

RECLAMATION

Managing Water in the West

Upper Snake Watershed Operations Outlook April 2019

Tuesday April 9, 2019



U.S. Department of the Interior
Bureau of Reclamation

Outline

- Reservoirs' Status
- April 2019 Forecasts
- Upcoming reservoir operations
- Short- and long term climate outlooks
- Operational Summary

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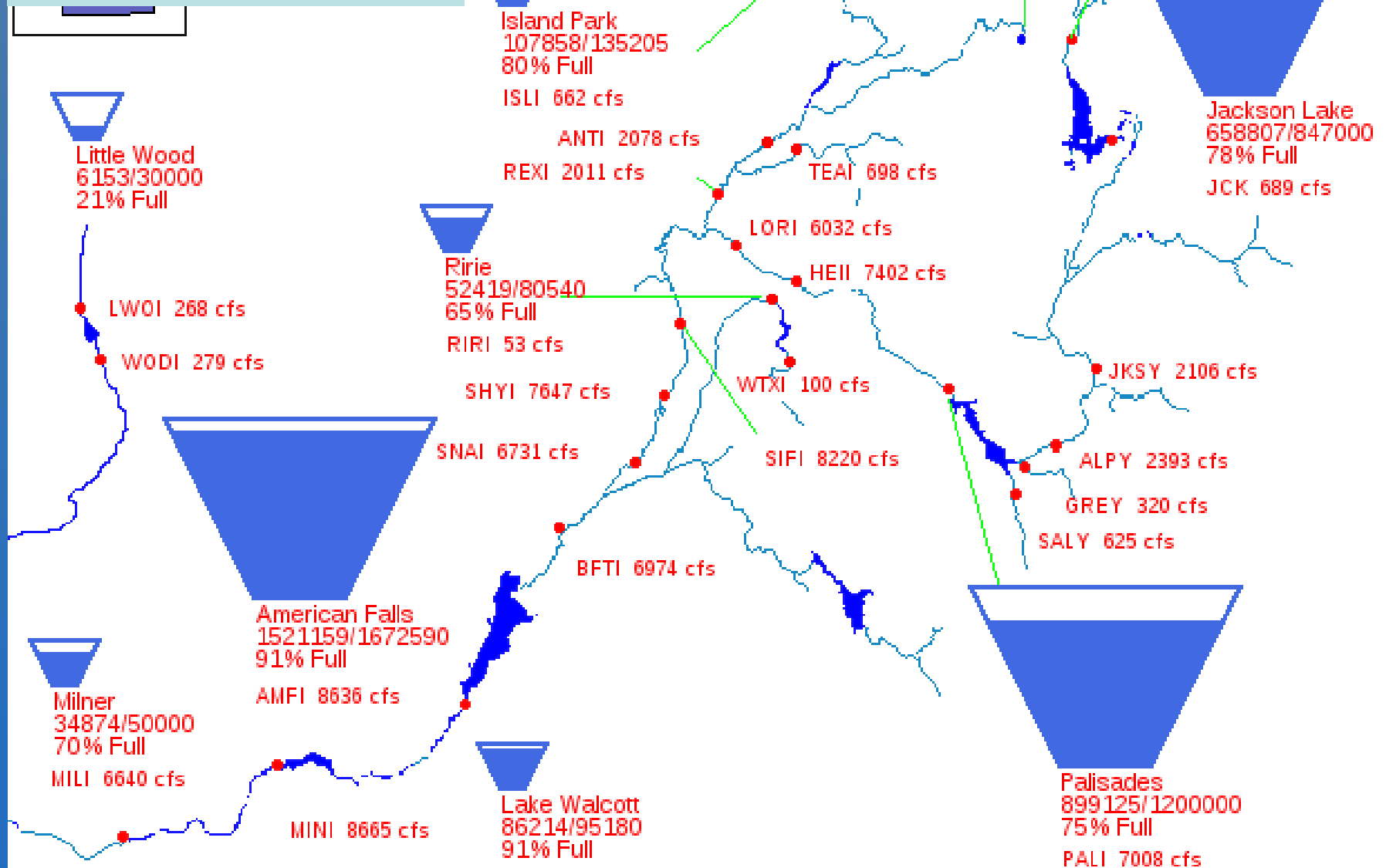
As of April 5, 2019:

~ 3.3 MAF

~ 83% of Capacity (4.045 MAF)

