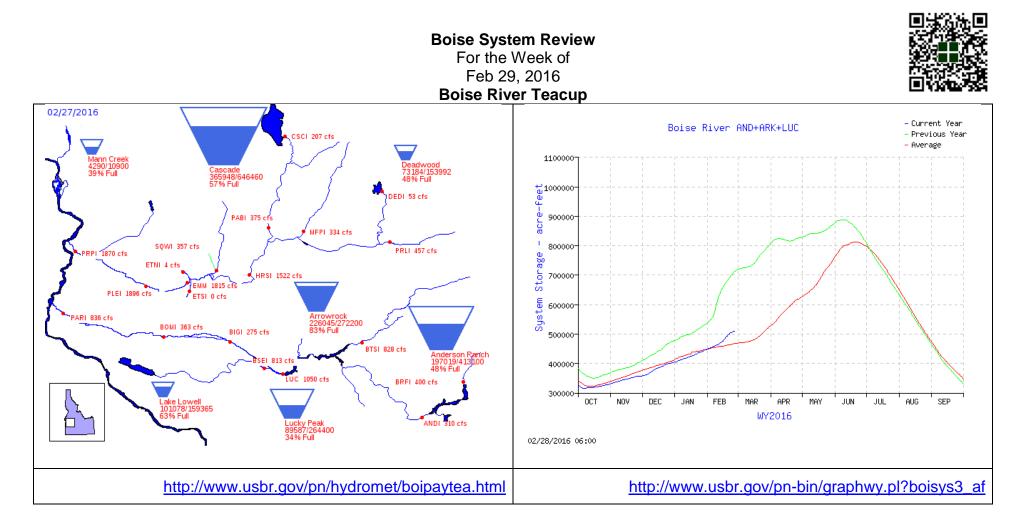


Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 51% of capacity.

Total space available:	465,055 AF
Total storage capacity:	949,700 AF
Natural Flow:	2,373 CFS

# **NRCS Water & Climate Center**

<b>Snow-Precipitation Update</b> United States Department of Agriculture	Natural Conserv	ation	28	Ψ			e Center , Oregon
	n Mountain s of THUR	Data fro SDAY: FEE	om NRCS S BRUARY 18	NOTEL S , 2016	ites		
	ELEV.						
Data Site Name		Current			Curren		-
IDAHO BOISE BASIN							
Atlanta Summit	7580	23.1	21.4	108	26.9	24.7	109
5	6340						-
Camas Creek Divide		11.5			15.5		
Dollarhide Summit					17.1		
Graham Guard Sta.		13.3			18.6		
Jackson Peak	7070		21.4		27.1		
	6100	26.6			31.1		
Prairie		6.0					
Trinity Mtn.		27.1					
Vienna Mine	8960	26.6	22.3	119	26.3	22.6	116
Basin	Index (%)			110			109



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 54% of capacity.

Total space available:	437,049 AF
Total storage capacity:	949,700 AF
Natural Flow:	2,062 CFS

## NRCS Water & Climate Center

Department of	Natural Conserv Service	ation	ès	W			e Center , Oregon
	Mountain of SUND	Data fro AY: FEBRU	om NRCS S JARY 28 ,	SNOTEL S 2016	ites		
	ELEV.	SNOW WAT			TOTAL		TATION %
		Current					-
IDAHO BOISE BASIN							
Atlanta Summit	7580	25.2	23.4	108	28.4	26.6	107
Bogus Basin	6340	23.0	20.6	112	21.3	18.6	115
Camas Creek Divide	5710	12.4	11.1	112	16.1	14.2	113
Dollarhide Summit	8420			*	18.2	21.2	86
Graham Guard Sta.	5690	14.3	11.7	122	19.9	18.4	108
Jackson Peak	7070	23.8	22.1	108	29.2	26.6	110
	6100						
Prairie		6.2					
Trinity Mtn.		28.9					
Vienna Mine	8960	27.1	24.7	110	28.3	24.5	116

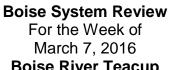
107

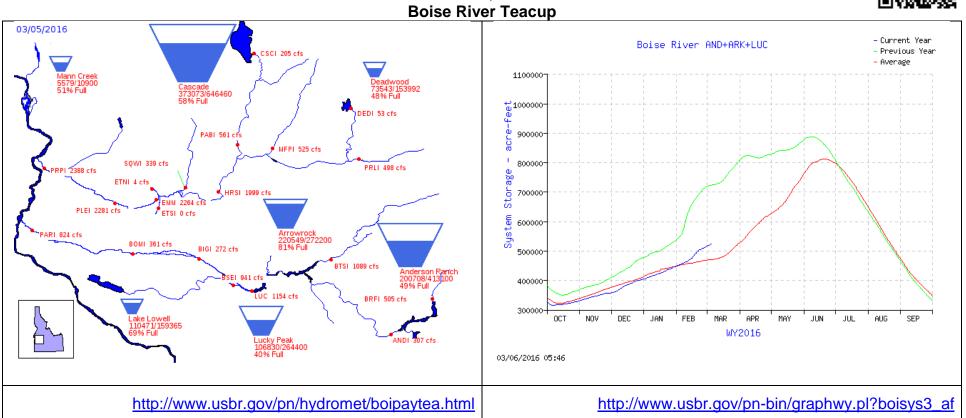
The most important thing about this issue is that it occurs on Leap Day, where we finally get the extra day that we're all due.

The blue line continues to depart the 30-yr average red line, almost as if the runoff is starting a month early in 2016. The snow pack remains slightly ahead of normal. With these warmer days, we'll start paying a little more attention now to how the high snow enters into the runoff equation.

Stay tuned.

Steve





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 56% of capacity.

