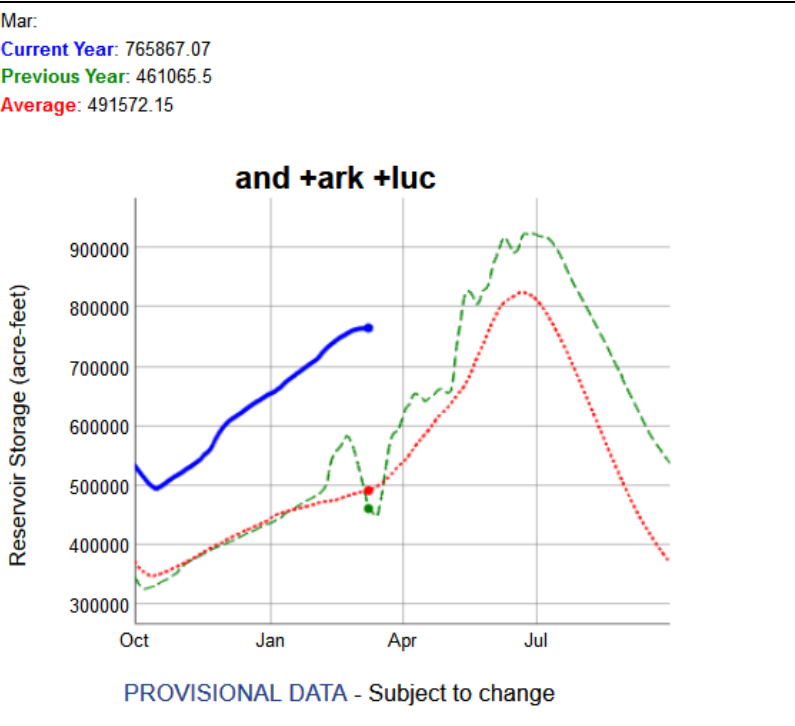
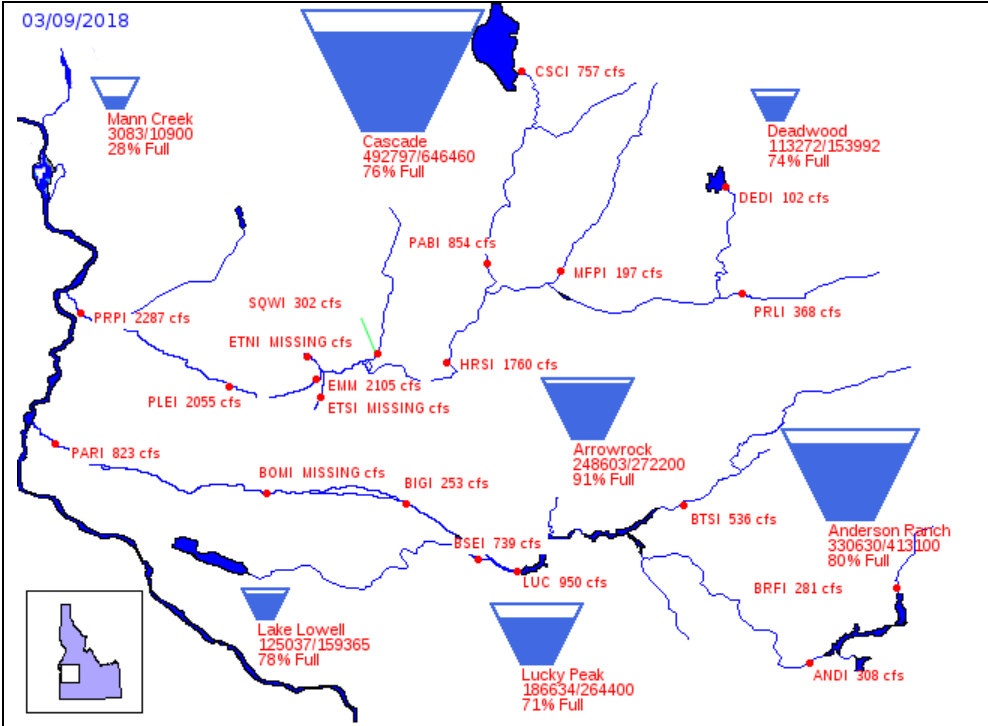


Boise System Review
For
March 10, 2018
Eureka! Edition
Boise River Teacup



<http://www.usbr.gov/pn/hydromet/boipaytea.html>

http://www.usbr.gov/pn-bin/graphwy.pl?boisys3_af

Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 81% of capacity.
Total space available: 194,383 AF
Total storage capacity: 949,700 AF
Natural Flow: 1,124 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 Saturday, March 10, 2018

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	21.8	25.1	87	25.7	28.4	90
Bogus Basin	6340	14.3	22.6 _c	63	17.3	19.7 _c	88
Camas Creek Divide	5710	–M	11.8 _c	*	–M	14.8 _c	*
Dollarhide Summit	8420	21.8	N/A	*	15.8	22.6	70
Graham Guard Sta.	5690	9.1	12.7	72	19.7	19.2	103
Jackson Peak	7070	19.4	23.1	84	26.0	28.3	92
Mores Creek Summit	6100	18.4	27.2	68	26.6	30.7	87
Prairie	4800	2.7	4.2	64	11.2	13.1	85
Trinity Mtn.	7770	25.3	31.5	80	27.3	34.2	80
Vienna Mine	8960	25.4	26.8	95	27.1	26.2	103
Basin Index (%)		79			88		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

For an interesting observation on the Boise Basin 2018 Snowpack Comparison check out this site:

https://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/basinsweplots/id/boise_swe_d.gif

According to the NRCS data, we’re currently 27% below the normal peak, which historically occurs on April 3 - another full 3 weeks out. If we’re to reach the Normal Peak by April 3, we’ll need to see precipitation @ 330% of normal.

Welcome back, folks,

A year ago the historic flood season of 2018 was just starting in earnest. This year’s a different story. The reservoirs are at 82% - 150% of normal. On the other side of the equation, the snow pack is just under 90% of normal.

Back in December, everyone along the River was prepared for another ’17 runoff season, as Bridge Trolls, snaggers, pile-drivers and gravel-diggers hurried to beat the anticipated onslaught. Alas, all that worrying turned out to be a bust. Jobs were completed, crews headed off for other chores and now the primary worry appears to be “Fill,” not “Spill.” Go figure.

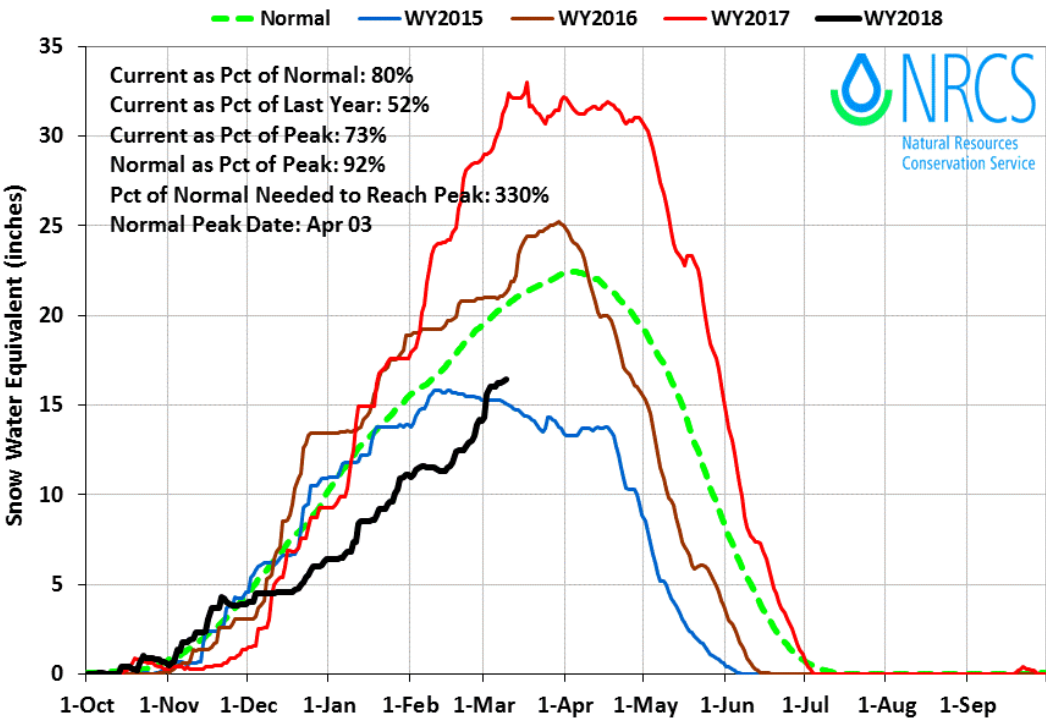
February turned in an impressive run on the snow pack, although the Mountain Guru has labeled the accumulation as “Cold Smoke Snow” – “some of the lightest, fluffiest snow that can be found on Earth and brings smiles to skiers, riders and winter recreationists.” He continues, “don’t let the snow depths lead you to think the snow water content is as healthy as the snow depths.”

In accordance with tradition and in the words of the almighty & omnipotent RiverDude, “Stay tuned.”

Steve

Boise Basin 2018 Snowpack Comparison Graph (10 sites)

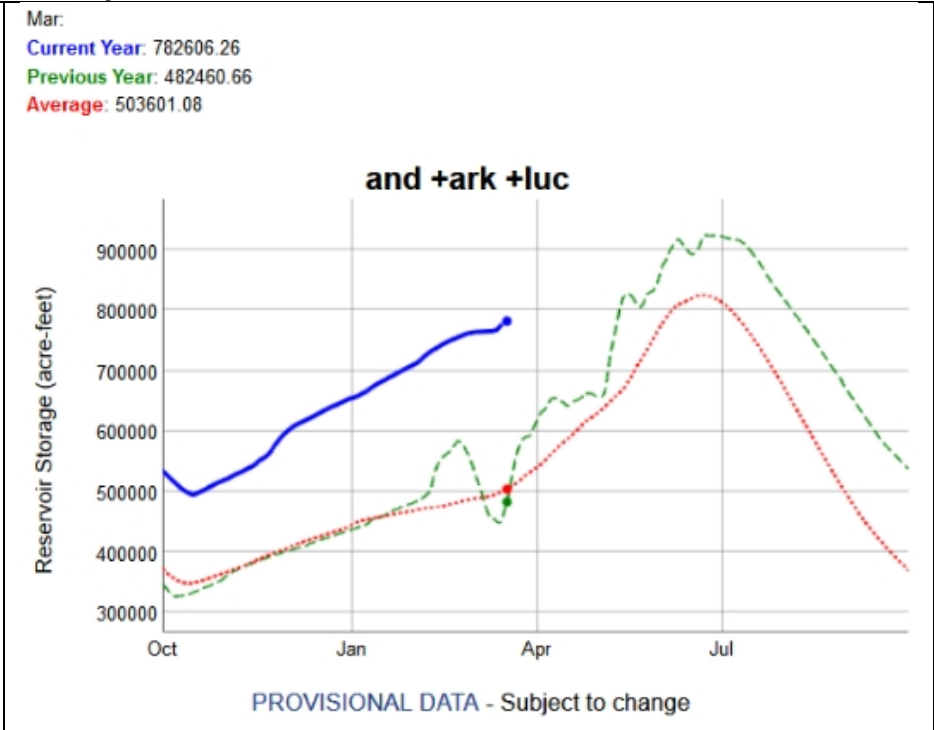
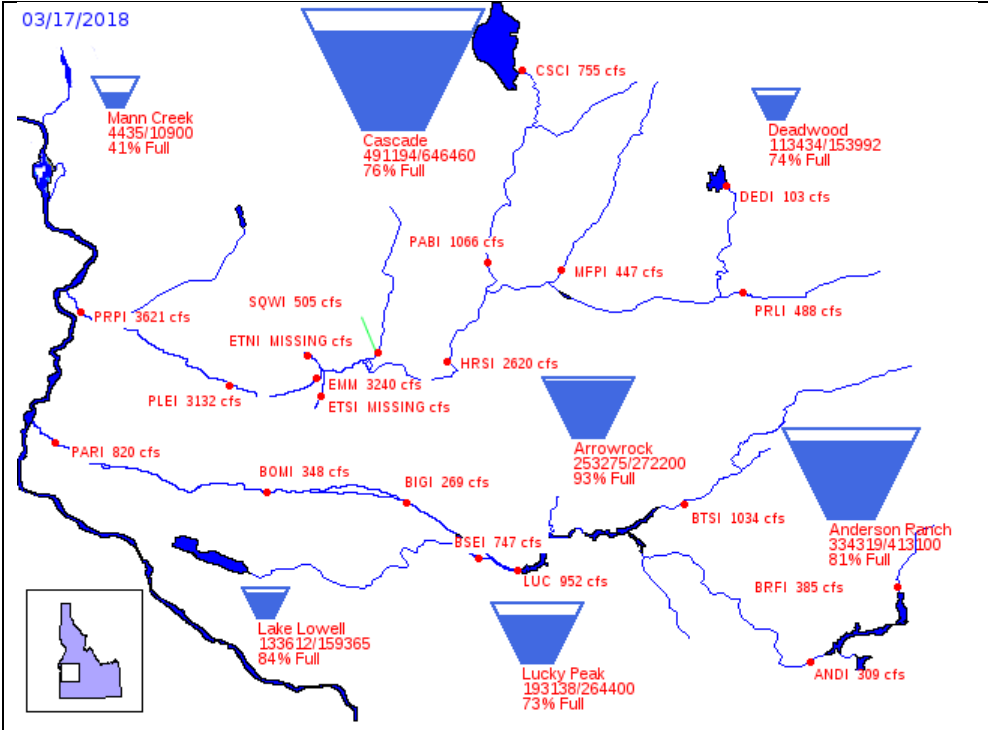
Based on Provisional SNOTEL data as of Mar 09, 2018



Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>



Boise River Teacup



<http://www.usbr.gov/pn/hydromet/boipaytea.html>

http://www.usbr.gov/pn-bin/graphwy.pl?boisys3_af

Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 82% of capacity.
Total space available: 167,094 AF
Total storage capacity: 949,700 AF
Natural Flow: 1,897 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, March 19, 2018

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	23.8	25.9	92	27.6	29.8	93
Bogus Basin	6340	16.1	22.1 _c	73	19.1	20.5 _c	93
Camas Creek Divide	5710	9.1	11.4 _c	80	15.6	15.4 _c	101
Dollarhide Summit	8420	–M	N / A	*	–M	23.8	*
Graham Guard Sta.	5690	10.2	13.2	77	21.2	20.1	105
Jackson Peak	7070	21.6	24.6	88	28.5	29.7	96
Mores Creek Summit	6100	21.7	27.3	79	29.3	32.2	91
Prairie	4800	3.3	2.6	127	13.2	13.8	96
Trinity Mtn.	7770	27.7	32.1	86	29.7	35.9	83
Vienna Mine	8960	27.4	28.3	97	28.8	27.3	105
Basin Index (%)		86			95		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

For an interesting observation on the Boise Basin 2018 Snowpack Comparison check out this site:

https://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/basinsweplots/id/boise_swe_d.gif

According to the NRCS data, we’re currently 18% below the normal peak, which historically occurs on April 3 - another 2 weeks out. If we’re to reach the Normal Peak by April 3, we’ll need to see precipitation @ 412% of normal.

March Madness is departing town along with the final throes of winter. Last week certainly provided improvement across the board for our upcoming irrigation season. March’s late run at 170% of normal upper basin precipitation moved Water Year precipitation upwards 7 points so the system is now at 95% of average. The snow water equivalent moved a similar 7 points.