~ 116% of Normal

~ 31 KAF lower than last year



SNAKE BASIN ABOVE AMERICAN FALLS

Base Camp	7060	17.0	15.2	112	20.9	20.7	101
Black Bear	8170	44.6	37.1	120	43.1	37.9	114
Blind Bull Sum	8650	23.8	23.3	102	18.6	19.3	96
Cottonwood Creek	7670	20.5	20.9	98	25.4	24.4	104
East Rim Divide	7930	10.8	10.2	106	11.6	11.7	99
Grand Targhee	9260	43.0	38.7 _R	111	31.4	30.7 _R	102
Granite Creek	6770	17.8	14.3	124	20.1	19.5	103
Grassy Lake	7265	33.4	31.4	106	37.0	35.6	104
Gros Ventre Summit	8750	8.7	12.9	67	11.6	12.8	91
Gunsight Pass	9820	12.6	13.9 _C	91	15.2	13.8 _C	110
Island Park	6290	16.5	13.3	124	22.3	18.0	124
Lewis Lake Divide	7850	36.1	30.0	120	37.9	35.1	108
Loomis Park	8240	14.9	13.8	108	16.6	17.2	97
Oxford Spring	6740	-M	5.2	*	19.6	17.3	113
Phillips Bench	8200	29.4	25.5	115	31.3	27.9	112
Pine Creek Pass	6720	16.6	13.7	121	22.2	21.1	105
Salt River Summit	7640	13.4	12.7	106	16.0	16.5	97
Sedgwick Peak	7850	23.6	18.6	127	24.1	21.6	112
Sheep Mtn.	6650	14.2	10.5	135	17.8	16.4	109
Slug Creek Divide	7225	15.8	13.5	117	21.4	20.7	103
Snake River Station	6920	19.1	14.8	129	25.1	22.2	113
Somsen Ranch	6800	13.0	10.2	127	17.7	16.5	107
Spring Creek Divide	9000	23.0	22.5	102	23.4	23.6	99
Thumb Divide	7980	19.2	14.7	131	18.7	18.4	102
Togwotee Pass	9580	23.3	22.2	105	24.2	24.1	100
Two Ocean Plateau	9240	30.0	26.2	115	25.2	26.9	94
White Elephant	7710	37.5	25.8	145	37.5	29.7	126
Wildhorse Divide	6490	20.0	15.3	131	25.4	19.6	130
Willow Creek	8080	31.2	28.4	110	34.4	33.3	103
Basin Index (%)		114			107		

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2019 April 1 Runoff Forecasts (Apr – July)

- Heise = 99% Average* (3200 KAF)
- Jackson = 104% Average (794 KAF)
- Ririe = 121% Average*# (76 KAF)
- Island Park = 115% Average (247 KAF)

* Coordinated Forecast with USACE

Apr-Jun Forecast Period

% Average based on 1981-2010 period

Assumes normal subsequent conditions

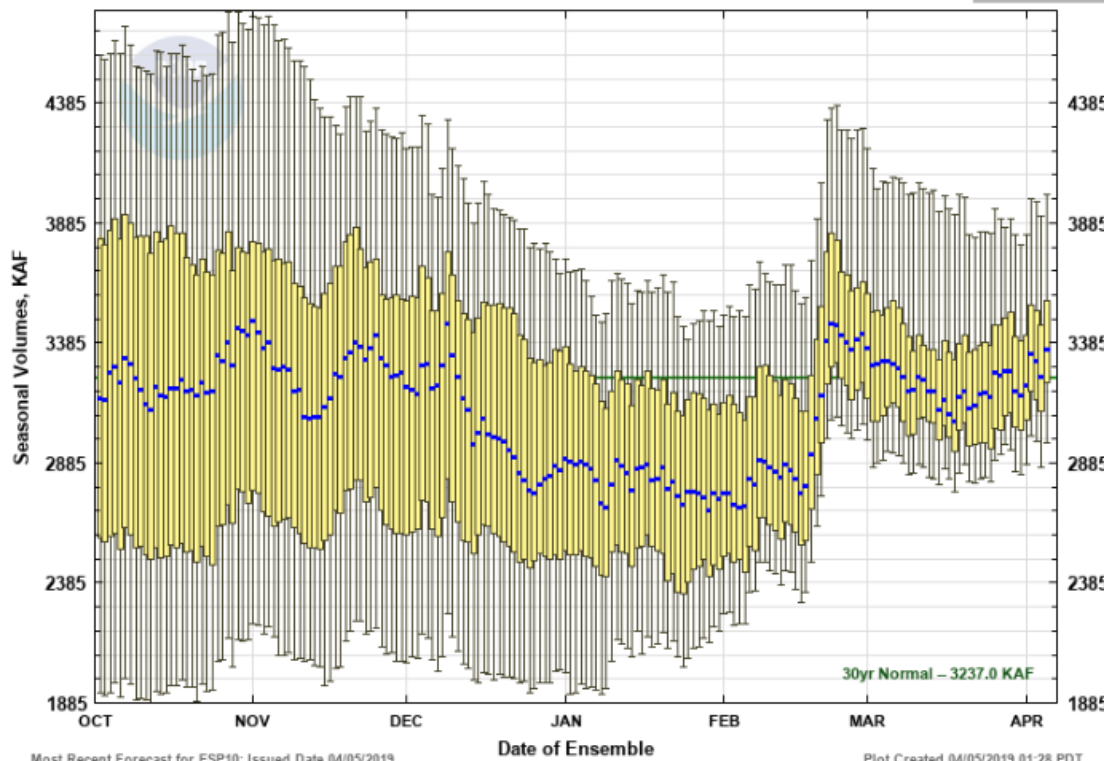
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Water Supply Forecasts