Total space available:	421,613 AF
Total storage capacity:	949,700 AF
Natural Flow:	2,702 CFS

### **NRCS Water & Climate Center** Sı

Snow-Precipitation Update							
• •	Natural Resources			M	later an	d Climat	e Center
Department of	Conserv	ation				Portland	, Oregon
Agriculture	Service						
	PRECI Mountain of SUND	Data fro	om NRCS S	SNOTEL S			
	ELEV. (Ft)			010			00
							age Avg
IDAHO BOISE BASIN							
Atlanta Summit	7580	25.3	24.2	105	28.8	27.8	104
Bogus Basin	6340	22.6	22.3	101	21.6	19.2	112
Camas Creek Divide	5710	11.8	11.7	101	16.1	14.6	110
Dollarhide Summit	8420	21.5	-M	*	18.5	22.0	84
Graham Guard Sta.	5690	13.0	12.4	105	20.2	19.0	106
Jackson Peak	7070	24.0	22.7	106	29.6	27.6	107
	6100				33.1		
Prairie	4800	4.6	4.8	96	13.6	12.8	106

31.2

25.8

7770

8960

29.3

27.8

108

94

32.9

28.9

98

114

33.5

25.4

Our pesky blue line indicates that our reservoir system is ahead of the 30-year average (red line above). Looking at last week's Snow Precipitation Update, the reader will observe that the low snow (< 6,500 ft elevation) is starting to come off. Overall, we've lost five percent, compared to last week's snow water equivalent and the annual median. While there's still 1 to 2 ft on the ground up in Pine and Featherville at elevation 4,500 ft (personal observation, 3/6), the recent rain is ripening the snow, resulting in stepped up turbidity and a 30% bump in reservoir inflow. With more precipitation on the horizon and average temperatures on the forecast, this could be our start of the 2016 runoff.

NRCS just published the March edition of the Idaho Water Supply Outlook Report (<u>ftp://ftp.wcc.nrcs.usda.gov/states/id/webftp/wsor/2016/borid316.pdf</u>). Runoff predictions on the Boise for the period March through July call for between 1.1 and 1.7 million acre feet (maf) coming out of the watershed, with 50/50 odds on 1.4 maf. Our upstream reservoir system still has capacity to store 0.4 maf, leaving the question: What happens to that other 1 maf?

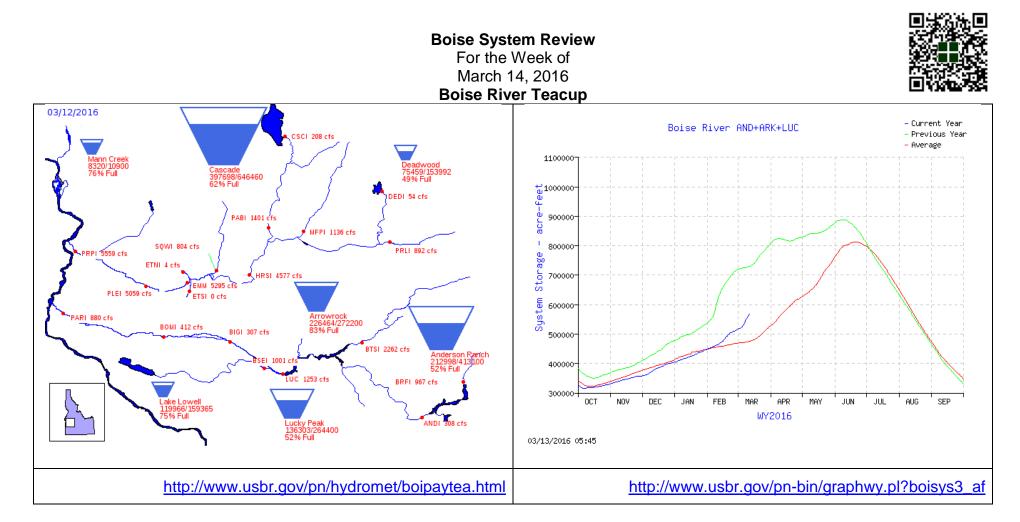
If we're living right, nights will be cool and our "Fifth Reservoir" (after Anderson Ranch, Arrowrock, Lucky Peak and Lake Lowell) will dole out the snow pack evenly and the "day of allocation" (https://www.idwr.idaho.gov/files/legal/WD63/WD63\_20141104\_Accounting-Staff\_Memo.pdf) will arrive after the summer solstice.

Stay tuned.

Trinity Mtn.

Vienna Mine

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 61% of capacity.

Total space available:	373,935 AF
Total storage capacity:	949,700 AF
Natural Flow:	5,439 CFS

#### **NRCS Water & Climate Center** Ś

Snow-Precipitation Update United States Department of Agriculture		ation	ès	W			e Center , Oregon
	P R E C I Mountain of SUND	Data fro	om NRCS S	SNOTEL S			
BASIN Data Site Name	ELEV. (Ft)		TER EQUIN	 /ALENT %	TOTAL	PRECIPI	TATION %
		Current					
IDAHO BOISE BASIN							
Atlanta Summit	7580	29.7	25.4	117	32.3	28.8	112
Bogus Basin	6340	22.9	22.5	102	23.4	19.9	118
Camas Creek Divide				98		14.9	
Dollarhide Summit						23.0	
Graham Guard Sta.				95			
Jackson Peak		25.9					
Mores Creek Summit							
Prairie Trinity Mtn.	4800 7770	.2 32.9				13.3 34.7	
IIIII CY MICHI.	1110	54.7	JT.0	TOT	50.5	51.7	±00

27.0

Basin Index (%)

8960

31.1

105

31.4

115

\_ \_ \_ 111

118

26.6

Enough of the pesky blue line – we're ahead of the average for this time of the year and that puppy's not likely to dip down anytime soon. Time to start looking at the overall system.

Warm precipitation has doubled system inflow compared to last week, as both the Snow Water Equivalent and Total Precipitation have reversed their recent slides and started heading northerly. System storage capacity bumped up a decent 5% compared to the prior week and the Total Space Available dropped to well under 400,000 ac-ft, following last week's increase of nearly 50, 000 ac-ft.

Lake Lowell's filling at 1,000 cfs (~2,000 ac-ft) per day and there's enough room to run another 20 days before that bag's full. NRCS's most recent projection has 1.4 (+ 0.3) million ac-ft in the 5<sup>th</sup> reservoir (snow pack) coming out between now and the end of July. That implies that we should be anticipating average flows for the next four months coming out below Lucky Peak on the order of 4,100 (+ 1,400) cfs. Fill up Lake Lowell and that water's either going to stay up there in the system or start heading out.