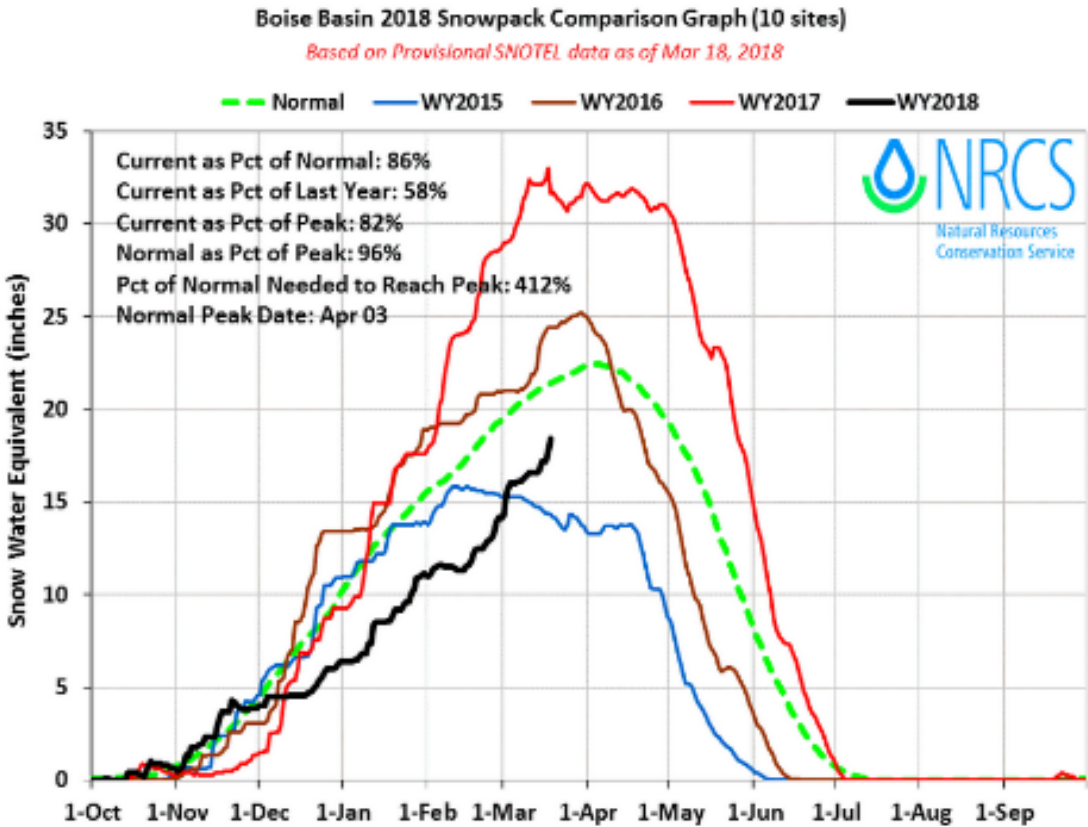
Natural flow (a function of upper basin weather conditions) increased nearly 70% last week as system storage moved upwards 27,000 ac-ft putting the system at 82% of capacity.

Come the Ides of March, The RiverDude was overheard proclaiming: “There is no flood control anticipated this month and we will have to wait for the April 1 forecast to see if there will be any in April (weather conditions???)” Since then, al’sl quiet on the water front.

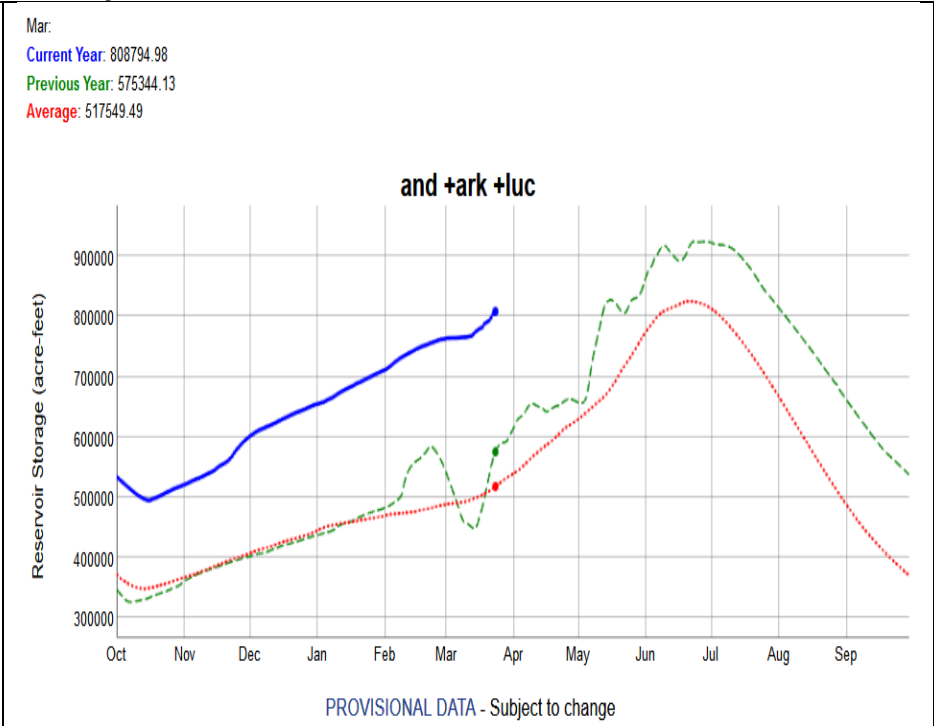
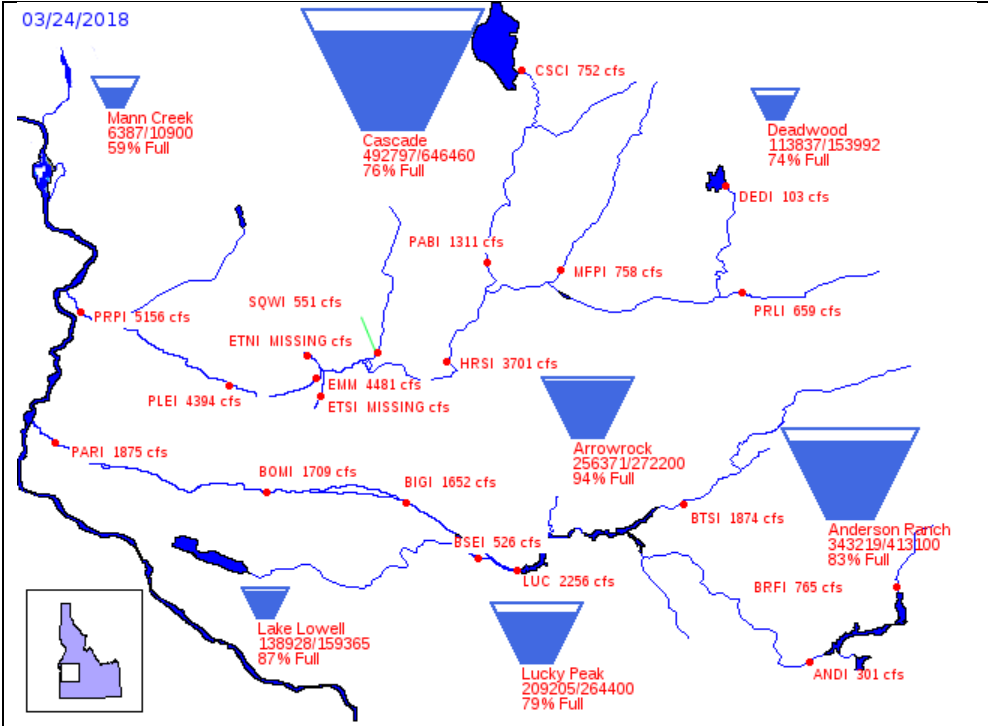
With his admonition issued, the RiverDude apparently picked his bracket winner (the ‘Zags, of course) and now is likely heading for the Alamodome to follow his final pick.

In accordance with tradition and in the words of the almighty & omnipotent RiverDude, “Stay tuned.”

Steve



Boise System Review
For the Week of
March 26, 2018
Boise River Teacup



<http://www.usbr.gov/pn/hydromet/boipaytea.html>

http://www.usbr.gov/pn-bin/graphwy.pl?boisys3_af

Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 85% of capacity.
Total space available: 138,186 AF
Total storage capacity: 949,700 AF
Natural Flow: 3,626 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, March 26, 2018

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	25.7	27.0	95	29.5	30.8	96
Bogus Basin	6340	16.4	23.1 _c	71	20.0	21.5 _c	93
Camas Creek Divide	5710	9.2	11.1 _c	83	16.9	15.8 _c	107
Dollarhide Summit	8420	26.6	N / A	*	19.3	24.8	78
Graham Guard Sta.	5690	10.4	12.6	83	22.2	20.8	107
Jackson Peak	7070	22.9	25.7	89	29.9	30.8	97
Mores Creek Summit	6100	22.0	29.7	74	30.3	33.2	91
Prairie	4800	2.3	0.3	767*	14.1	14.6	97
Trinity Mtn.	7770	29.9	34.0	88	31.2	37.2	84
Vienna Mine	8960	29.6	29.6	100	30.3	28.4	107
Basin Index (%)		87			94		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

For an interesting observation on the Boise Basin 2018 Snowpack Comparison check out this site:

https://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/basinsweplots/id/boise_swe_d.gif

According to the NRCS data, we’re currently 11% below the normal peak, which historically occurs on April 3 - another week out. If we’re to reach the Normal Peak, we’ll need to see precipitation @ 558% of normal during the next week. Slim chance.

With only a week left and while it’s not official yet, we just may have reached peak snow for this season. The excitement before us is likely relegated to how fast the stuff melts and transits the reservoir system.

Celebrating the first full day of spring last week, both the RiverDude and Ada County’s Chief-Worrier-In-Chief informed us that Walla2 would be taking over control of river flows. Starting last Wednesday, we were greeted by three daily 500-cfs increases into the river putting approximately 1,600 cfs coursing past Glenwood over weekend. Seems as though most everyone was aware of the rising waters, ‘cept perhaps for the cattle prowling the aftermath of last year’s Duck Alley pit capture (more on pit capture below). No confirmed reports yet, but we’re hearing that some of the downstream cattlemen began giving swimming lessons to their herds. I suppose that if there’s an iconic Treasure Valley cowboy, a retired vet and rising water involved, won’t be long before we’re hearing about a Lower Valley Bovine Swim Team.

The most recent word on the street as of the end of last week is that we can all anticipate this week to start with two more 500 cfs steps (Monday and Tuesday) to be followed by a 200 cfs step on Wednesday, putting the estimated Glenwood flow at ~3,000 cfs. The bovine dogies, bridge trolls, and channel debris muckers better just be calm and step away from the river for a spell. Irrigation will be coming on in just a few weeks and all this is anticipate to pass with far less drama than just a year ago. (A year ago, flows at Glenwood were in the vicinity of 8,000 cfs – oboy!)





This season’s rising waters on the Boise could end up exacerbating conditions associated with the two pit captures that resulted from the last year’s historic runoff event. Folks of all stripes will be watching to see how the river responds to this week’s increased flow. We probably shouldn’t count on our collective good looks, good luck and good old-fashioned magic to put the river back “where it belongs.” This will likely take a while to sort out.

In accordance with tradition and in the words of the almighty & omnipotent RiverDude, “Stay tuned.”

Steve

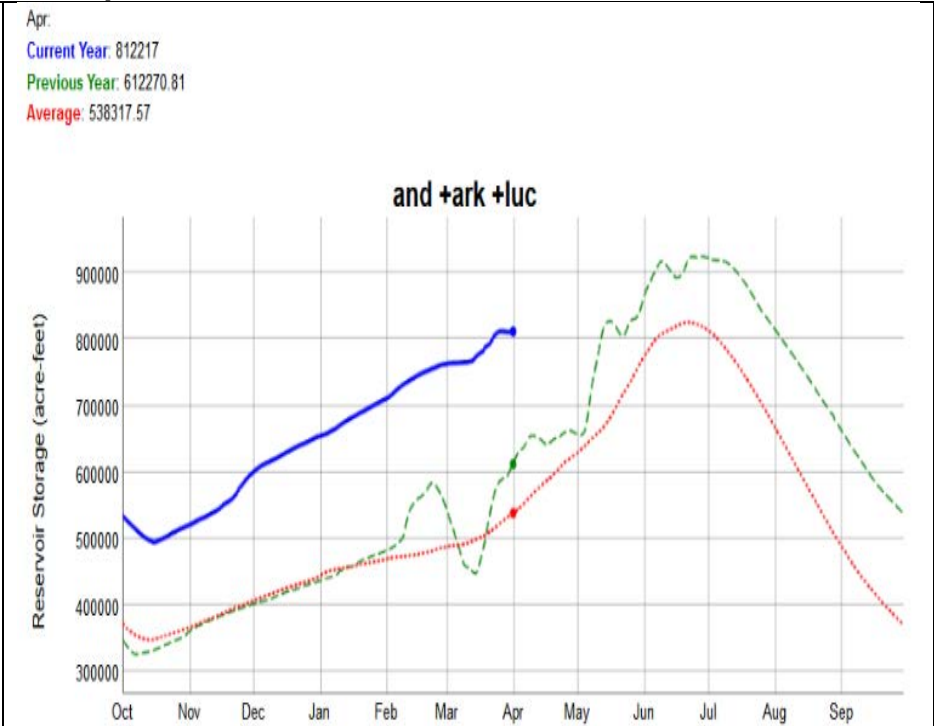
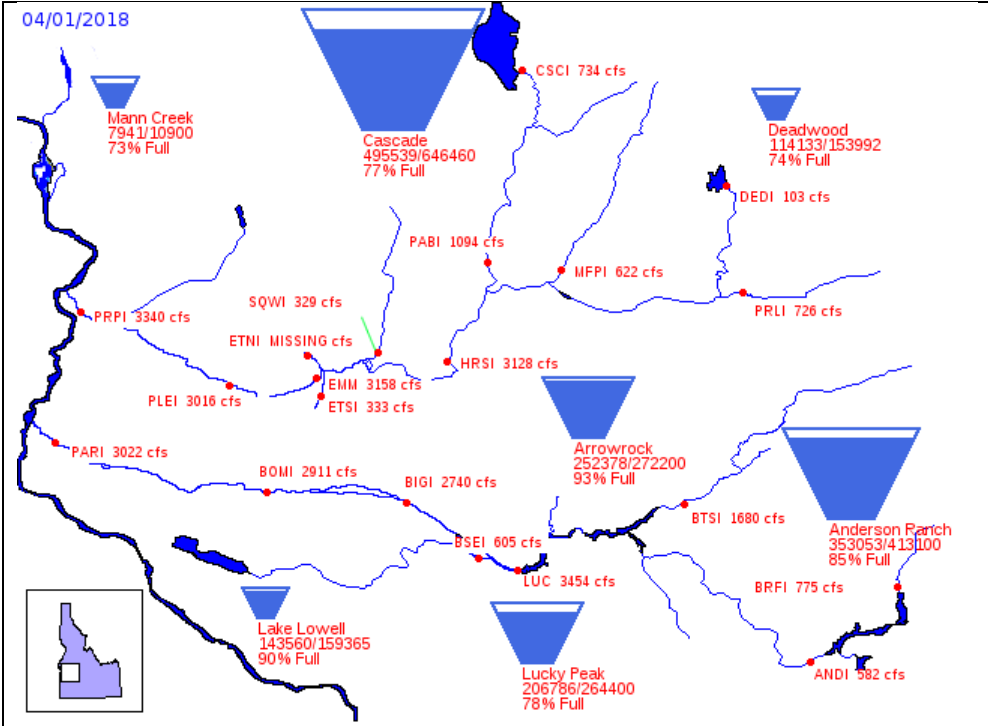
Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>



Boise River Duck Alley Pit Capture – Before & After	Boise River Farmway Pit Capture – Before & After
 <p data-bbox="777 1008 932 1038">April 1, 2016</p>	 <p data-bbox="2222 1008 2377 1038">April 1, 2016</p>
 <p data-bbox="761 1828 947 1860">June 29, 2017</p>	 <p data-bbox="2206 1828 2393 1860">June 29, 2017</p>

Two recent pit captures on the Boise River are presently sorting things out. Absent restoration efforts, new channels will develop over time. Impacts to in-channel conditions and bank stability both upstream and downstream should be anticipated.

Boise System Review
For the Week of
April 2, 2018
Boise River Teacup



<http://www.usbr.gov/pn/hydromet/boipaytea.html>

http://www.usbr.gov/pn-bin/graphwy.pl?boisys3_af

Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 86% of capacity.
Total space available: 137,483 AF
Total storage capacity: 949,700 AF
Natural Flow: 3,564 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 02, 2018

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	25.6	27.4	93	30.2	31.9	95
Bogus Basin	6340	15.8	25.7 _C	61	20.1	22.5 _C	89
Camas Creek Divide	5710	7.8	10.2 _C	76	16.9	16.3 _C	104
Dollarhide Summit	8420	–M	N/A	*	–M	25.7	*
Graham Guard Sta.	5690	9.1	11.7	78	22.3	21.5	104
Jackson Peak	7070	22.9	27.2	84	30.0	32.0	94
Mores Creek Summit	6100	20.8	30.4	68	30.5	34.2	89
Prairie	4800	0.5	0.0	*	14.8	15.2	97
Trinity Mtn.	7770	30.4	35.4	86	32.1	38.6	83
Vienna Mine	8960	30.0	30.3	99	31.3	29.4	106
Basin Index (%)		82			94		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

For an interesting observation on the Boise Basin 2018 Snowpack Comparison check out this site:

https://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/basinsweplots/id/boise_swe_d.gif

According to the NRCS data, we’re currently 14% below the normal peak, which historically occurs on April 3 – that’s tomorrow! If we’re to reach the Normal Peak, we’ll need to see precipitation @ 4,714% of normal today. Slimmer than slim chance on that one, pardner!