SNAKE - NEAR HEISE

Period APR to JUL - Water Year 2019

30yr Normal
ESP10

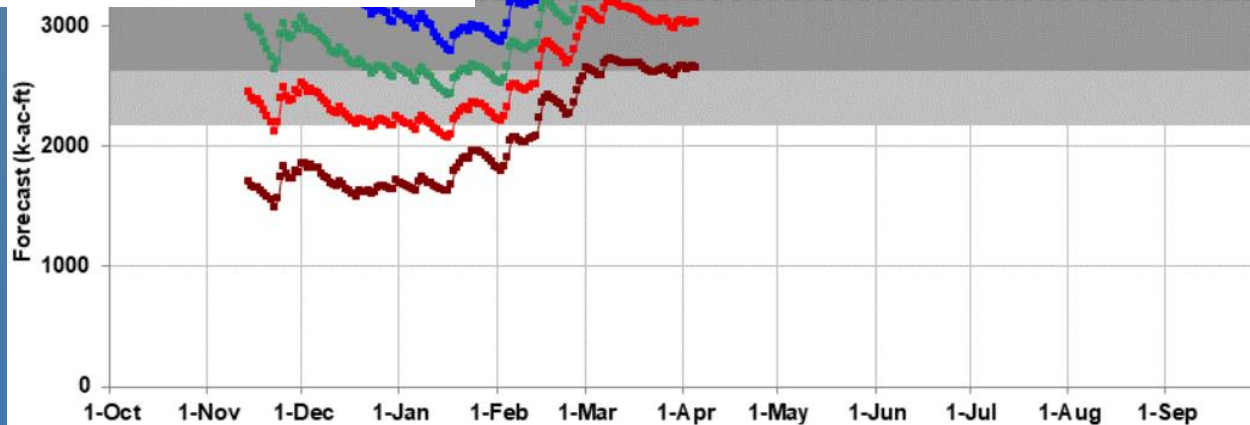
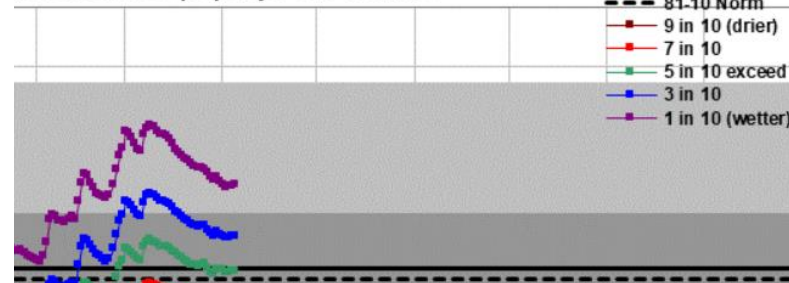