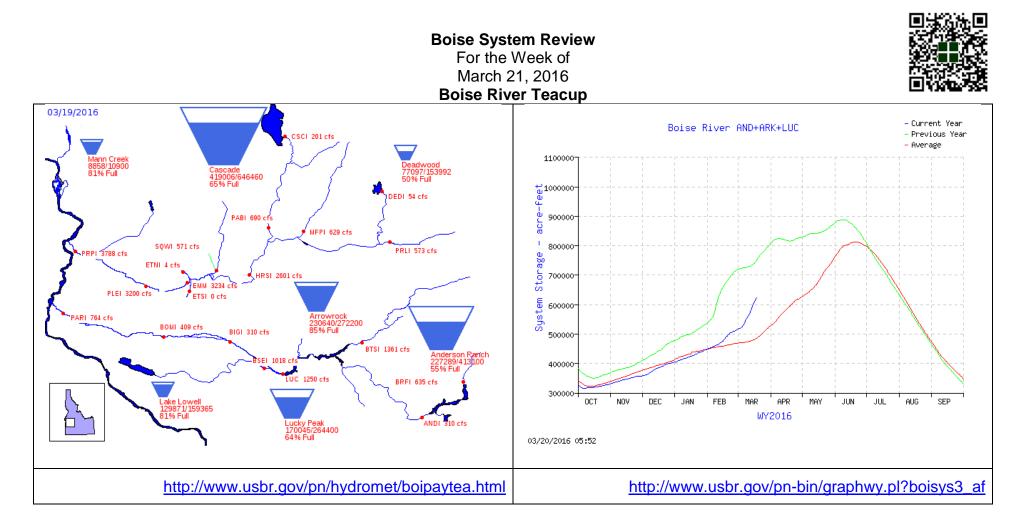
The RiverDude's been heard mumbling "It's not 'if,' it's 'when!" as he's been chewing at the end of another stogie. Probably time to start paying attention to his grumbles.

At the same time, the howling snowstorms in the Upper Basin have drowned out any possibility of detecting singing in the hills.

Stay tuned.

Vienna Mine

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 66% of capacity.

Total space available:	321,726 AF
Total storage capacity:	949,700 AF
Natural Flow:	3,517 CFS

### NRCS Water & Climate Center Snow-Precipitation Update

Snow-Precipitation Update										
• •	V	Water and Climate Cente								
Department of	Conserv	ration			Portland, Orego					
Agriculture	Service	:								
	PRECI Mountain s of SUND	Data fro	om NRCS S	SNOTEL S						
BASIN Data Site Name	ELEV. (Ft)	SNOW WAT	FER EQUIN	 /ALENT %	TOTAL	PRECIPI	TATION %			
							age Avg			
IDAHO										
BOISE BASIN										
Atlanta Summit	7580	33.1	26.0	127	35.2	30.0	117			
Bogus Basin	6340	25.3	22.2	114	24.9	20.7	120			
Camas Creek Divide	5710	12.4	11.4	109	19.4	15.4	126			
Dollarhide Summit	8420	28.2	-M	*	23.2	23.9	97			
Graham Guard Sta.	5690	13.2	13.2	100	23.4	20.2	116			
Jackson Peak	7070	28.2	24.6	115	34.8	29.9	116			
Mores Creek Summit	6100	31.6	27.5	115	38.0	32.3	118			
Prairie	4800	.1	2.3	4	16.3	13.9	117			

32.3

28.4

7770

8960

37.4

34.4

115

39.4

34.6

36.1

27.4

116

121

109

126

Try as we might to disregard that pesky blue line, the thing remains on a bit of a tear. Last week the system gained another 50,000 acft of storage in the upper basin. At the same time, Lake Lowell continued to fill at 2,000 ac-ft per day, leaving 15 days before topping out. Once full, a decision will likely be necessary re: continuing to store in the upper basin or blessing the Valley with this year's first Spring freshet. Before the next full moon (Wed 3/23), the overall system storage available could be under 300,000 ac-ft. And if things keep up, by April Fools Day we could be under ¼ million ac-ft of available storage, with over 1.4 m-ac-ft ripening on the hillsides.

Last week's new precipitation bumped the Snow Water Equivalent in the hills a full 10%, up to 115%, and total precipitation moved up 5%. Reservoir inflow dropped 35% as this new precipitation accumulated in the snow pack. At the same time, our Water Supply Guru was quoted as saying that the snowpack is ripening about a month ahead of schedule, essentially confirming the RiverDude's grumblings last week of *"It's not 'if,' it's 'when."* 

Speaking of the RiverDude; what was originally reported as a Kumbaya session on the banks of the Boise River, intended to celebrate the last work day of Winter ended up being a trailer full of Feds, State reps and bridge builders discussing current runoff projections. The RiverDude and his buddies are apparently not joking when they suggest that the perfect apparel for April Fool's Day could likely be a new set of hip waders (D&B Supply, \$94.99 plus tax, Free Shipping!, <u>http://tinyurl.com/gnp45jh</u>). *"Better be ready to hike 'em up!"* 

This week's predicted cool, occasionally damp upper basin forecast precludes notions of singing coming out of those hills for a while.

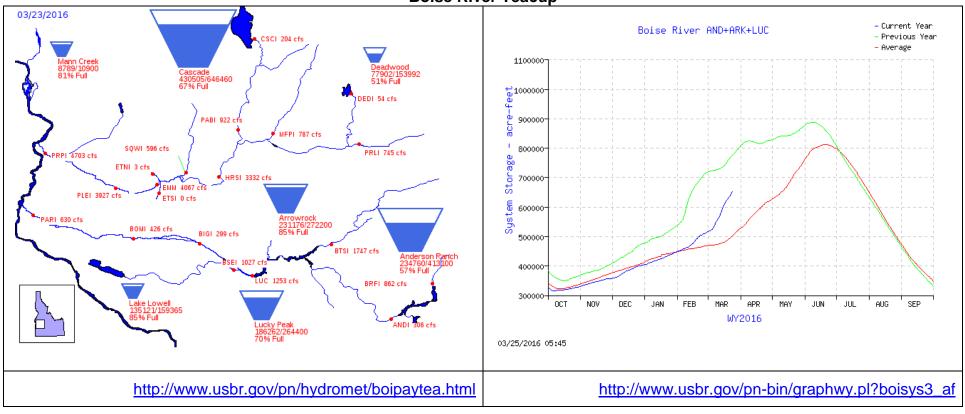
Stay tuned. Steve

Trinity Mtn.