Looks as though we’ve seen the peak for 2018. Presently, what’s coming into the system from up above is just about what’s going past Lucky Peak. Not quite sure if it was the screaming wind last night or the oh-so-faint sound of the Fat Lady that was clearing her throat getting ready to close this season out.

The RiverDude awakened this morning, saw the rain drops on his windshield and immediately dispatched the following:

Another increase is set for today. However, the increase will be diverted by the New York Canal at 08:00.
08:00 plus 300 cfs to 3750 cfs out of LP. (New York canal plus 300 cfs at 08:00)
Some other canals will begin diversion this week so flows may decrease at Glenwood unless the Corps and BOR decide to increase.
Stay tuned!!!!

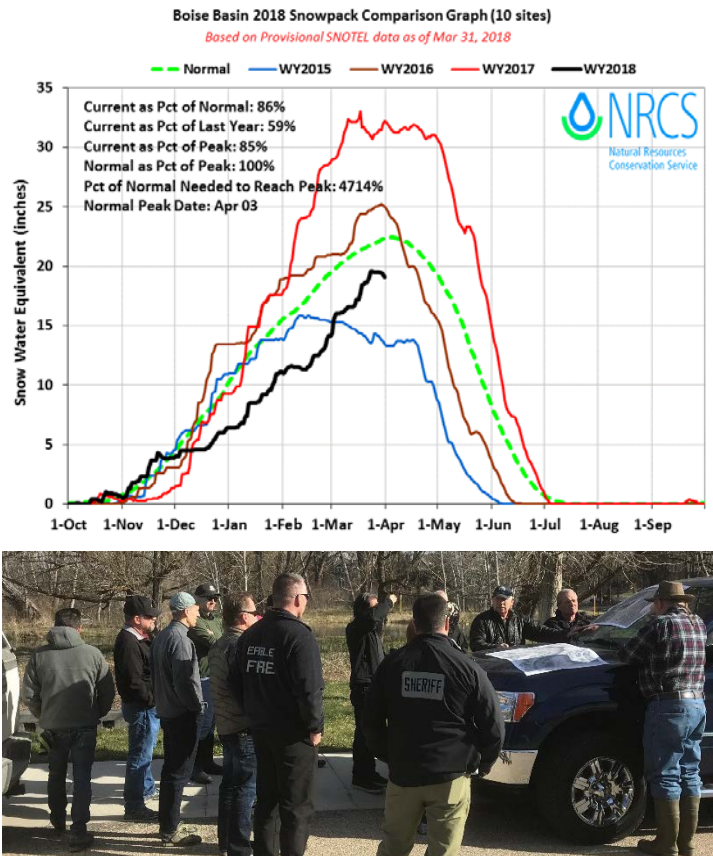
We haven’t heard anything more from the Lower Valley Bovine Swim Team, as the river rose through last week. Crossing the SH 16 bridge, the Team appears to be bucolically off to the east adorning the landscape & contentedly munching the grass, while the overbank flow south of the river seems to be curiously out of place.

The only little bit of excitement last week: A half dozen neighbors, downstream of Eagle Road on the South Channel, reported seeing water coming out of channel and saturating backyards again. Apparently, the Response community is still prepared to show the flag, as reps from the Sherriff’s office, Eagle Fire, the Corps (in the tradition of Walla Walla redundancy, two Corps members actually showed), Ada County Emergency Management, IDWR, the RiverDude’s Right-Hand-Man and FCD10 convened alongside the River to confer with the Neighbors, while offering words of enlightenment & encouragement.

In the words of the elusive, almighty & omnipotent RiverDude, “Stay tuned.”

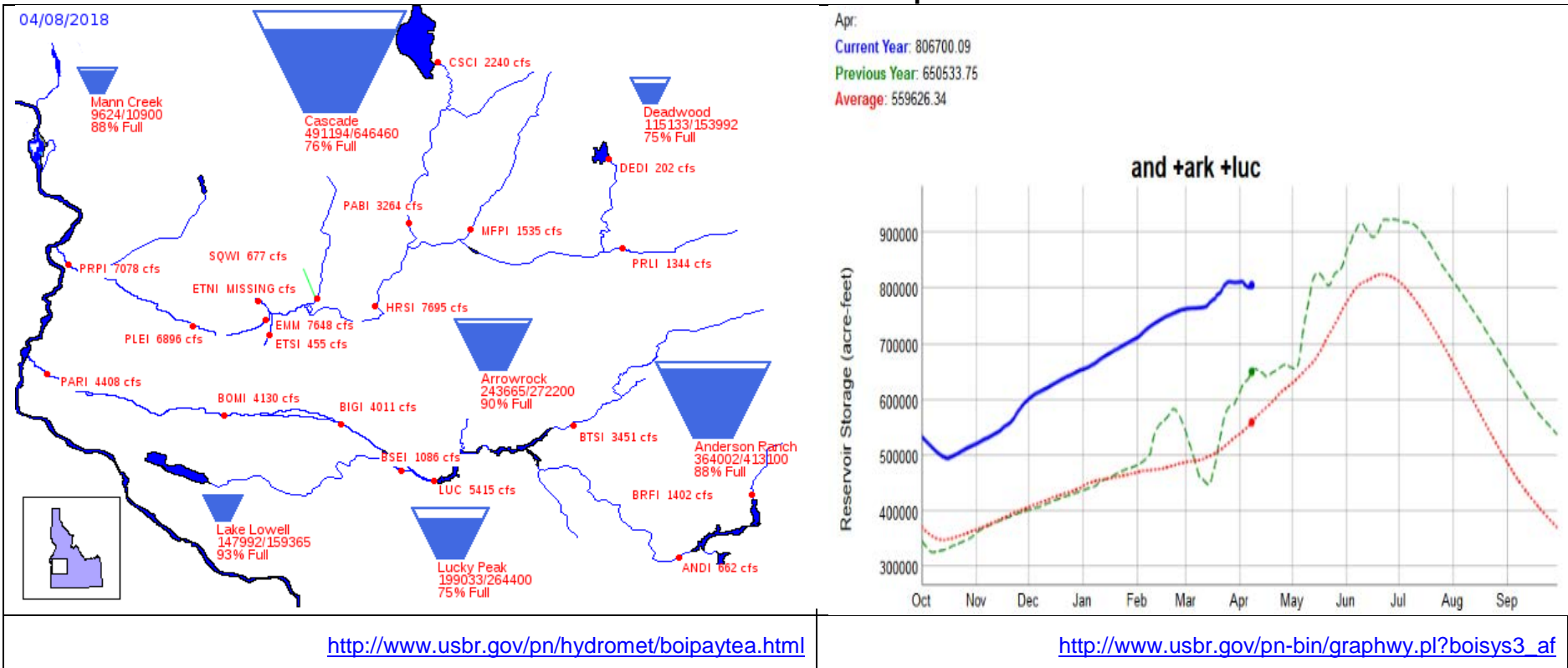
Steve

Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>



A Tip O’ the Hat to The RiverDude’s RHM, Z, for capturing this image

Boise System Review
For the Week of
April 9, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 85% of capacity.
Total space available: 143,000 AF
Total storage capacity: 949,700 AF
Natural Flow: 7,135 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 09, 2018

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	25.4	26.6	95	32.0	32.8	98
Bogus Basin	6340	15.6	25.6 _C	61	21.7	23.4 _C	93
Camas Creek Divide	5710	5.9	7.4 _C	80	18.5	16.7 _C	111
Dollarhide Summit	8420	29.4	N/A	*	20.8	26.5	78
Graham Guard Sta.	5690	7.7	10.0	77	23.7	22.0	108
Jackson Peak	7070	23.6	27.1	87	31.7	32.9	96
Mores Creek Summit	6100	20.5	29.3	70	32.3	35.1	92
Prairie	4800	0.1	0.0	*	15.4	15.9	97
Trinity Mtn.	7770	32.5	35.8	91	34.1	39.6	86
Vienna Mine	8960	32.4	30.9	105	32.6	30.2	108
Basin Index (%)		85			96		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

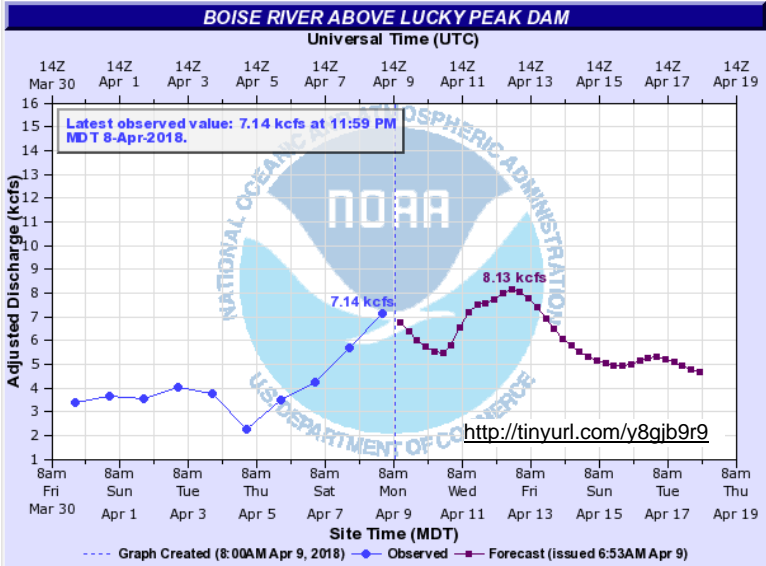
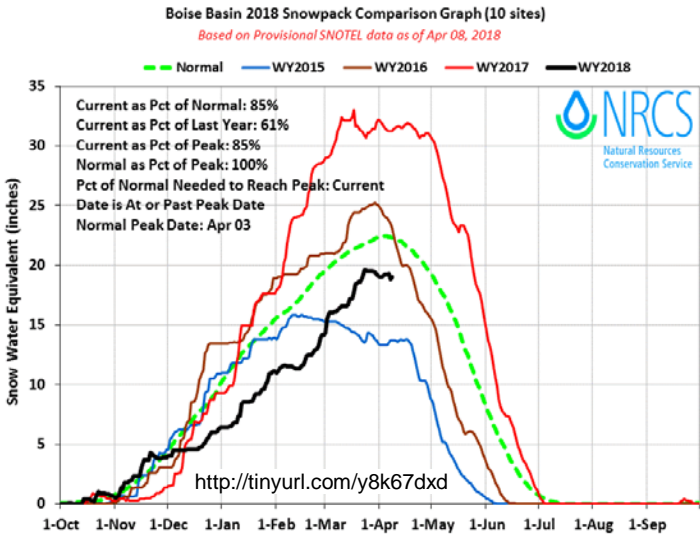
Well, Runoffers, the Boise Basin 2018 Snowpack Comparison apparently shows that we’ve seen the snowpack peak for 2018. For the first time this season, the available capacity in the upper system increased, albeit by a measly 1%, as available storage decreased in Anderson Ranch (filled) and increased in both Arrowrock and Lucky Peak (spilled). System inflow doubled last week (3,600 to 7,100 cfs), as Lucky Peak increased discharges and flows ramped up from 3,500 to 5,400 cfs. Glenwood rose from 2,700 to 4,000 cfs. It’s going to be tough resisting letting all that “free” water slip past, so as the weather improves, we’ll be seeing that water get put to productive use. Heaven knows, we wouldn’t want the downriver folks (OR & WA) to start getting accustomed to taking our water and end up having color of title to our precious lifeblood. (There’s more to that story – just ask AquaMan and the Water Pup. References on request.)

Local canals are wetting up following winter maintenance and construction. The National Weather Service’s Advanced Hydrologic Prediction Service indicates inflow is on the decline for a few days, only to be followed by a nice bump for Friday the 13th. After that, the weather starts to taper, crops will be thirstily growing and canals will be drawing.

The RiverDude’s unusually quiet, coming off what was predicted to be a precipitation-ous weekend. Can’t tell right now over the buzz of the bees, but in the background, the Ol’ Fat Lady just might be getting ready behind the curtains.

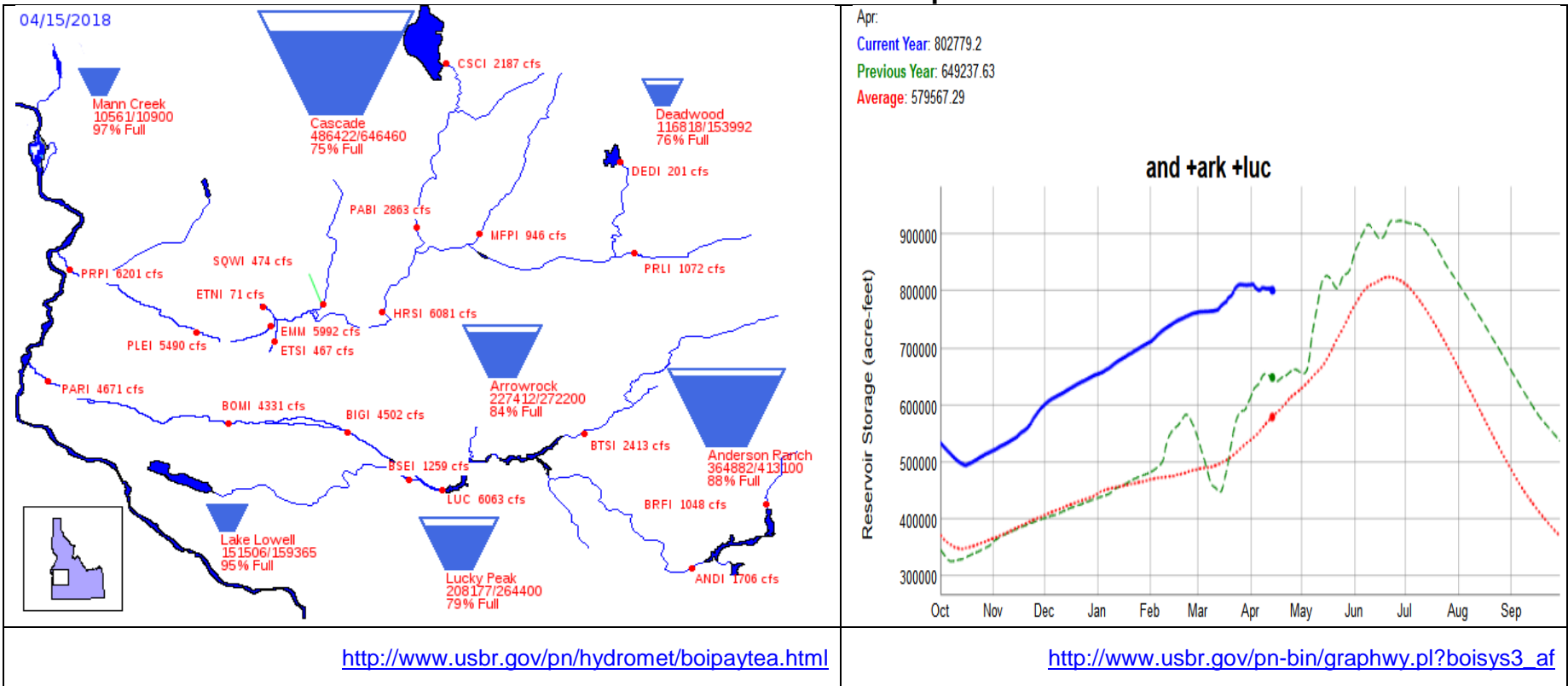
In the words of the elusive, almighty & omnipotent RiverDude, “Stay tuned.” (Note: No exclamation points on this occasion.)