Most Recent Forecast for ESP10: Issued Date 04/05/2019

Plot Created 04/05/2019 01:28 PDT

USBR Forecast: 3200 KAF
RFC Forecast: 3350 KAF
NRCS Forecast: 3300 KAF

ver nr Heise (ID): Apr-Jul Volume

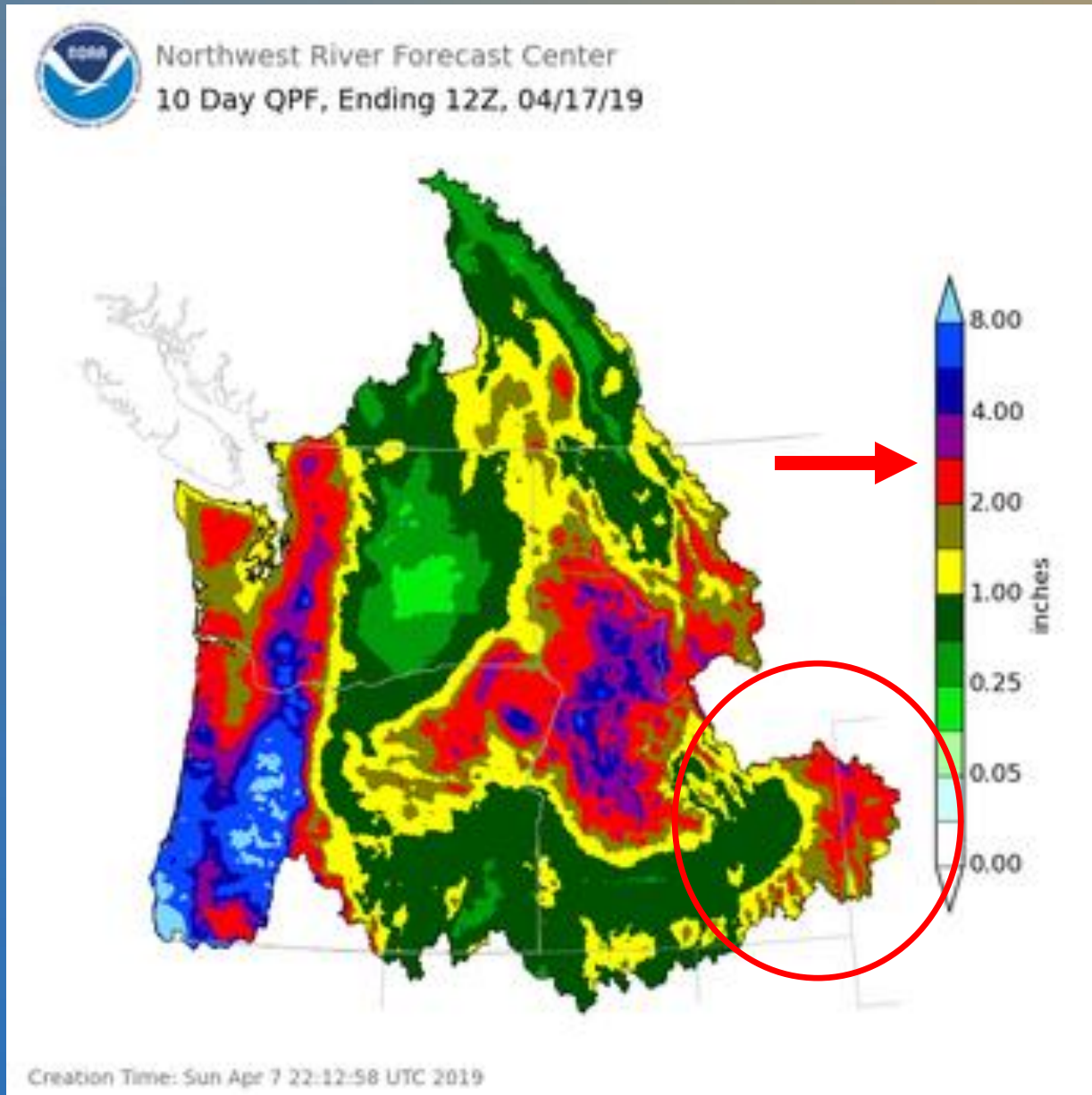


Created 6:58 Apr 5 2019



This is an automated product based solely on SNOTEL data, provisional data are subject to change. This product is a statistically based guidance forecast combining indices of snowpack and precipitation. **Yellow squares** are the official outlooks. **Gray background** is the historical period of record variability. This product does not consider climate information such as El Nino or short range weather forecasts, or a variety of other factors considered in the official forecasts. This product is not meant to replace or supercede the official forecasts produced in coordination with the National Weather Service. Science Contact: Cara.s.McCarthy@por.usda.gov www.wcc.nrcs.usda.gov/ws/daily_forecasts.html