Vienna Mine

### Boise System Review For the End of the Week March 25, 2016 (Special Good Friday Edition) Boise River Teacup





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 69% of capacity.Total space available:291,590 AFTotal storage capacity:949,700 AFNatural Flow:4,231 CFS

#### NRCS Water & Climate Center Snow-Precipitation Update

Show-Frecipitation Opt	Jale	
United States	Natural Resources	Water and Climate Center
Department of	Conservation	Portland, Oregon
Agriculture	Service	
S N O W	- PRECIPITATIO	N UPDATE
Base	d on Mountain Data from NRCS	SNOTEL Sites
	As of FRIDAY: March 25 ,	2016

BASIN Data Site Name	ELEV. (Ft)	SNOW WATER EQUIVALENT TOTAL PRECIPITA %				TION	
Data Site Name	(I <sup>C</sup> )	Current	Median	-	Current	t Averag	· ·
IDAHO							
BOISE BASIN							
Atlanta Summit	7580	33.9	26.8	126	36.2	30.6	118
Bogus Basin	6340	26.0	22.9	114	25.9	21.2	122
Camas Creek Divide	5710	11.9	11.2	106	19.7	15.7	125
Dollarhide Summit	8420	28.8	-M	*	23.5	24.6	96
Graham Guard Sta.	5690	12.6	12.8	98	24.1	20.7	116
Jackson Peak	7070	28.9	25.5	113	35.8	30.6	117
Mores Creek Summit	6100	32.5	29.3	111	39.1	33.0	118
Prairie	4800	.0	.6	0	16.6	14.4	115
Trinity Mtn.	7770	38.7	33.6	115	41.3	37.0	112
Vienna Mine	8960	35.8	29.4	122	35.7	28.2	127
Basin 1	Index (%)			115		-	 116

A week ahead of schedule, the RiverDude dispatched the following @ 7:14 this morning.

"All,

"I have been notified by the Bureau that during discussions with the Corps and after review of the current conditions in the basin, flood control operations will begin next week.

"On March 28 or 29, 2016 flows below Diversion Dam will increase 500 cfs. If inflows to Lucky Peak continue to increase then expect additional increases in the days following.

"With the first increase, flows at Glenwood will be approximately 800 cfs.

"Current conditions in the basin are as follows

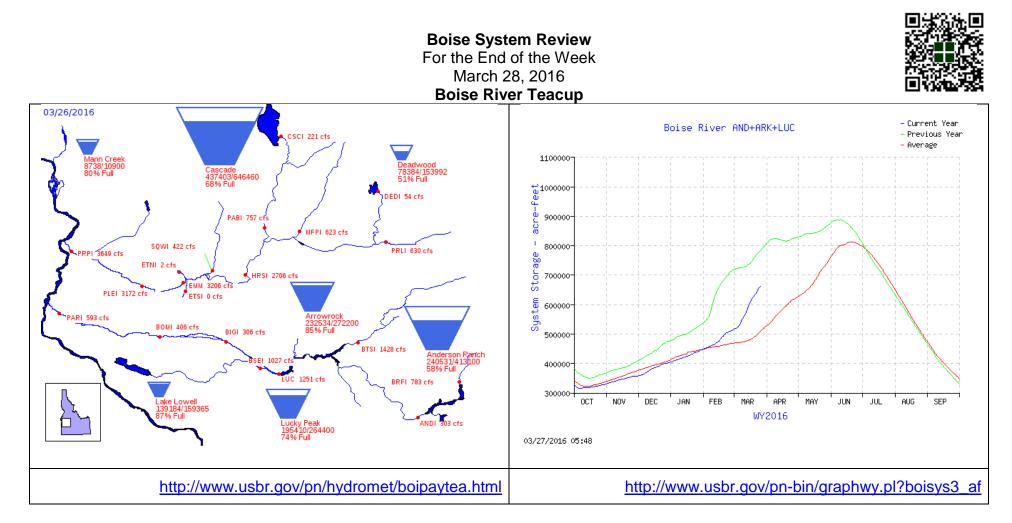
"On 3/23/2016 we are at 69% capacity and natural flow was reported at 4567 cfs.

"On 3/21/2016 snow water equivalent was reported as 114% of average.

"Stay tuned!!!!"

#### Steve

PS For all you Bridge & Greenbelt Tunnel Trolls out there: There was no mention on how the inventory of hip boots is holding out at D&B Supply. Better get 'em now, while you still can.



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 70% of capacity.

Total space available:	281,225 AF
Total storage capacity:	949,700 AF
Natural Flow:	3,697 CFS

# **NRCS Water & Climate Center**

<b>Snow-Precipitation Update</b> United States Department of Agriculture	Conserv	ation	es	W			e Center , Oregon
	PRECI Mountain of SUND	. Data fro	om NRCS S	NOTEL S			
	ELEV.	SNOW WAT	ER EQUIV			PRECIPI	
Data Site Name		Current			Currer		
IDAHO BOISE BASIN							
Atlanta Summit	7580	34.3	27.2	126	36.5	31.0	118
Bogus Basin	6340	26.3	23.5	112	26.0	21.6	120
Camas Creek Divide	5710	11.5	11.0	105	19.8	15.9	125
Dollarhide Summit	8420	29.0	-M	*	23.6	24.9	95
Graham Guard Sta.	5690	12.9	12.5	103	24.3	20.9	116
Jackson Peak	7070	29.1	26.1	111	36.0	30.9	117
Mores Creek Summit	6100	32.4	30.0	108	39.3	33.5	117
Prairie		.1				14.7	
Trinity Mtn.	7770	39.0	34.2	114	41.3	37.4	110
Vienna Mine	8960	36.0	29.8	121	36.0	28.6	126

Basin Index (%)

116

The system stored another 50,000 ft between the four reservoirs. If last year is any indicator, Lake Lowell's likely going to be "full enough" (145-kac-ft) in a few short days. Overall, at the current rate, that puppy will be topped off in 10 days, unless the irrigation drafts materialize first.