Steve



Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>

Boise System Review
For the Week of
April 16, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 84% of capacity.
Total space available: 149,229 AF
Total storage capacity: 949,700 AF
Natural Flow: 4,900 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 16, 2018

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	27.2	26.6	102	33.0	33.7	98
Bogus Basin	6340	16.4	22.4 _C	73	22.4	24.1 _C	93
Camas Creek Divide	5710	3.4	4.4 _C	77	19.0	17.0 _C	112
Dollarhide Summit	8420	30.6	N/A	*	21.4	27.1	79
Graham Guard Sta.	5690	5.6	7.3	77	24.7	22.7	109
Jackson Peak	7070	24.8	26.6	93	33.2	33.8	98
Mores Creek Summit	6100	20.1	27.4	73	33.7	35.8	94
Prairie	4800	0.0	0.0	*	16.6	16.4	101
Trinity Mtn.	7770	33.1	35.9	92	34.9	40.5	86
Vienna Mine	8960	34.4	31.7	109	34.9	31.0	113
Basin Index (%)		91			97		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.
<http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html>

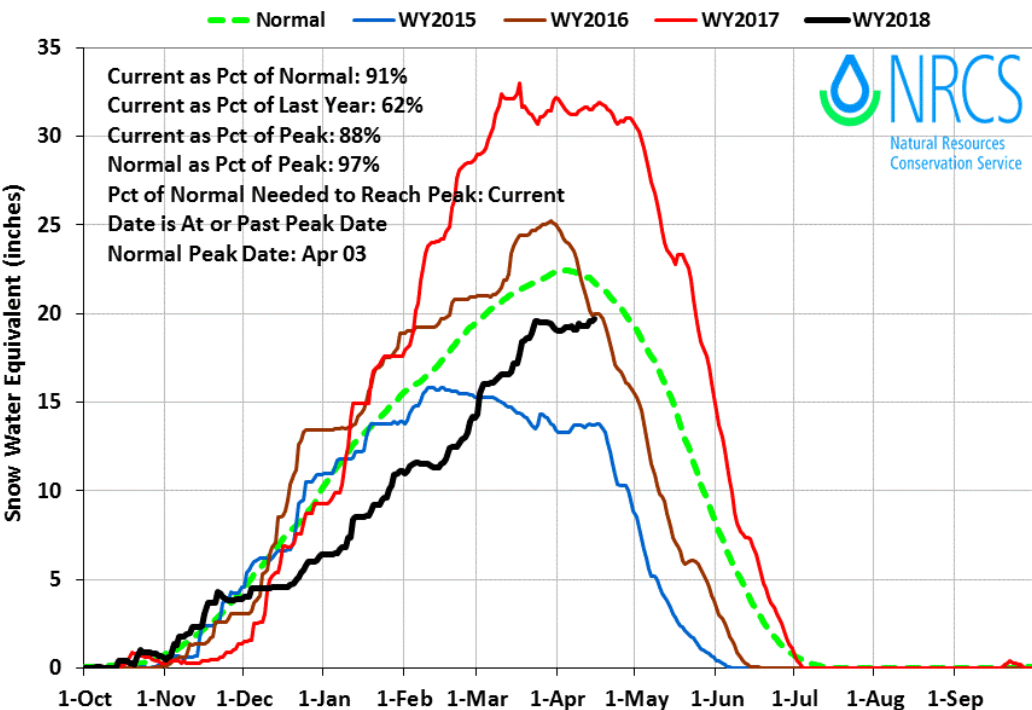
Well, Runoffers, the Boise Basin 2018 Snowpack Comparison has provided a bit of a surprise. Apparently, there’s still a bit of winter out there, the Snow Water Equivalent has crossed 90 % of the median amount for the first time this year – a 6% jump over last week’s readings. Out on the river, the US Army Corps of Engineers cut flow out of Lucky Peak by 500 cfs today. The flows at Glenwood are now back to levels (4,400 cfs) that we saw a week ago. Overall, the system remains at 84% of capacity, with only a single point drop from last week.

Reports from the field are pretty darn consistent that last season’s gravel movement disrupted this year’s channel conveyance capacity. At 4,000 cfs, water is showing in places that are usually dry up to 6 or 7,000 cfs.

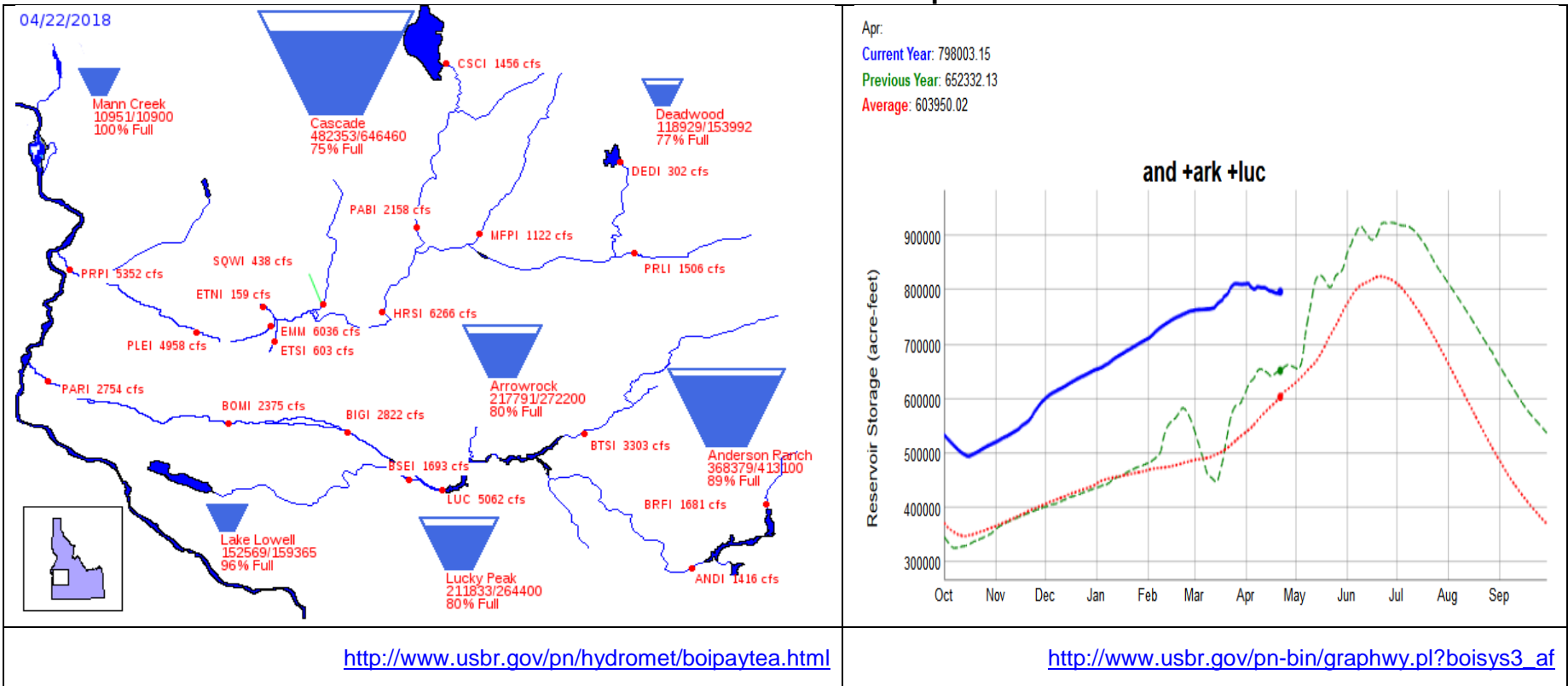
A curious note: flooding was showing up in unusual places out in West Eagle. A closer look revealed that the ~ three foot rise in standing water was a result of beaver activity. That large rodent’s plugging of an undersized culvert certainly got the attention of the locals. Go figure.

In the words of the omnipotent RiverDude, “Stay tuned.” (Note: Once again, no exclamation points on this occasion.)
Steve

Boise Basin 2018 Snowpack Comparison Graph (10 sites)
Based on Provisional SNOTEL data as of Apr 15, 2018



Boise System Review
For the Week of
April 23, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 84% of capacity (no appreciable change).
Total space available: 151,697 AF
Total storage capacity: 949,700 AF
Natural Flow: 6,251 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 22, 2018

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	27.4	25.5	107	33.4	34.5	97
Bogus Basin	6340	15.0	20.7 _C	72	22.8	24.6 _C	93
Camas Creek Divide	5710	0.0	1.7 _C	0	19.1	17.4 _C	110
Dollarhide Summit	8420	–M	N/A	*	–M	27.8	*
Graham Guard Sta.	5690	2.5	4.2	60	24.9	23.2	107
Jackson Peak	7070	24.3	25.2	96	33.9	34.6	98
Mores Creek Summit	6100	17.4	26.1	67	34.4	36.6	94
Prairie	4800	0.1	0.0	*	16.0	17.0	94
Trinity Mtn.	7770	32.6	35.6	92	35.5	41.4	86
Vienna Mine	8960	34.4	32.0	108	35.8	31.7	113
Basin Index (%)		90			98		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

Well, Runoffers, winter’s over. Last week the low snow started callin’ it quits. It’s about all gone below 5,000-ft elevation, although the over 7,000-ft stuff seems to be hanging in there. Take a look at the Snowpack Comparison Graph (→), the SWE took a big drop last week after a tepid, but consistent rise that started last October. Good bye, Winter & Hello, Springtime!

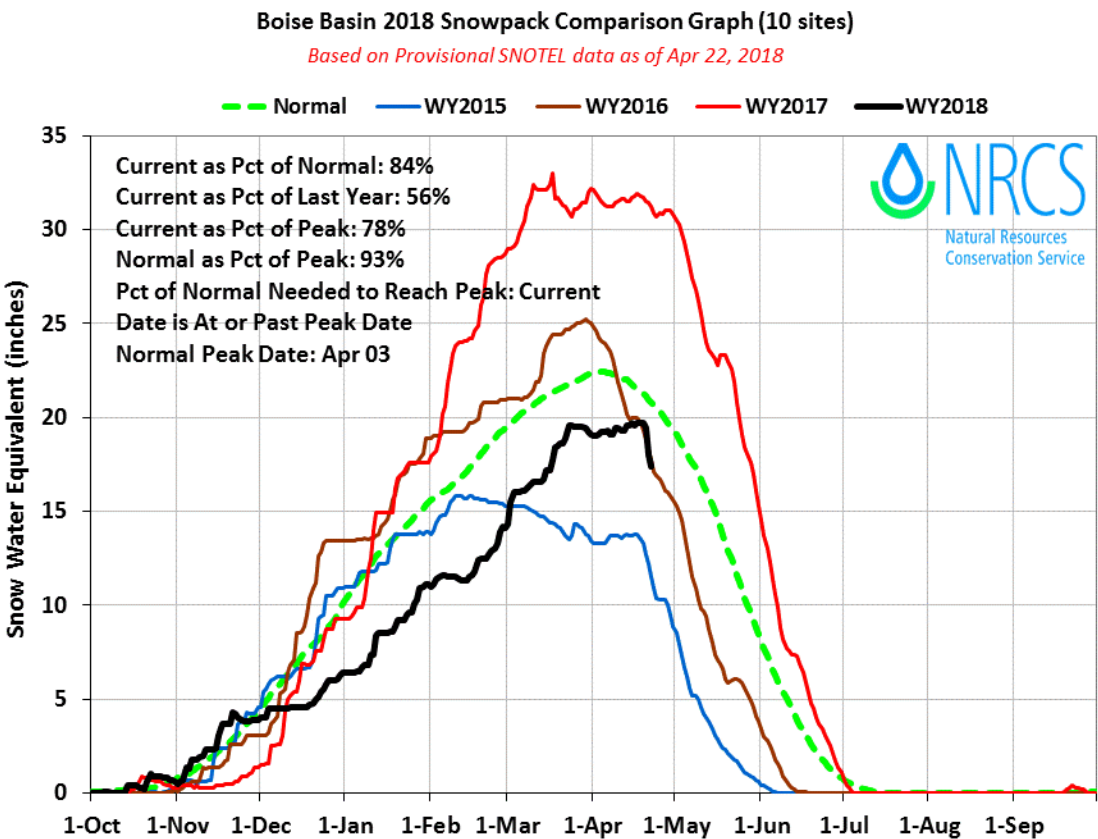
System inflow is up nearly 30% from last week as the snow comes off. At the same time, Walla2 has cut flow out of Lucky Peak 1,000 cfs, the irrigators are spreading the mountains’ bounty out on the fertile Treasure Valley fields. Glenwood’s gone from 4,500 cfs a week ago to what the RiverDude predicts will be 2,100 cfs by afternoon today. At the same time, Parma’s experiencing a 2,000 cfs decline over the past week, with irrigation ramping up. Overall, the system storage remains at 84% of capacity.

Starting to sound as though some of the locals may have spotted the Fat Lady sauntering about up there in the hills getting ready for the curtain call - The Local Water Purveyor’s Chief Prognosticator’s calling for quite a bit more coming out, toward the end of this week, & ‘Arizona’ Charlie’s wanting to start a Flow Lottery similar to the Yukon/Klondike Breakup. We’ll just wait for the Mountain Guru to call it – he’s got the handle on this one.

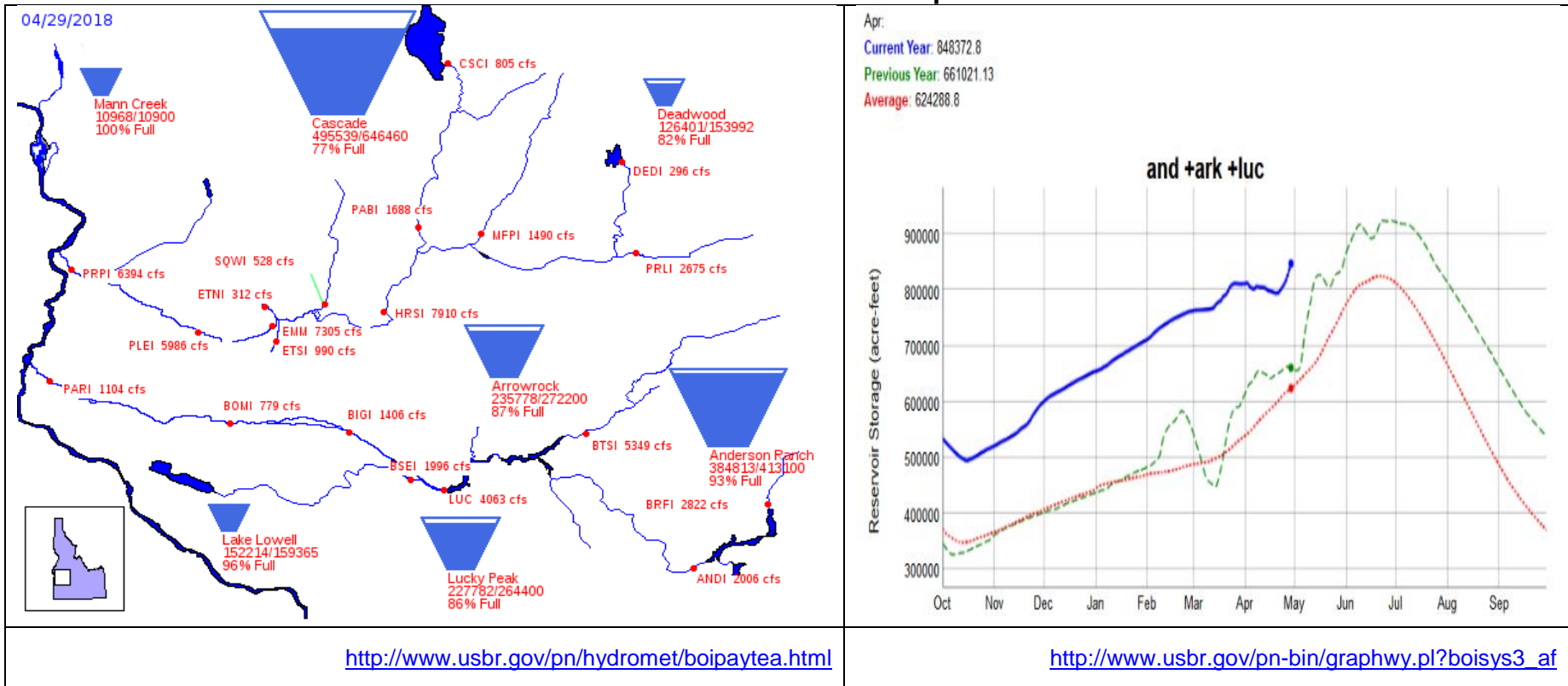
Stay Tuned (no exclamation points justified at this date)

Steve

Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>



Boise System Review
For the Week of
April 30, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 89% of capacity (Up 5%).
Total space available: 101,327 AF (Down 50 kaf)
Total storage capacity: 949,700 AF
Natural Flow: 9,419 CFS (Wow - Up 50%!)

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 30, 2018

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	22.0	24.2	91	33.1	35.4	94
Bogus Basin	6340	8.7	18.7 _C	47	22.8	25.0 _C	91
Camas Creek Divide	5710	−M	0.0 _C	*	−M	17.9 _C	*
Dollarhide Summit	8420	−M	N/A	*	−M	28.6	*
Graham Guard Sta.	5690	0.0	0.0	*	25.0	24.0	104
Jackson Peak	7070	20.6	24.4	84	34.2	35.7	96
Mores Creek Summit	6100	8.4	23.9	35	34.4	37.5	92
Prairie	4800	0.0	0.0	*	16.0	17.6	91
Trinity Mtn.	7770	27.9	35.5	79	35.3	42.5	83
Vienna Mine	8960	30.8	31.3	98	35.9	32.6	110
Basin Index (%)		75			95		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

Here we go. The snow in the 6,000-7,000 ft range took a pretty good hit last week, while the stuff above that elevation is starting to come out nicely, too. That ol' Snowpack Comparison Graph (→) is heading south – dang near falling vertical. Corresponding to the drop in our “Fourth Reservoir,” inflow to the system has kicked up a neat 50% to 9,419 cfs. Free water for everyone, but you better get it now, before it's all gone.