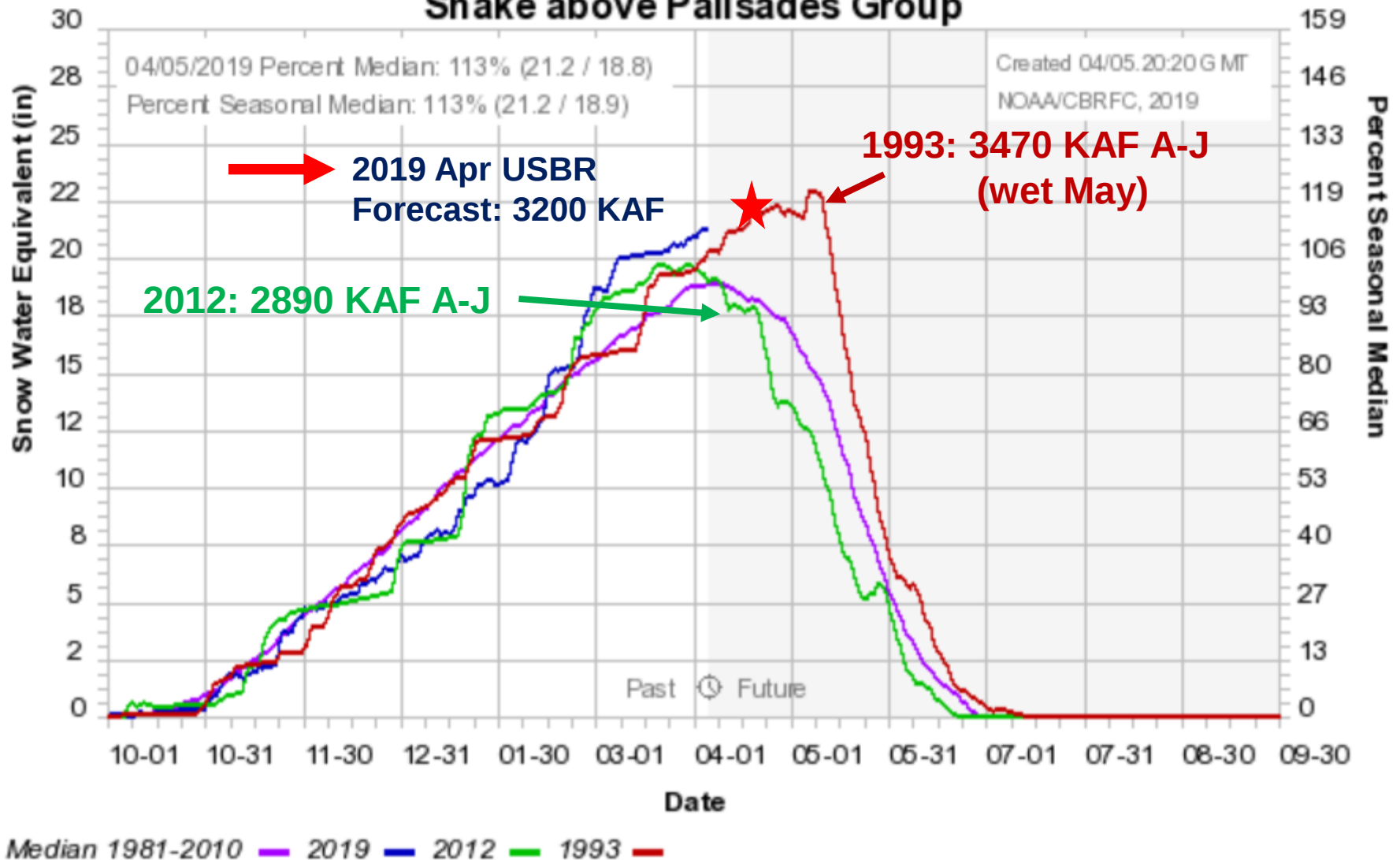
10 Day Forecast



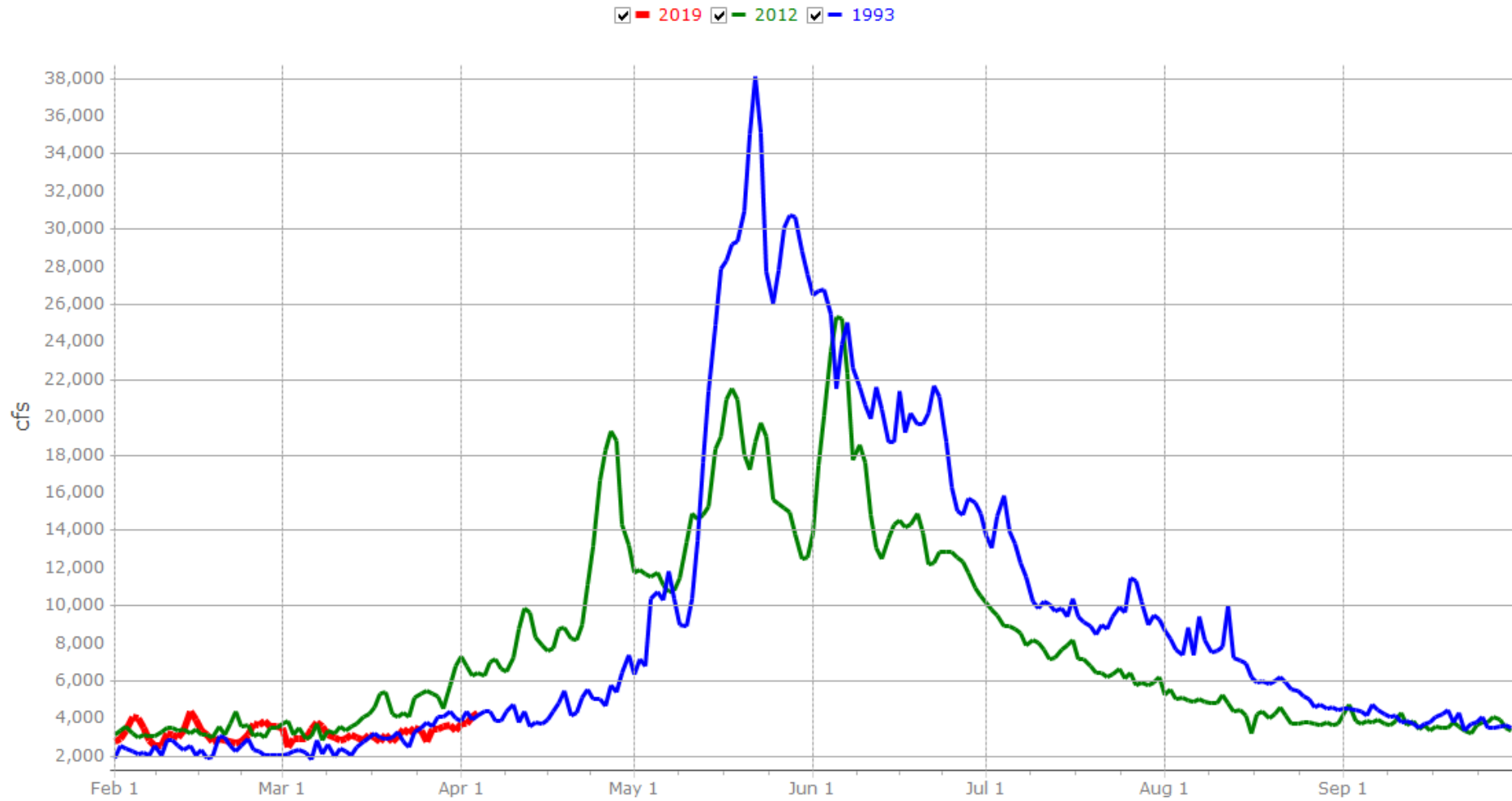
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Palisades Snow Comparison

Colorado Basin River Forecast Center Snake above Palisades Group



Snake River Inflow above Heise, ID



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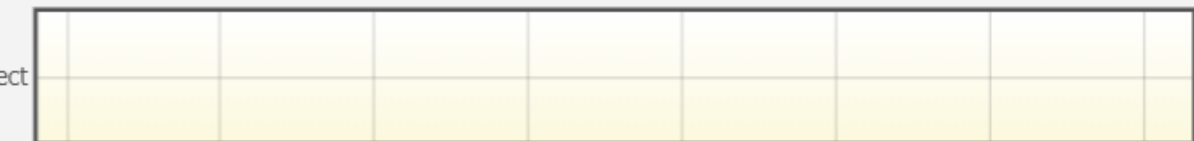
Weather Forecast upstream of Jackson Lake



NWS Forecast for South Entrance WY (Elevation: 7152 ft.) Lat: 44.16 Lon: -110.68



No Watches, Warnings or Advisories in effect



4/7 - 6 PM Sun 4/8 - 2 AM Mon 4/8 - 10 AM Mon 4/8 - 6 PM Mon 4/9 - 2 AM Tue 4/9 - 10 AM Tue 4/9 - 6 PM Tue 4/10 - 2 AM Wed