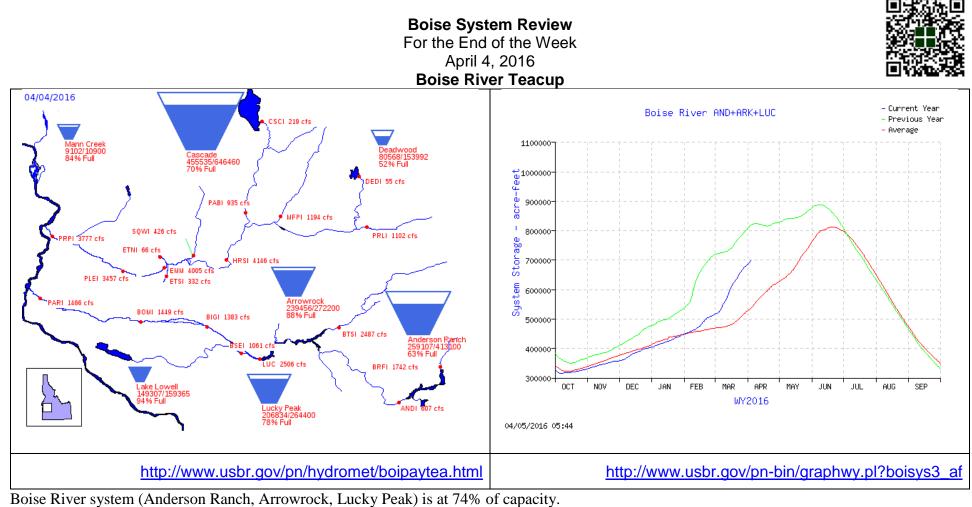
114

The RiverDude's call for the beginning of flood control operations on Monday or Tuesday has perked up a few ears. Contrary to earlier predications, the Broadway crew is simply getting out of the river and foregoing the opportunity to score some of those classic D&B Supply hip waders. The Municipal & Industrialers with junior rights are even looking forward to the "free water." The little bit of flood release should start bending the pesky blue line off its recent tear and bring things back to normal. All that's necessary is to get to April 15 and then the irrigators can start using their fair share of Mother Nature's "free water" and help relieve the system. You can expect to see canals starting up shortly.

The long-term weather's calling for a little warmer than normal in the upper Boise basin, with the nights starting to go above freezing around the middle of April. All in all, things are on a pretty even keel with no surprises anticipated. (Famous last words...)

On the sound advice of the Riverdude, we shall diligently "stay tuned!"

Steve



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 74% of capacity.Total space available:244,303 AFTotal storage capacity:949,700 AFNatural Flow:6,124 CFS

## NRCS Water & Climate Center

Snow-Precipitation Update							
United States	Natural	Resource	s	W	ater and	Climat	e Center
Department of						ortland	, Oregon
Agriculture	Service						
SNOW -	PRECI	ΡΙΤΑ	T I O N	UP	DΑΤΕ		
Based or	n Mountain	Data fro	m NRCS S	SNOTEL S	ites		
A	s of TUES	DAY: APRI	ъ 5,20	16			
BASIN	ELEV.	SNOW WAT	'ER EQUIV	ALENT	TOTAL	 PRECIPI	TATION
Data Site Name				olo			00
		Current					
 IDAHO							
BOISE BASIN							
Atlanta Summit	7580	32.9	27 0	122	36 6	32 4	113
Boqus Basin		25.0					
Camas Creek Divide		8.4			19.8		
Dollarhide Summit				*	23.7		
Graham Guard Sta.							
Jackson Peak		28.6			36.4		
Mores Creek Summit	6100						
Prairie		.0			16.7		
Trinity Mtn.		37.9					
Vienna Mine	8960						
Basin	Index (%)			107		64 m - 1/64 m	 111

ftp://ftp.wcc.nrcs.usda.gov/data/snow/update/id.txt

The system stored another 47,000 ft between the four reservoirs. Lake Lowell's got another 5 days at this rate before she's 100% and topped off. The system inflow jumped 40% compared to last week's figure – all this wonderful spring weather's behind that. Looks as though we're back to watching that "pesky blue line" and it's resistance to bowing to the red line. There's folks out there that aren't going to put up with that.

Speaking of, the RiverDude and the County's "Flood Worrier-in-Chief" are channeling the wizards behind the curtain and reporting: April 5, 2016: plus 500 cfs @ 08:00 to 3000 cfs out of LP (Lucky Peak). (Glenwood - 2,030 cfs) April 6, 2016: plus 500 cfs @ 08:00 and plus 500 cfs @ 10:00 to 4,000 cfs out of LP. (Glenwood - 3,030 cfs) April 7, 2016: plus 500 cfs @ 08:00 and plus 500 cfs @ 10:00 to 5,000 cfs out of LP. (Glenwood - 4,030 cfs) April 8, 2016: plus 500 cfs @ 08:00 and plus 500 cfs @ 10:00 to 6,000 cfs out of LP. (Glenwood - 5,030 cfs)

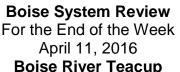
By the end of the week, there should be just as much going out as coming in and that pesky blue line may be whipped back into shape.

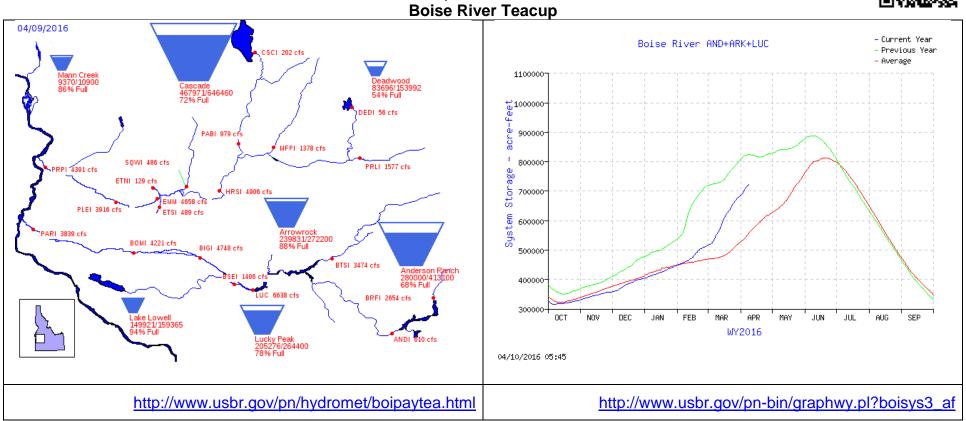
The unknown will be irrigation demand. This week the Ridenbaugh started to fill, knocking 300 cfs off the top, so as the canals fill there will be some additional draw on the system.

We wait with bated breath for the updated ID Water Supply Outlook and see how much snow remains in the "5<sup>th</sup> reservoir."

The long-term weather's still calling for warmer than normal in the upper Boise basin, with the nights starting to venture more consistently above freezing through April. The sounds that we're hearing from the upper watershed appear to be that of snow ripening and no singing quite yet.