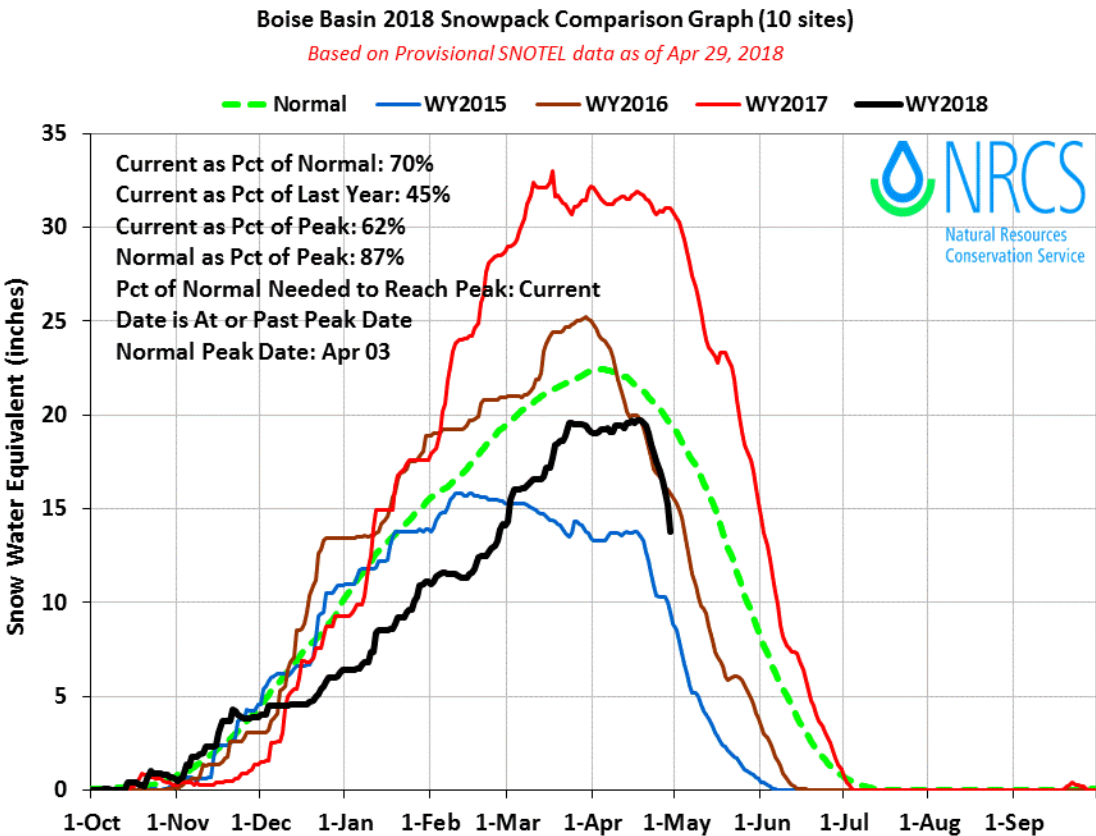
Even though Walla2's still got control over the Lucky Peak throttle, someone else is calling “Fill ‘Er Up!” Last week the system added 50,000 ac-ft of storage (that's 5% in one week), as flows at Glenwood halved to 1,400 cfs now. Two more weeks like that, we'll be at a full tank! Heck, if the weather was just a little warmer, we could all be renting rafts at Barber Park.

If you look a little further downstream, the River's taking even a bigger drop. Down ‘round Parma the water that's getting away has dropped by a whopping 60%, as only 1,100 cfs is now making it to the Snake River.

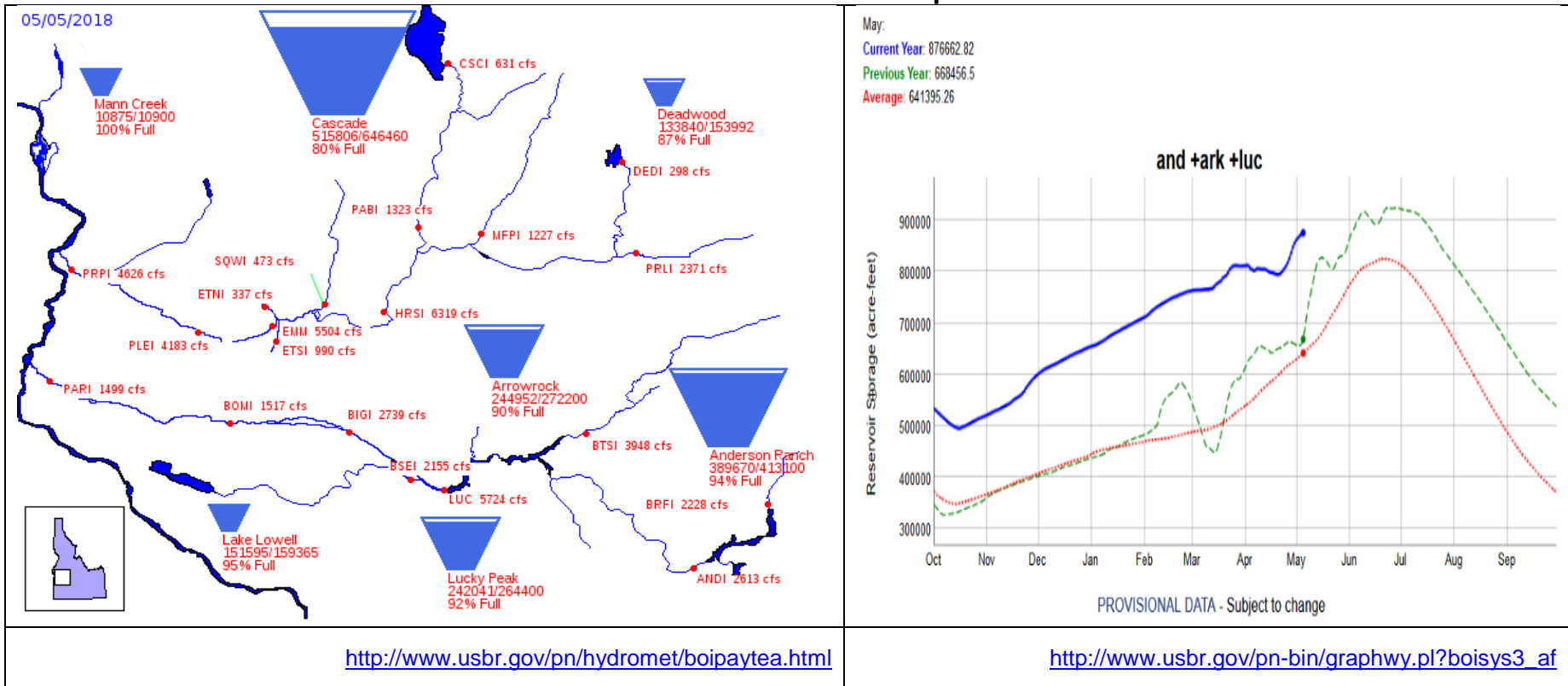
Steady as she goes!

Stay Tuned. (no exclamation points justified at this date)

Steve



Boise System Review
For the Week of
May 7, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 92% of capacity (Up 3%).
Total space available: 73,037 AF (Down 28 kaf)
Total storage capacity: 949,700 AF
Natural Flow: 7,133 CFS (Down 24%)

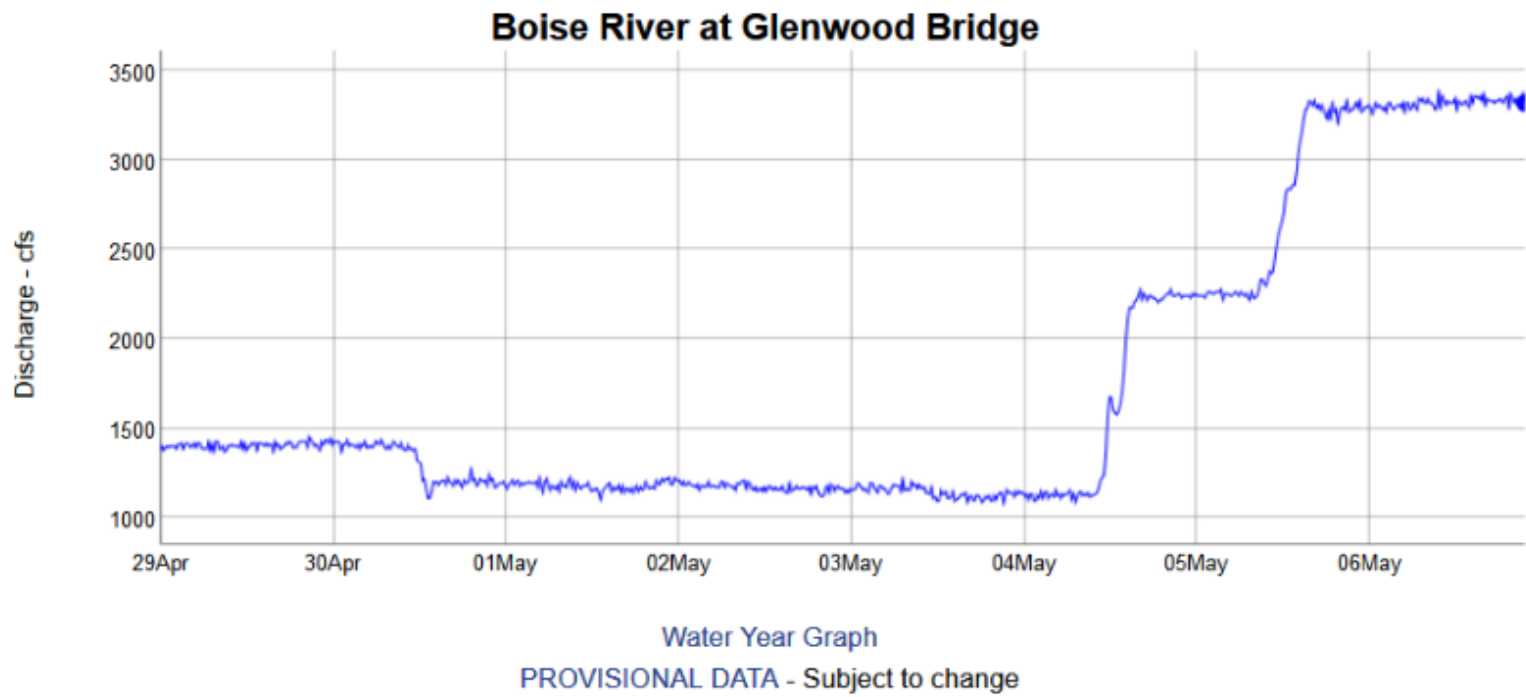
Idaho SNOTEL Snow/Precipitation Update Report
Missing (Sorry)

So much for last week's "Steady as she goes!" We started the week ago with 1,400 cfs passing Glenwood and 1,100 cfs at Parma. Within a few days things started to taper and we even got down to 1,100 @ Glenwood and 900 @ Parma. Then, on Thursday water started moving with a couple daily bumps of 1,000 cfs, with still another bump tomorrow of 500 cfs tomorrow. As of Monday, we're anticipating seeing 3,700 cfs at Glenwood and 3,000 cfs at the Parma gage. Heck, the RiverDude even upped his admonition level to 10 exclamation points. We'll just have to see the week brings.

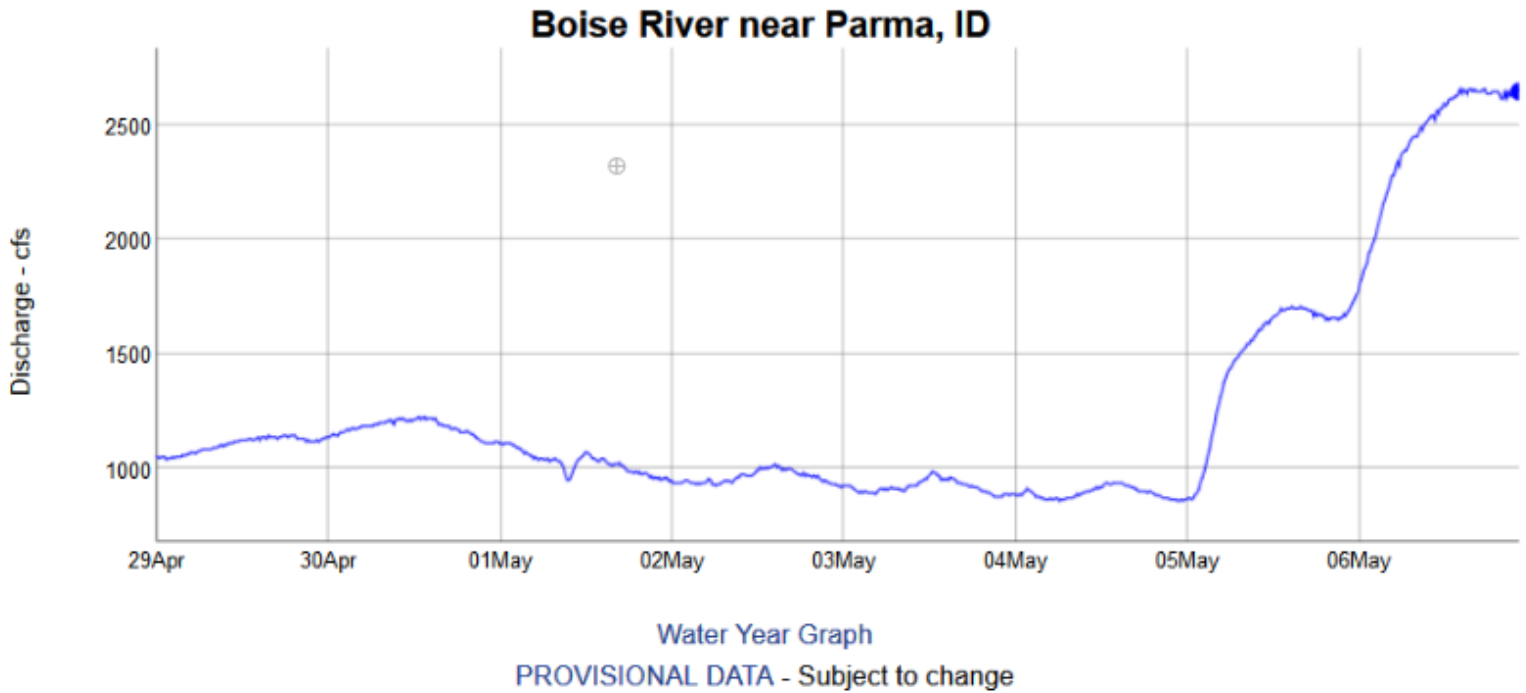
Stay Tuned.