[?](#) Disclaimer



Hourly Graph



Text Forecast

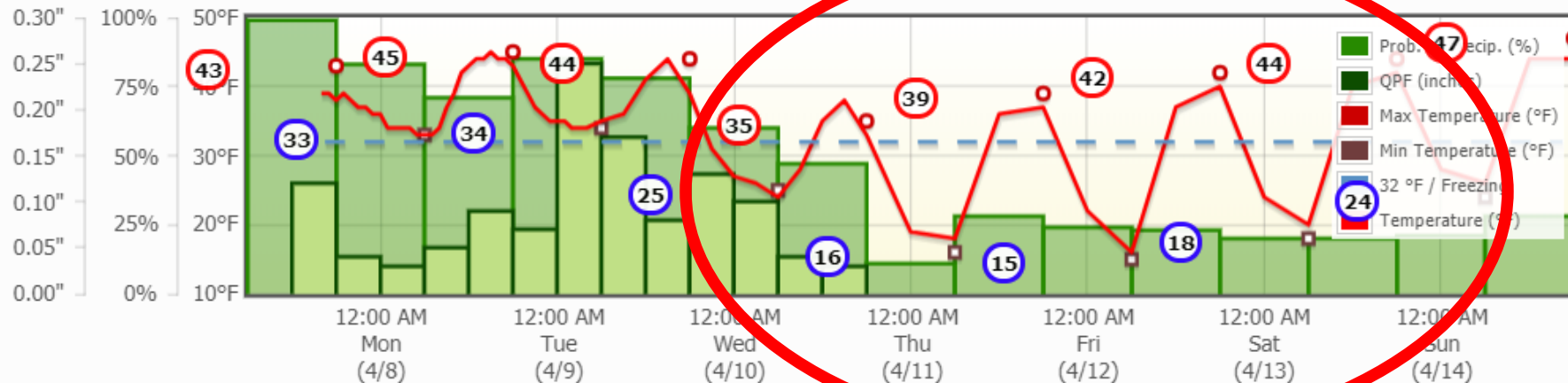


Hourly Table



Forecast Discussion

Cool Down late this week

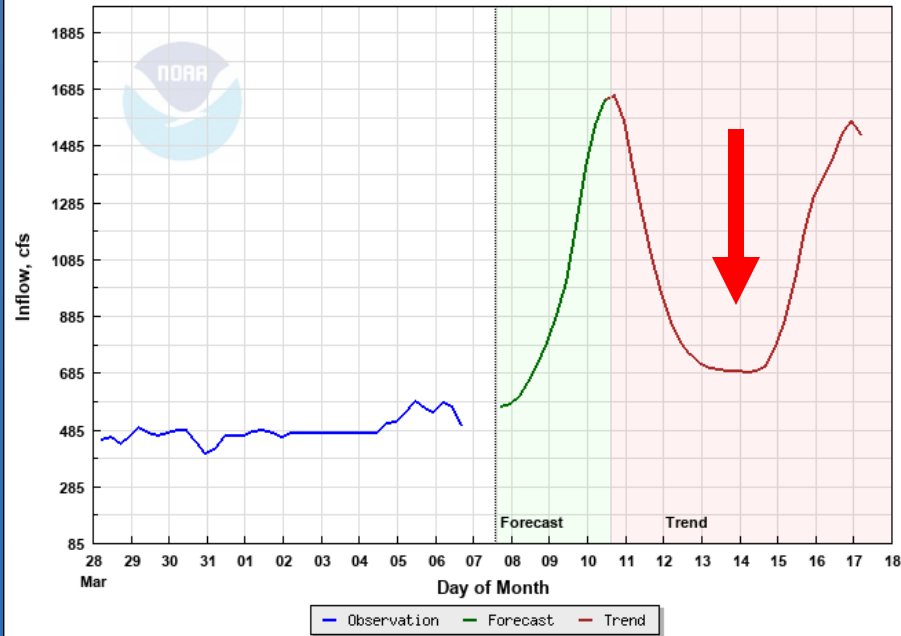


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Current Jackson/Palisades Inflow Forecast

SNAKE - JACKSON LAKE AT DAM (JLKW4)

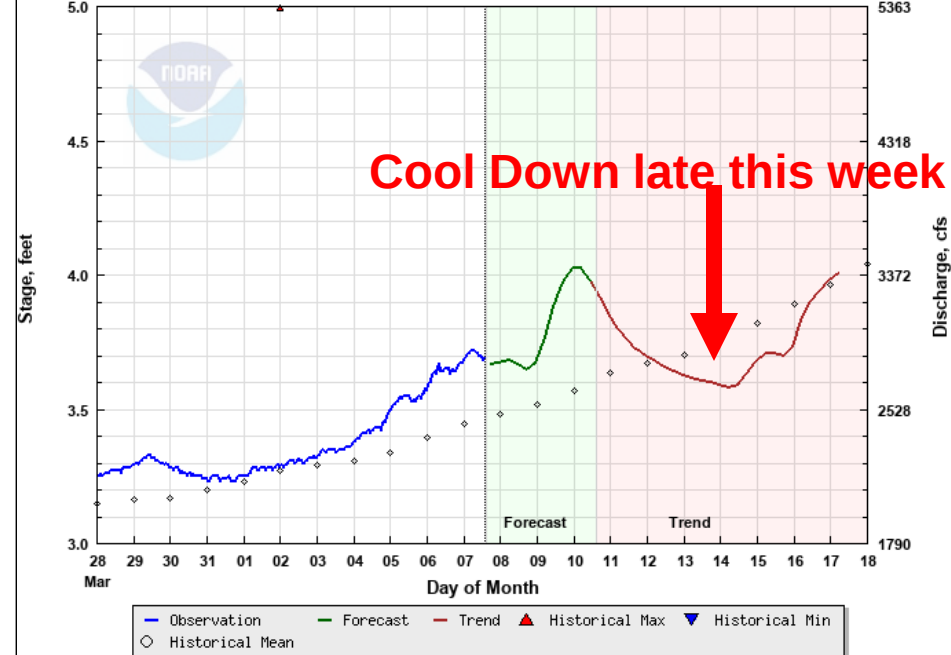
Latest Observation: 502 cfs 04/06/2019 17:00 PDT