On the sound advice of the Riverdude, "Stay tuned for more information." Steve





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 76% of capacity.Total space available:224,593 AFTotal storage capacity:949,700 AFNatural Flow:8,282 CFS

## Idaho SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites

\*\*Provisional data, subject to revision\*\*

Data based on the first reading of the day (typically 00:00) for Sunday, April 10, 2016

	Snow Water Equivalent			ivalent	Water Year-to-Date Precipitation			
Basin Site Name	Elev (ft)	Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average	
BOISE BASIN								
Atlanta Summit	7580	31.6	26.6	119	36.8	33.0	112	
Bogus Basin	6340	21.9	25.1c	87	26.3	23.6 <sub>C</sub>	111	
Camas Creek Divide	5710	4.4	6.9 <sub>C</sub>	64	19.8	16.8 <sub>C</sub>	118	
Dollarhide Summit	8420	28.0	N/A	*	23.8	26.6	89	
Graham Guard Sta.	5690	6.4	9.7	66	24.0	22.2	108	
Jackson Peak	7070	27.6	27.1	102	36.4	33.1	110	
Mores Creek Summit	6100	28.0	29.1	96	39.5	35.3	112	
Prairie	4800	0.0	0.0	*	17.3	16.0	108	
Trinity Mtn.	7770	36.2	35.8	101	42.4	39.8	107	
Vienna Mine	8960	35.8	31.0	115	36.9	30.4	121	
Basin Index (%)				100			110	

#### http://tinyurl.com/j2qgrdm

With the irrigation season kicking in, the system stored another 20,000 ac-ft between the four reservoirs. Lake Lowell's apparently topped out @ 150,000 ac-ft. The system inflow jumped in impressive 35% compared to last week's figure, as this wonderful spring weather continues to take out the low snow and starts on the high (6,000-ft +).

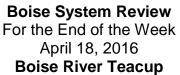
The Mountain Guru updated the ID Water Supply Outlook last week. Precip in March was ~150% of normal, providing the bump we needed for this season. Snow pack available between today and July is estimated to be 1.46 (+ 0.23) million acre-ft in our "5<sup>th</sup> reservoir," and that all has to fit through the 0.22 act-ft availability in the lower reservoirs. Therefore, at Lucky Peak between today and the end of June, the discharge will need hit 6,000 (<u>+</u> 800 cfs) each day to pass the snowpack. If the irrigators can take their 4,000 cfs per day, we'll be in a good position for full reservoirs at the end of June with flows averaging 2,000 cfs at Glenwood through then.

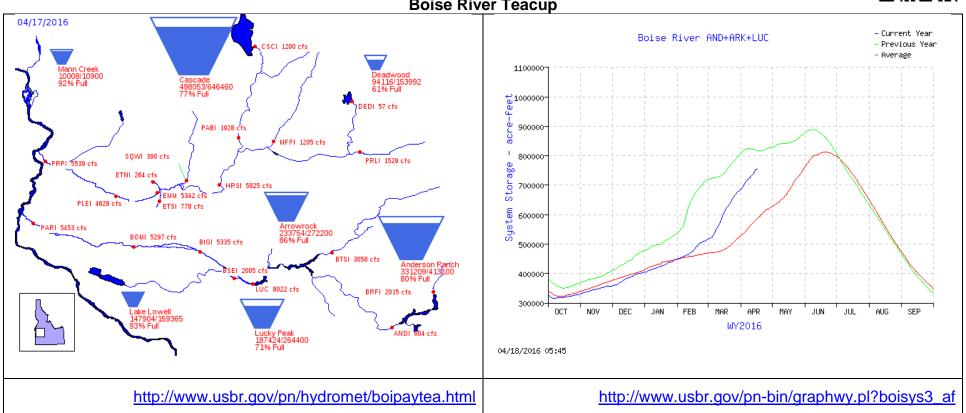
The focus has apparently shifted to making the Pesky Blue Line (today's reservoir storage) "bow" to the Red Line (30-year average). Essentially, that means that inflow into the reservoir system, "Natural Flow," has to be less on a daily basis than the outflow from Lucky Peak, "LUC," in the Teacup above. That's been an elusive goal. No one's panicking at this point, they just keep cranking the river up, letting all that "free water" head past Parma and "wet up" some of the Dixie works, among others.

There's been no singing detected in the hills yet. The most notable acoustical change is that on a quiet morning, you can hear the river flowing. There's been an occasional downriver rumble that with all that snow pack, the regulators have been Asleep at the Wheel, and discharges should have started earlier. The Mountain Guru reportedly checked out the accusations and the closest he could find to any party matching that description was at the Egyptian on Saturday evening, when Ray Benson & Gang rocked the town. Great time!

There's another planned step in Lucky Peak outflow on Monday, with potentially more in the forecast. This could be a challenging time for folks along the river – especially the Landshark, who's going to have to move one point of regulation to the Berm, try to get his friends at the road district to finish fixing what's been tore up, and keep his feet dry while delivering water in Eagle. Oboy!

At the same time, we'll continue watching the flow split at the head of Eagle Island. Interesting times, indeed. Stay tuned. Steve





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 79% of capacity. Total space available: 197,313 AF 949,700 AF Total storage capacity:

Natural Flow:

7,267 CFS

## **Idaho SNOTEL Snow/Precipitation Update Report**

Based on Mountain Data from NRCS SNOTEL Sites

\*\*Provisional data, subject to revision\*\*

Data based on the first reading of the day (typically 00:00) for Monday, April 18, 2016

		Snow V	Vater Equ	ivalent	Water Year-to-Date Precipitation		
Basin Site Name	Elev (ft)	Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average
BOISE BASIN							
Atlanta Summit	7580	29.8	26.4	113	37.7	33.9	111
Bogus Basin	6340	19.8	22.0 <sub>c</sub>	90	28.0	24.2 <sub>c</sub>	116
Camas Creek Divide	5710	0.0	3.7 <sub>c</sub>	0	20.0	17.1 <sub>c</sub>	117
Dollarhide Summit	8420	23.1	N/A	*	24.3	27.4	89
Graham Guard Sta.	5690	1.7	6.5	26	25.2	22.8	111
Jackson Peak	7070	27.0	26.1	103	38.2	34.0	112
Mores Creek Summit	6100	24.8	27.1	92	40.8	36.1	113
Prairie	4800	0.0	0.0	*	17.4	16.6	105
Trinity Mtn.	7770	36.2	36.0	101	43.6	40.8	107
Vienna Mine	8960	35.2	31.9	110	37.6	31.2	12:
Basin Index (%)				97			110

http://tinyurl.com/hmesm2k

We had a good run early last week, which continued to add another 27,200 ac-ft to storage. Cooling in recent days finally bent the pesky blue line to flatten out over the last couple of days. The system inflow dropped compared to last week's figure, as the cool weather moved in.