Steve

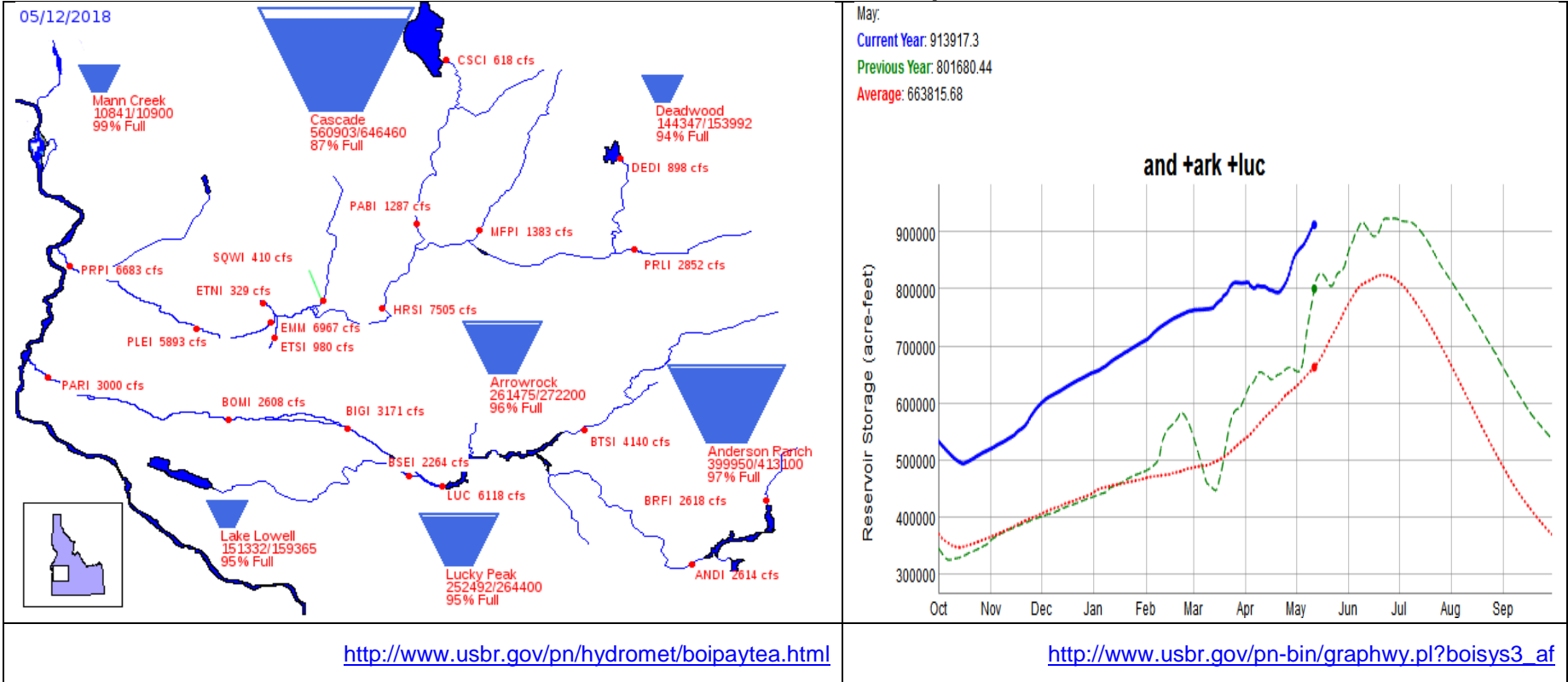
2018/05/06 21:45:
BIGI Q : 3319.72



2018/05/06 22:30:
PARI Q : 2645.12



Boise System Review
For the Week of
May 14, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 96% of capacity (Up 4%).
Total space available: 35,783 AF (Down 49% to 37 kaf)
Total storage capacity: 949,700 AF
Natural Flow: 7,813 CFS (Up 10%)

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, May 13, 2018

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	13.6	22.0	62	34.2	36.7	93
Bogus Basin	6340	0.0	12.7 _C	0	23.1	26.1 _C	89
Camas Creek Divide	5710	0.0	0.0 _C	*	19.8	18.7 _C	106
Dollarhide Summit	8420	–M	N/A	*	–M	29.7	*
Graham Guard Sta.	5690	0.0	0.0	*	25.4	24.9	102
Jackson Peak	7070	13.4	18.7	72	34.7	37.0	94
Mores Creek Summit	6100	0.0	18.6	0	34.7	38.8	89
Prairie	4800	0.1	0.0	*	16.7	18.3	91
Trinity Mtn.	7770	20.2	33.1	61	35.8	44.0	81
Vienna Mine	8960	26.5	27.6	96	36.6	33.9	108
Basin Index (%)		56			94		

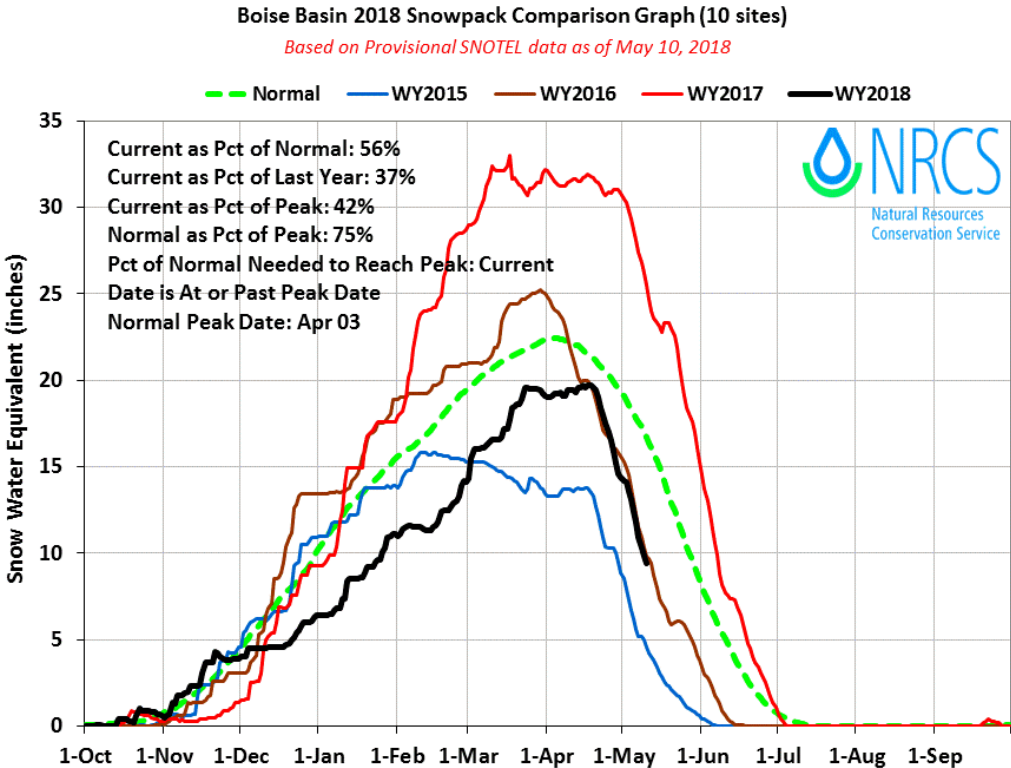
Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.
<http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html>

Snow-wise, things are looking pretty sparse up in the hills. The Boise Basin Snowpack Comparison Graph (→) has dropped to less than 10 inches. The SNOTEL Precip Update Report (above) shows that what snow's left is over 7,000-ft elevation. And the weather talking heads are calling for more warm weather in the next week. What snow's left is going to have a tough time finding much of a home high up in those hills.

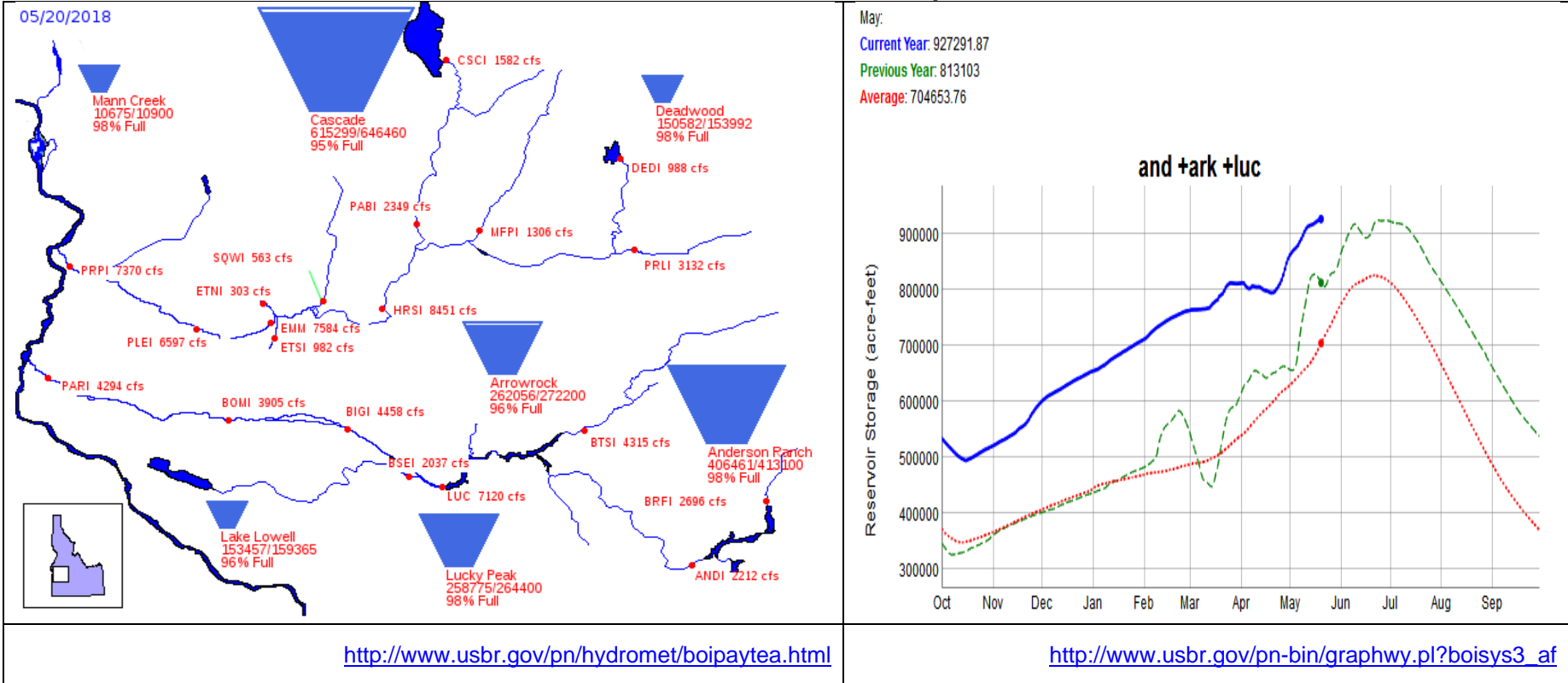
The folks with their hand on the valve up at Lucky Peak have cut flows out of the lake by 14% (from 7,100 cfs in the middle of last week down to 6,100 cfs for the weekend.). At the same time, the system has moved to 96% of capacity. That means there's less than 40 kaf of room available in the three reservoirs.

One more indicator that things are about to wrap up can be found in the RiverDude's “Admonition Index.” At the beginning of last week, we were at a 10 (the highest number of exclamation points for the year). By the end of the week, the Index dropped 60% to a 4. Maybe it's a coincidence, but at the same time that the RiverDude's calling a 4, the total system capacity was reduced to right near 40 kaf. Stay Tuned.

Steve



Boise System Review
For the Week of
May 21, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 98% of capacity (Up 2%).
Total space available: 22,408 AF (Down 37%)
Total storage capacity: 949,700 AF
Natural Flow: 7,830 CFS (Holding steady)

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 21, 2018

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	6.2	16.4	38	35.3	37.7	94
Bogus Basin	6340	0.0	0.7 _c	0*	24.9	26.8 _c	93
Camas Creek Divide	5710	0.0	0.0 _c	*	20.8	19.3 _c	108
Dollarhide Summit	8420	–M	N/A	*	–M	30.7	*
Graham Guard Sta.	5690	0.1	0.0	*	25.6	25.8	99
Jackson Peak	7070	7.0	14.6	48	35.5	37.9	94
Mores Creek Summit	6100	0.0	10.7	0	35.8	39.6	90
Prairie	4800	0.0	0.0	*	17.1	18.8	91
Trinity Mtn.	7770	16.0	29.8	54	37.8	45.0	84
Vienna Mine	8960	23.5	25.2	93	37.4	34.7	108
Basin Index (%)		54			95		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

Snow-wise, these days you’re only going to find that white stuff above 7,000 ft. The Boise Basin Snowpack Comparison Graph has dropped to less than 8 inches, as the warm weather continues through this week. The reservoir system’s just about full @ 98% and the river’s still going up (500 cfs rise on Monday with another 500 on Tuesday) to 5,500 cfs at Glenwood by late Tuesday afternoon. Parma should be nudging 5,500 cfs, sooner than later.

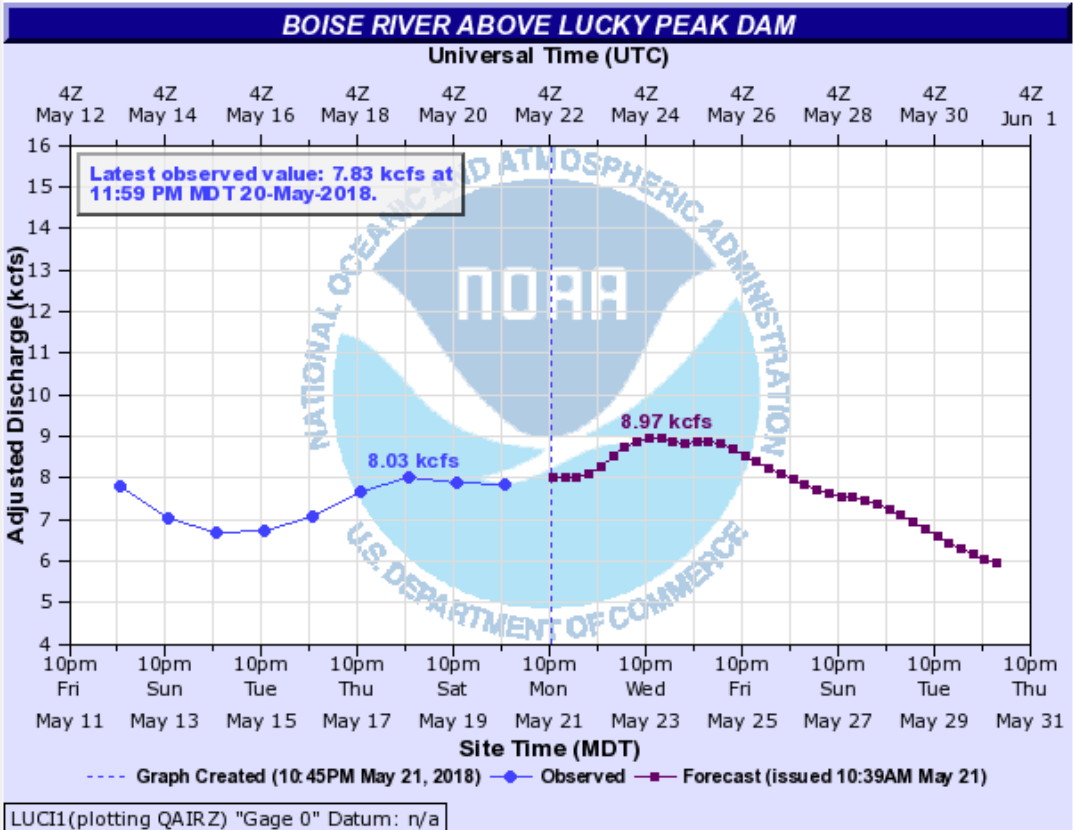
With lower river flows likely near the seasonal peak, now seems appropriate to take a look at the Eagle Island Flow Split (attached). The long and the short of the matter is that the percentage flow is increasing slightly in the North Channel with these increasing flows, leading to speculation that some gravel is moving again at the head of the Island. Too early to tell, but all the gravel that moved around in the channel last year, not to mention two bonafide pit captures, there could be some interesting flow patterns beginning to develop between now and when flows start receding.

Current projections have the upper basin inflow moving from 8 kcfs to 9 kcfs by the middle of this week and then tapering off through the next week. One might suspect that the flows leaving Lucky Peak will stick to closely matching inflows for the next week or so.

We won’t be doing this much longer, as the snow keeps coming out and the hills are starting to brown on some south sloping faces. Can’t be much longer before the reservoirs are topped off (2% left to fill), and we start worrying about allocations and carryover.

Stay Tuned.
Steve

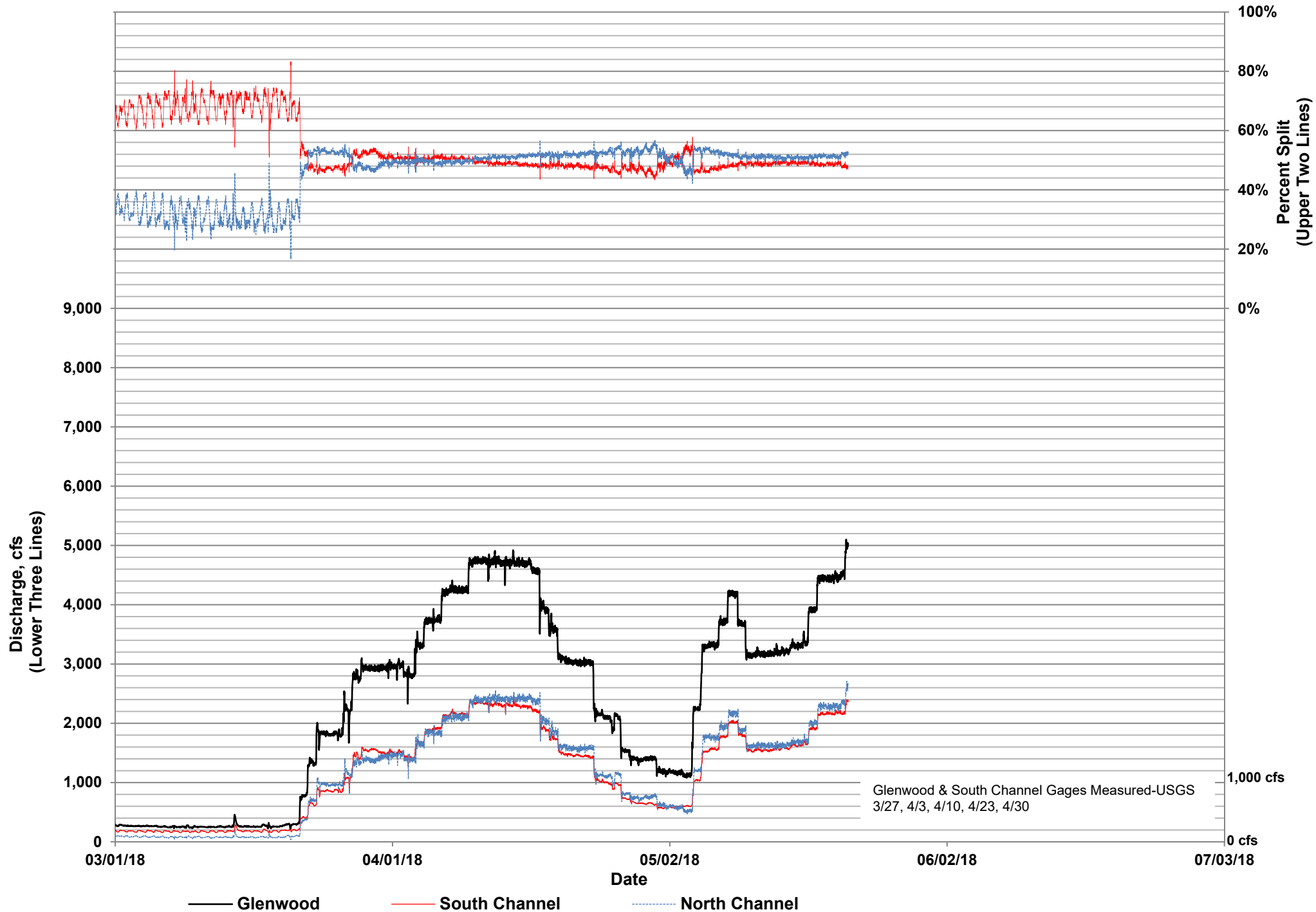
Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>



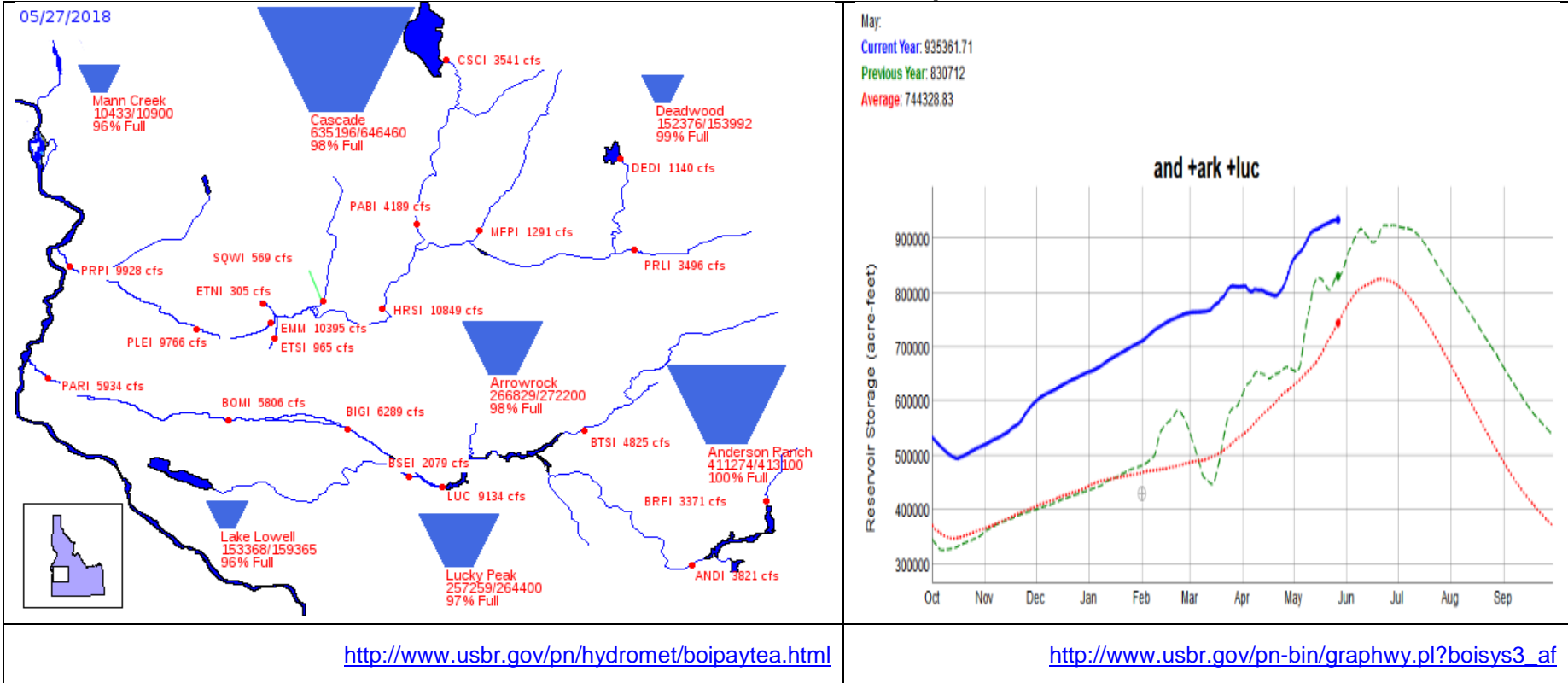
Boise River

Spring 2018

Q & %



Boise System Review
For the Week of
May 28, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 98% of capacity (Steady as she goes, Cap’n!).
Total space available: 22,408 AF (Down 36% - again!)
Total storage capacity: 949,700 AF
Natural Flow: 9,098 CFS (Up 16%)

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 28, 2018

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	0.2	10.9	2	35.7	38.3	93
Bogus Basin	6340	0.0	0.0 _C	*	25.5	27.3 _C	93
Camas Creek Divide	5710	0.0	0.0 _C	*	21.5	19.6 _C	110
Dollarhide Summit	8420	0.1	N/A	*	25.2	31.1	81
Graham Guard Sta.	5690	0.0	0.0	*	26.7	26.2	102
Jackson Peak	7070	0.0	11.8	0	36.0	38.6	93
Mores Creek Summit	6100	0.0	1.6	0*	36.7	40.2	91
Prairie	4800	0.1	0.0	*	18.5	19.2	96
Trinity Mtn.	7770	8.2	27.4	30	39.9	45.7	87
Vienna Mine	8960	17.6	21.8	81	38.0	35.4	107
Basin Index (%)		36			94		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

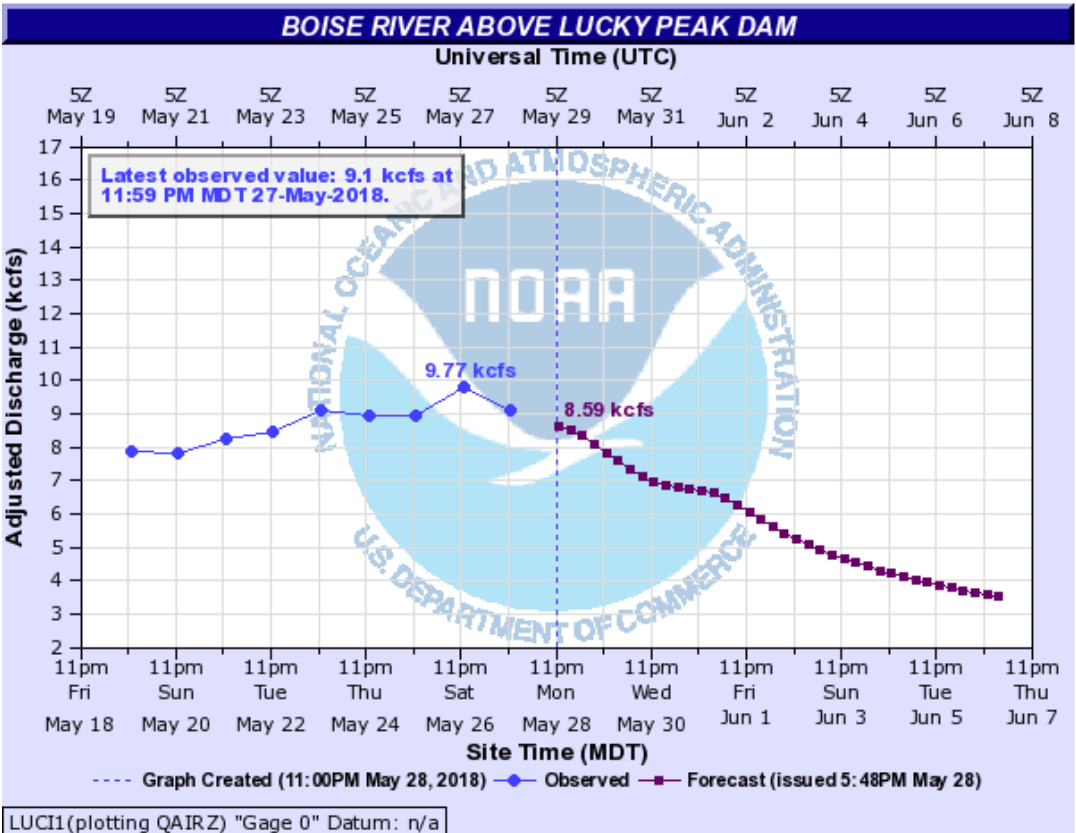
The Boise Basin Snowpack Comparison Graph halved last week and dropped to less than 4 inches. At the same time, warm weather is expected to continue through this week. The reservoir system’s hanging in at about full @ 98%, while the river’s gone through the weekend with 6,300 cfs at Glenwood and Parma flirting with 6,000 cfs. Right now, 9,100’s coming in & 9,100’s going out of Lucky Peak. That could all to screech to a halt this week.

Looks as though inflows are headed toward summer and should drop by nearly half by the end of the week. Sooner than later, someone’s going to speak up and say that it seems silly to be sending all that “free” water down to Astoria, when it’ll nicely fit in that last little two percent hole in the system. If it ain’t the Fat Lady calling an end to this chicanery, the water users probably will find their voice and could even end up raising a chorus. To be sure, the Fat Lady is in the wings!

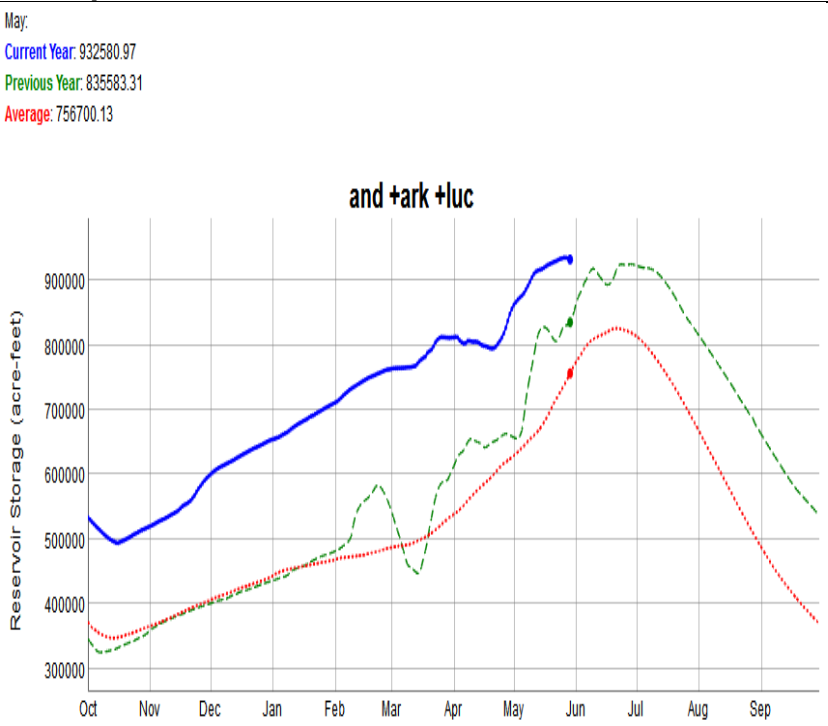
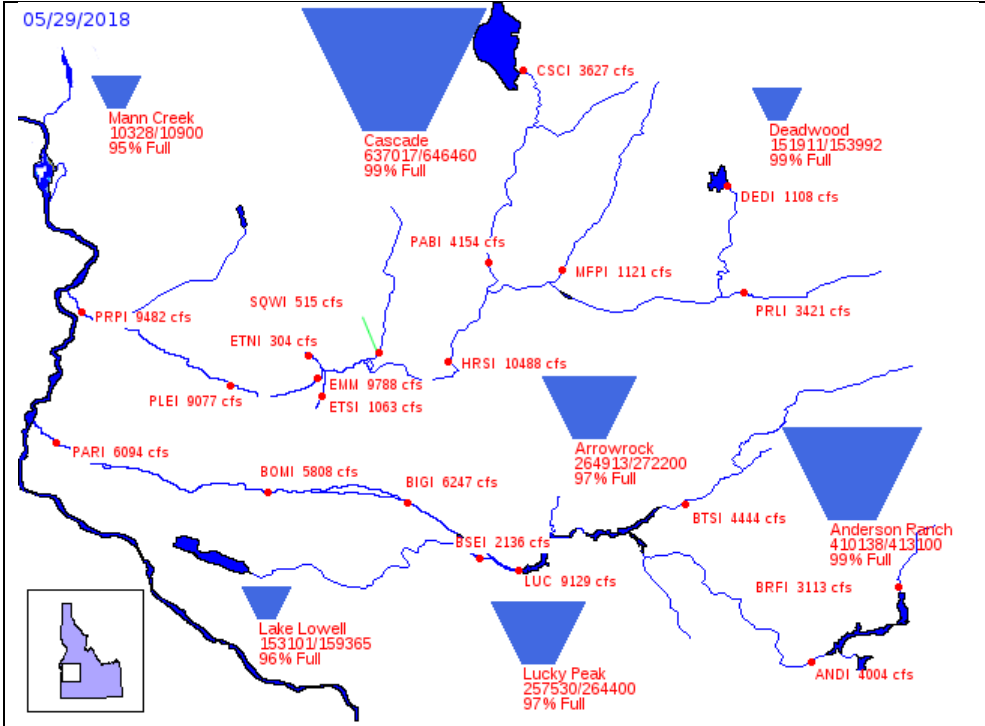
While we are under a 6 Exclamation Point Index warning issued by the RiverDude, we can all bank on things to change.

Stay Tuned (no explanation points)

Steve



Boise System Review
For the Week of
May 31, 2018
Boise River Teacup



<http://www.usbr.gov/pn/hydromet/boipaytea.html>

http://www.usbr.gov/pn-bin/graphwvy.pl?boisys3_af

Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 98% of capacity (Steady as she goes, Cap’n!).
Total space available: 17,119 AF (Down 24% - in just 2 days!)
Total storage capacity: 949,700 AF
Natural Flow: 9,098 CFS (Down 10% in the same 2 days)

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 Wednesday, May 30, 2018

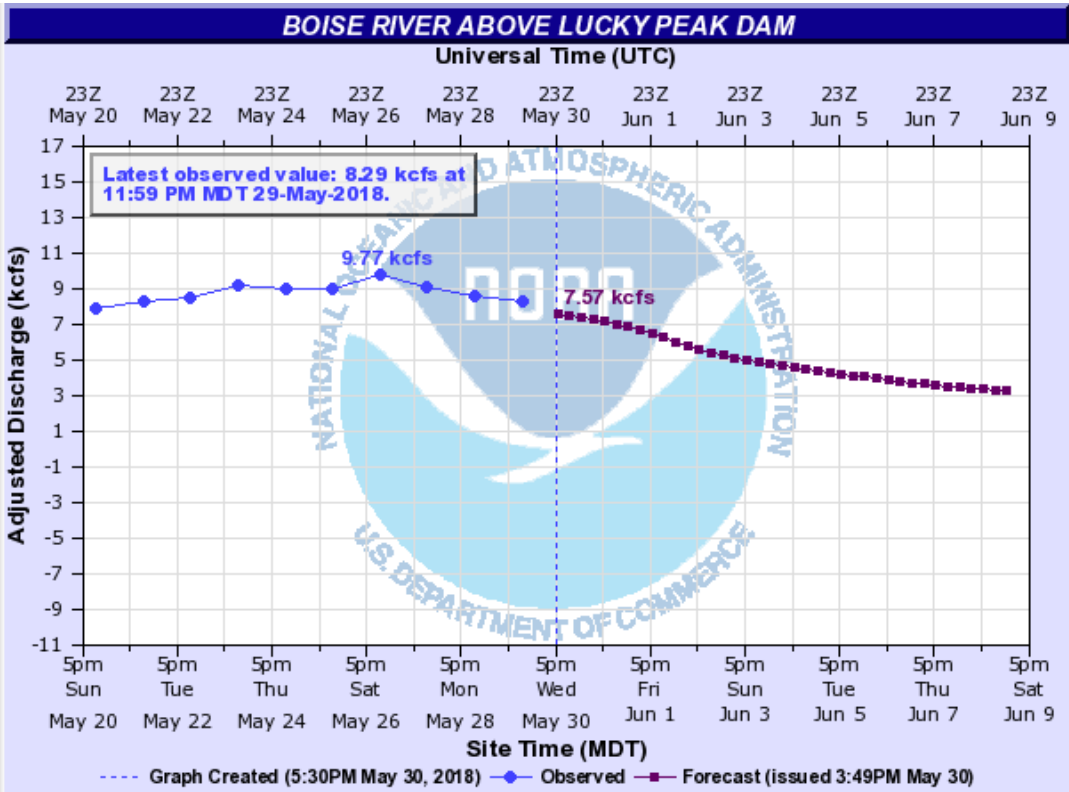
Basin Site Name	Elev (ft)	Snow Water Equivalent			Water Year-to-Date Precipitation		
		Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average
BOISE BASIN							
Atlanta Summit	7580	0.0	9.4	0	35.8	38.5	93
Bogus Basin	6340	0.0	0.0 _C	*	25.4	27.4 _C	93
Camas Creek Divide	5710	0.0	0.0 _C	*	21.7	19.7 _C	110
Dollarhide Summit	8420	0.0	N/A	*	25.2	31.4	80
Graham Guard Sta.	5690	0.0	0.0	*	26.8	26.4	102
Jackson Peak	7070	0.0	10.3	0	36.0	38.9	93
Mores Creek Summit	6100	0.0	0.0	*	36.8	40.5	91
Prairie	4800	0.0	0.0	*	18.5	19.4	95
Trinity Mtn.	7770	5.0	25.8	19	40.0	45.9	87
Vienna Mine	8960	15.8	20.7	76	38.2	35.7	107
Basin Index (%)		31			94		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.