### Early this week, the RiverDude reported:

Boise River flow changes for this week are as follows:

Mon April 18, 2016, minus 500 cfs at 12:30 hours to 7,500 cfs out of Lucky Peak.

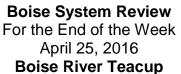
Tue April 19, 2016, minus 500 cts at 08:00 hours to 7,000 cts out of LP. Wed April 20, 2016, minus 500 cfs at 08:00 hours to 6,500 cfs out of LP. Thu April 21, 2016, minus 500 cfs at 08:00 hours to 6,000 cfs out of LP. Flows at Glenwood on Thursday will be approximately 3,300 cfs. Stay tuned for more updates later this week.

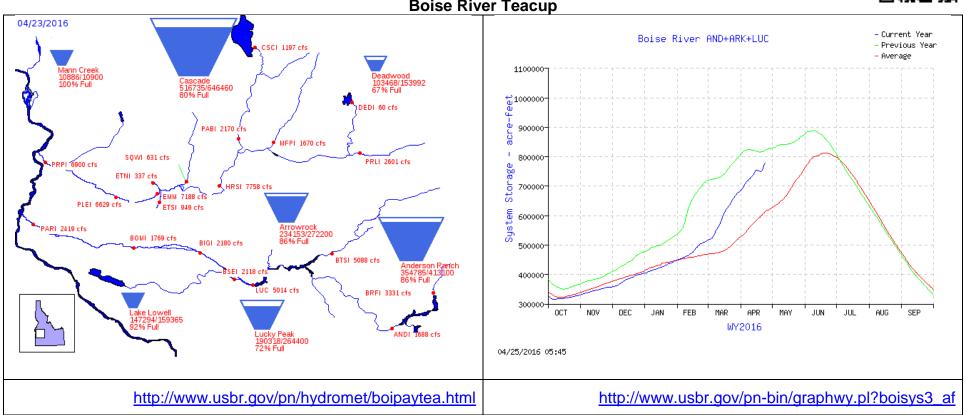
The Mountain Guru has officially proclaimed that we have jumped into the "snowmelt season," which is accompanying a less-than-hoped-for April precipitation accumulation. Looks as though we will be looking at warming temperatures (eventually reaching 10 degrees above normal) and decreasing precipitation for the next 7 days.

Still too much snow in the hills to detect any singing yet, but if this dry weather keeps up, things could change.

Stay tuned.

Steve





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 81% of capacity.Total space available:181,334 AFTotal storage capacity:949,700 AFNatural Flow:9,942 CFS

## Idaho SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites

\*\*Provisional data, subject to revision\*\*

Data based on the first reading of the day (typically 00:00) for Monday, April 25, 2016

		Snow V	Snow Water Equivalent			Water Year-to-Date Precipitation		
Basin Site Name	Elev (ft)	Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average	
BOISE BASIN								
Atlanta Summit	7580	26.0	24.9	104	37.8	34.9	108	
Bogus Basin	6340	13.9	19.2 <sub>C</sub>	72	28.6	24.80	c 115	
Camas Creek Divide	5710	0.0	0.0 <sub>C</sub>	*	20.1	17.60	c 114	
Dollarhide Summit	8420	17.3	N/A	*	24.4	28.1	87	
Graham Guard Sta.	5690	0.0	2.1	0	25.2	23.6	107	
Jackson Peak	7070	23.6	24.8	95	38.3	35.1	109	
Mores Creek Summit	6100	19.7	25.0	79	41.0	37.0	111	
Prairie	4800	0.0	0.0	*	17.2	17.3	99	
Trinity Mtn.	7770	34.0	35.3	96	44.0	41.9	105	
Vienna Mine	8960	33.1	32.0	103	37.8	32.1	118	
Basin Index (%)				92		*	108	

#### http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html

We continue to bank storage water – last week the system went over 80% full when another 16,000 ac-ft was added to system. Everyone's starting to relax a bit as two weeks of increased flow at Glenwood had the desired effect and turned the pesky Blue Line southerly – for a few days. Not to worry though – there's still a fair amount of water in the hills. The RiverDude's reporting that we should be seeing flows out of Lucky Peak on the 5,000 cfs range for the foreseeable future.





The Mountain Guru sent out an interesting dispatch recently. According to the data, the "South Fork of the Boise River near Featherville, on average, peaks or has another increase 3 days after half melt at Vienna Mine." (<u>http://www.wcc.nrcs.usda.gov/ftpref/states/id/webftp/snow-stream/sfboise\_halfmelt.gif</u>). This year's half melt is projected to be at 18.2 inches and will likely occur between mid-May to early-June. Currently, Vienna Mine is at 33.1 inches, so we'll hang around until another 15 inches melts off and see what's up. Interesting stuff.

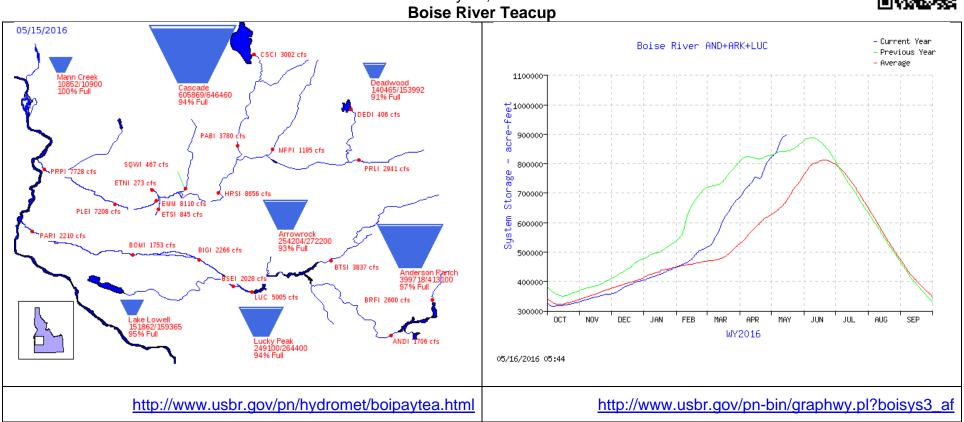
If the wind don't blow today, there might be a very faint clarion call from the hills for the runoff season getting ready to wind down. But then again, we're counting on Mother Nature's cooperation here.