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

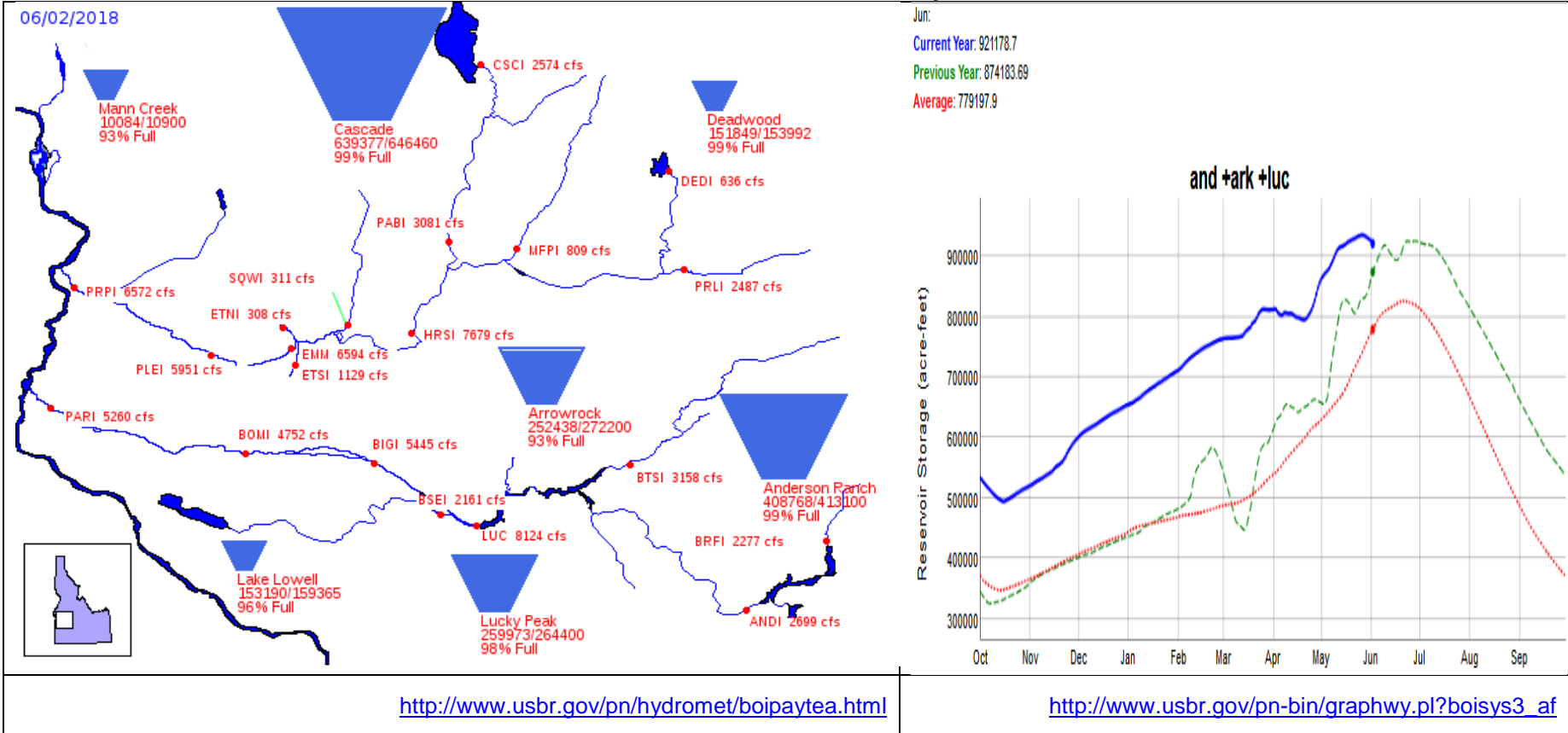
The Boise Basin Snowpack Comparison Graph has dropped to less than 3 inches and the only snow is way high. Continuing along the recent days, warm weather is expected to continue through this week. The reservoir system’s hanging in at about full @ 98%.
The Corps has announced that flows will start to be cut beginning Thursday, May 31. A cut of 500 cfs is scheduled for Thursday followed by another 500 cfs cut on Friday. At the same time, river flows are forecast to be dropping by 700 (Th), 500 (Fr), 700 (Sa), 800 (Su), 600 (Mo), & 400 (Tu), which should just about bring us to The Day of Allocation – when inflow is less than outflow and storage starts to rule supreme.

The Fat Lady is in the wings. Stay tuned.



Current and Previous Copies of the Boise System Review are here: <http://www.quadrant.cc/runoff-review.html>

Boise System Review
For the Week of
June 4 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 97% of capacity (OMG! Flood control & we’ve dropped a point!)
Total space available: 28,521 AF Increased 27% in a week)
Total storage capacity: 949,700 AF
Natural Flow: 5,981 CFS (Down 40% in a week)

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, June 03, 2018

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	0.0	5.4	0	36.0	38.9	93
Bogus Basin	6340	0.0	0.0 _C	*	25.8	27.7 _C	93
Camas Creek Divide	5710	0.0	0.0 _C	*	22.0	19.9 _C	111
Dollarhide Summit	8420	0.0	N/A	*	25.6	31.8	81
Graham Guard Sta.	5690	0.0	0.0	*	27.2	26.8	101
Jackson Peak	7070	0.0	6.1	0	36.5	39.4	93
Mores Creek Summit	6100	0.0	0.0	*	37.1	40.9	91
Prairie	4800	0.1	0.0	*	18.5	19.7	94
Trinity Mtn.	7770	0.4	22.6	2	40.5	46.5	87
Vienna Mine	8960	12.2	18.3	67	38.6	36.1	107
Basin Index (%)		24			94		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.
<http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html>

The Boise Basin Snowpack Comparison Graph has dropped to less than 2 inches. Short of a Black Swan cruising over the Upper Basin and emptying a load of rain, that runoff stuff’s all about done.

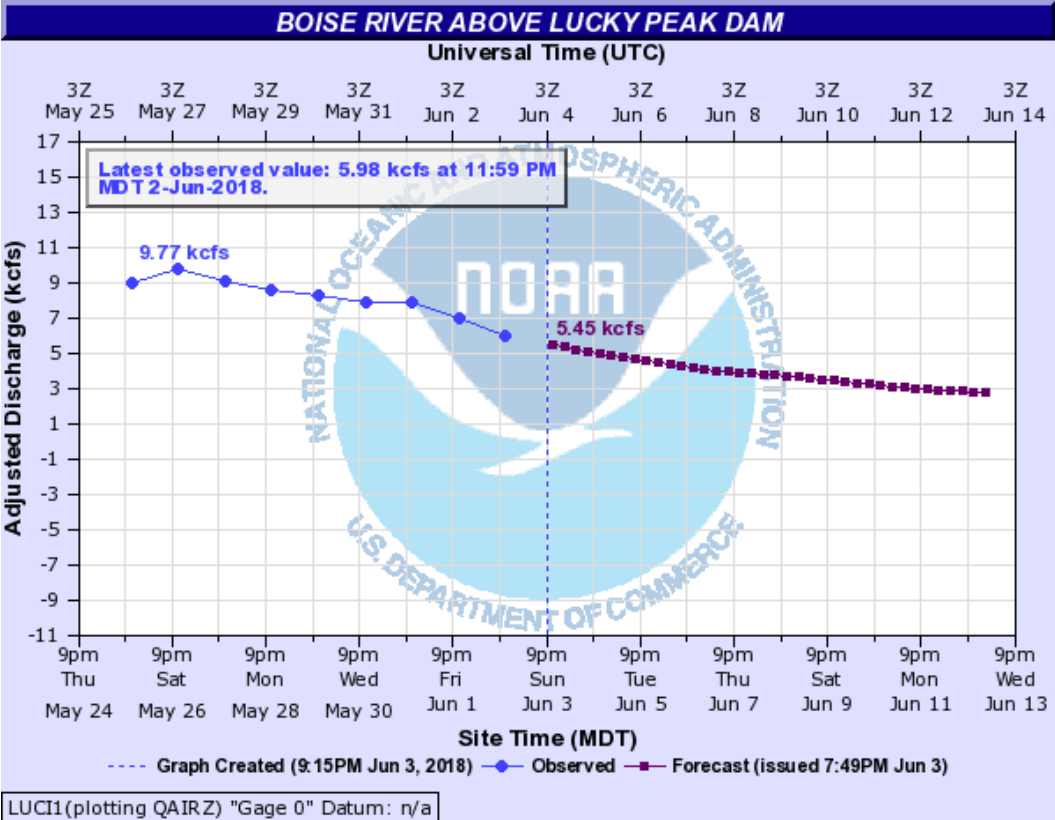
The Corps cut 1,000 cfs out of Lucky Peak discharges late last week. From here on out, river flows are forecast to be consistently dropping by until reaching ~3,000 cfs by next Monday. (See <http://tinyurl.com/y732pj47>)

The street’s money is on once the Walla2 folks operating our reservoir system return from their weekend cavorting around the PNW and start paying attention to what’s coming in, what’s going out, what’s left in the hills, and the declining reservoir system, someone’s bound to get a hair to start closing the Lucky Peak gates.

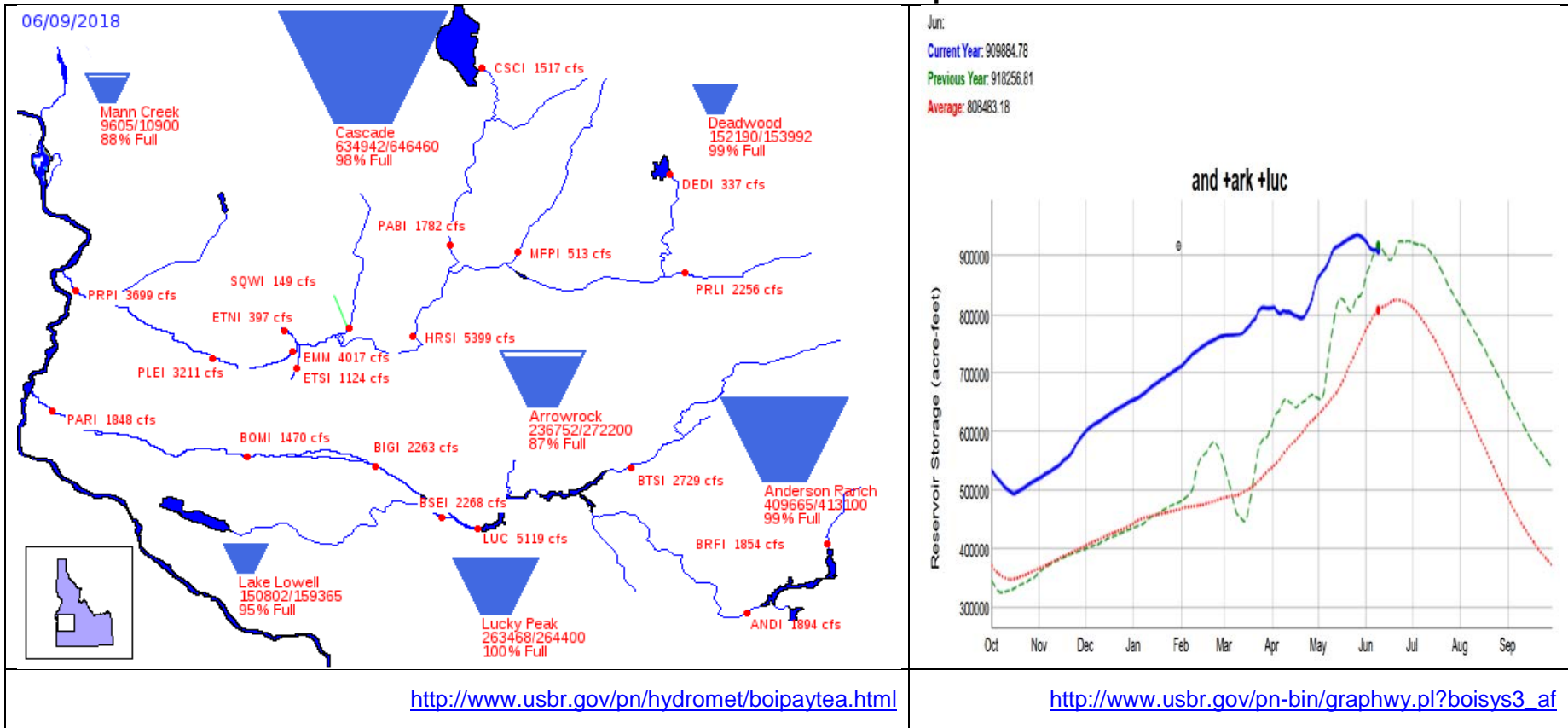
On top of all that, the Fat Lady’s is ready to go on stage and getting a tad bit eager to call this a wrap.

Stay tuned.

Steve



Boise System Review
For the Week of
June 11, 2018
Boise River Teacup



Boise River system (Anderson Ranch, Arrowrock, Lucky Peak) is at 96% of capacity (OMG! Flood control & we’ve dropped a point!)
Total space available: 39,815 AF (Increased 40% in a week)
Total storage capacity: 949,700 AF
Natural Flow: 5,981 CFS (Down 25% in a week)

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, June 10, 2018

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	0.0	0.0	*	36.2	39.6	91
Bogus Basin	6340	0.0	0.0 _C	*	25.9	28.3 _C	92
Camas Creek Divide	5710	0.0	0.0 _C	*	22.1	20.4 _C	108
Dollarhide Summit	8420	0.0	N/A	*	25.7	32.5	79
Graham Guard Sta.	5690	0.1	0.0	*	27.7	27.4	101
Jackson Peak	7070	0.0	0.0	*	37.0	40.1	92
Mores Creek Summit	6100	0.0	0.0	*	37.6	41.5	91
Prairie	4800	0.0	0.0	*	18.8	20.0	94
Trinity Mtn.	7770	0.4	15.7	3	41.4	47.3	88
Vienna Mine	8960	0.9	14.2	6	38.7	36.8	105
Basin Index (%)		5			93		

Legend - “-M” = Missing data. “*” = Analysis may not provide a valid measure of conditions.
<http://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html>

The reservoir system continues to drop a percentage a week, while flood control is still in play. The Boise Basin Snowpack Comparison Graph is as good as zilch (nil, nada, nought, nothing, zero, zip). The Mountain Guru recently took a hard look around the Boise Basin and opined in his June Water Supply Outlook Report that “There’s little to no snow remaining...” Heck, the Corps even cut 3,000 cfs out of Lucky Peak discharges late last week – a 37% cut. That’s unsustainable – another 37% cut and there won’t be enough to water the crops in the Valley.

On top of all this, there’s hay to be watered, conventions over in La La Land to attend, a honey crop to harvest and to top it all, the Minnesotan turistas are drifting in to town. Plenty of sure signs that changes are afoot.

This is it. Head outside, listen – you’ll hear the Fat Lady singing. The curtain is about to fall on the 2018 Runoff Season.

As that great, local philosopher David Southers is wont to remark: “It’s been real and it’s been fun, ...”

Thanks to the likes of the RiverDude, the Mountain Guru, Ada County’s Chief Worrier-In-Chief, and the gang over in Walla2 that provided fodder for this season’s ramblings. And thanks to you all for hanging in for the duration. Until next year, Runoffers, “Stay Tuned.”

Steve



Amalie_Materna_as_Brünhilde_1876