Stay tuned.

Steve



Two weeks of increased discharges at Glenwood are represented by the blue peak. Red is 30 yr average, green is last year's record.



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 95% of capacity.Total space available:46,678 AFTotal storage capacity:949,700 AFNatural Flow:7,642 CFS

## Idaho SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites

\*\*Provisional data, subject to revision\*\*

Data based on the first reading of the day (typically 00:00) for Monday, May 16, 2016

Basin Site Name		Snow V	Vater Equ	ivalent	Water Year-to-Date Precipitation		
	Elev (ft)	Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average
BOISE BASIN				1			
Atlanta Summit	7580	11.2	20.8	54	39.4	37.1	108
Bogus Basin	6340	0.1	9.3C	1	29.9	26.3C	115
Camas Creek Divide	5710	1.0	0.0C	*	20.7	18.9C	114
Dollarhide Summit	8420	0.0	N/A	*	25.3	30.0	87
Graham Guard Sta.	5690	0.1	0.0	*	25.2	25.2	107
Jackson Peak	7070	-M	17.4	*	-M	37.3	109
Mores Creek Summit	6100	-M	16.0	*	-M	39.1	111
Prairie	4800	0.0	0.0	*	17.8	18.5	99
Trinity Mtn.	7770	-M	31.4	*	-M	44.4	105
Vienna Mine	8960	33.1	32.0	103	37.8	32.1	118
Basin Index (%)				62			104

#### http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html

Well, after a three week hiatus, we're back. In brief, the snow came and now it's going, going, dang near gone. In the words of AgNet West (<u>Snowpack melting at record speed</u>):

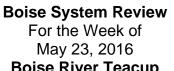
During April, Western snowpack dropped at record speed, according to data from the fifth and final 2016 forecast by the NRCS. "In the Pacific Northwest, low precipitation and high temperatures led to a dramatic reduction in snowpack," said NRCS hydrologist Cara McCarthy. "In this area, peak streamflow is arriving weeks earlier than normal this year."

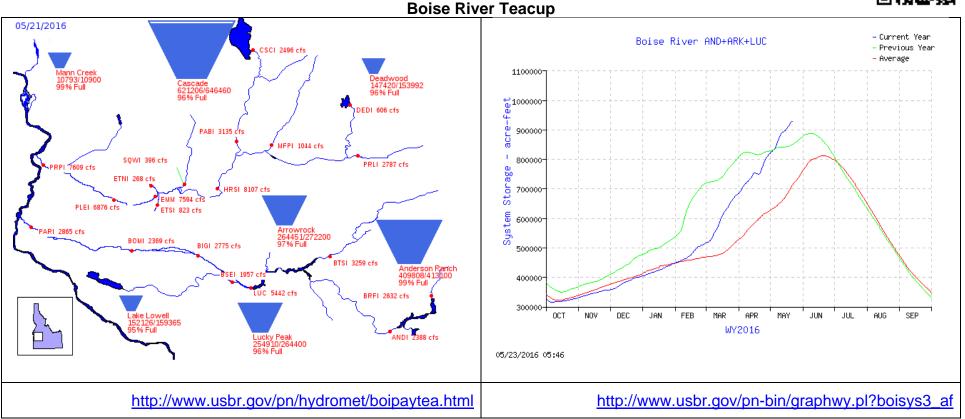
There you have it. We're 95% full in the reservoirs, at 62% of normal for snow to come off and there's still little bit of water hanging on in the high elevations. The low stuff is gone and in just 5 weeks the days will start getting shorter.

Word on the street is that, as of 2015, the Fat Lady made her last appearance on these pages. And in the spirit of political correctness, may she Rest in Peace. In her stead, we'll all wait around with bated breath for The River Dude to proclaim the "Day of Allocation." When you see his crusty mug here, you'll know we're all done.

Stay tuned.

Steve





Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 98% of capacity.Total space available:20,531 AFTotal storage capacity:949,700 AFNatural Flow:6,765 CFS

## Idaho SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites

\*\*Provisional data, subject to revision\*\*

Data based on the first reading of the day (typically 00:00) for Monday, May 23, 2016

Basin Site Name	Elev (ft)	Snow Water Equivalent			Water Year-to-Date Precipitation		
		Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average
BOISE BASIN							
Atlanta Summit	7580	7.4	14.4	51	40.5	37.8	107
Bogus Basin	6340	0.1	0.0 <sub>C</sub>	*	30.9	27.0 <sub>c</sub>	114
Camas Creek Divide	5710	1.0	0.0 <sub>C</sub>	*	21.8	19.4 <sub>c</sub>	112
Dollarhide Summit	8420	0.2	N/A	*	26.5	30.8	86
Graham Guard Sta.	5690	0.0	0.0	*	26.3	25.9	102
Jackson Peak	7070	-M	13.8	*	-M	38.2	*
Mores Creek Summit	6100	-M	8.3	*	-M	39.8	k
Prairie	4800	0.0	0.0	*	18.5	19.0	97
Trinity Mtn.	7770	21.8	29.4	74	46.3	45.3	102
Vienna Mine	8960	22.9	23.7	97	40.3	35.0	115
Basin Index (%)		79			105		

#### http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html

Reservoir storage is up a good, solid 3% (26,000 ac-ft) compared to last week and we're now at 98% full in the reservoirs. This last spate of weather improved snow water equivalent in the hills a full 17 percentage points to put us now at 79% of normal for snow to come off.

#### The RiverDude reported on Friday:

At noon on Friday (5/20) the Corps will end flood control operations and the high flows will continue until the BOR has released all the flow augmentation water required for this year.

The "Day of Allocation" approaches. Inflows are 6,800 cfs (down from 7,600 last week) and outflow is 5,500 cfs. We're storing approximately 2,500 ac-ft per day. Considering the storage available, we could do that for another eight days before everything's full up.

In the meantime, we're all on standby as we eagerly await the RiverDude's crusty mug. Stay tuned.

Steve