Forecast Created: 04/07/2019 13:08 PDT
Plot Created: 04/07/2019 15:34 PDT

SNAKE - NEAR ALPINE (ALPW4)

Latest Observation: 3.69 ft 04/07/2019 14:30 PDT



Forecast Created: 04/07/2019 13:08 PDT
Plot Created: 04/07/2019 15:32 PDT

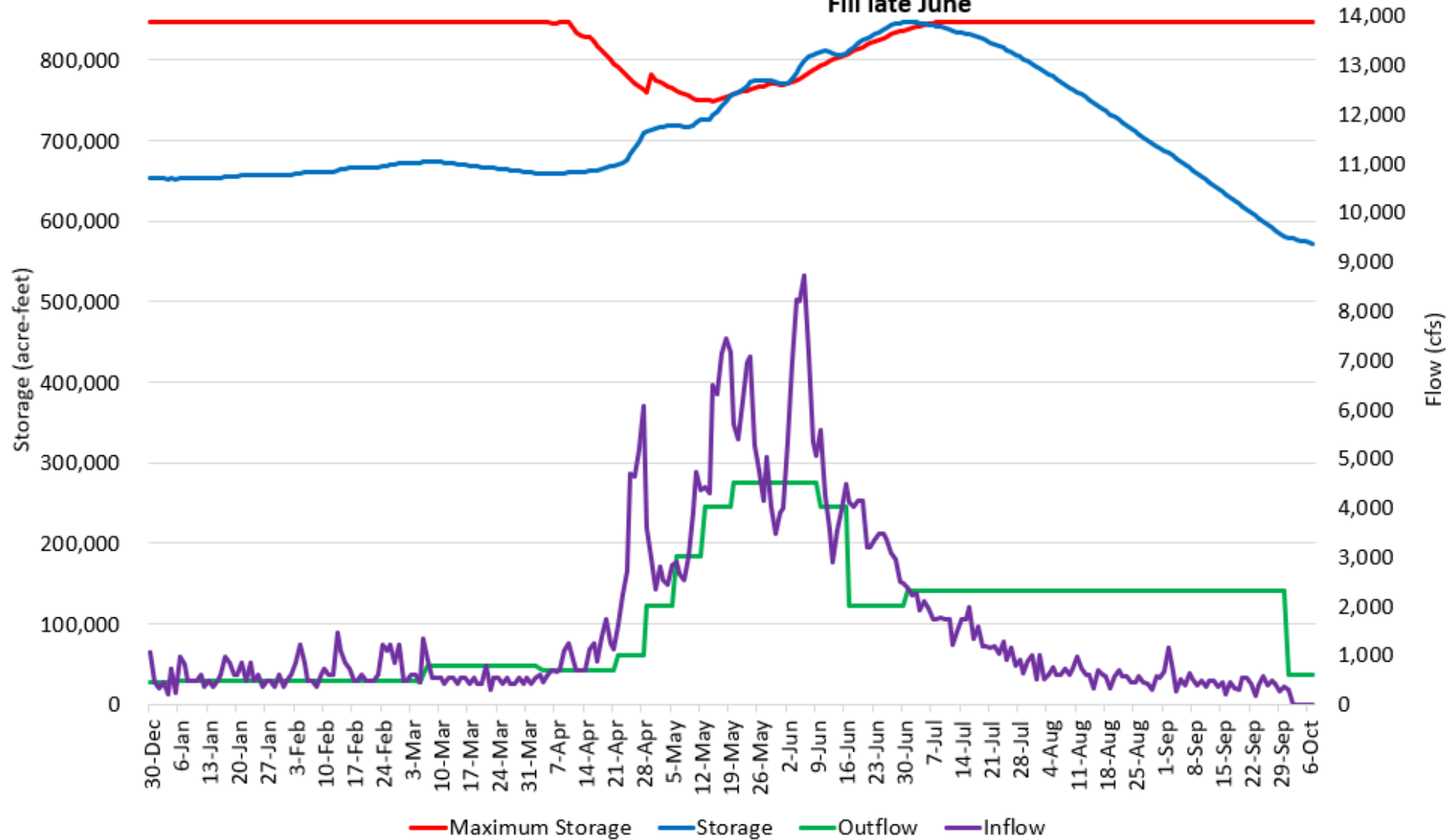
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Jackson Lake

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Jackson Lake (2012 Scenario)

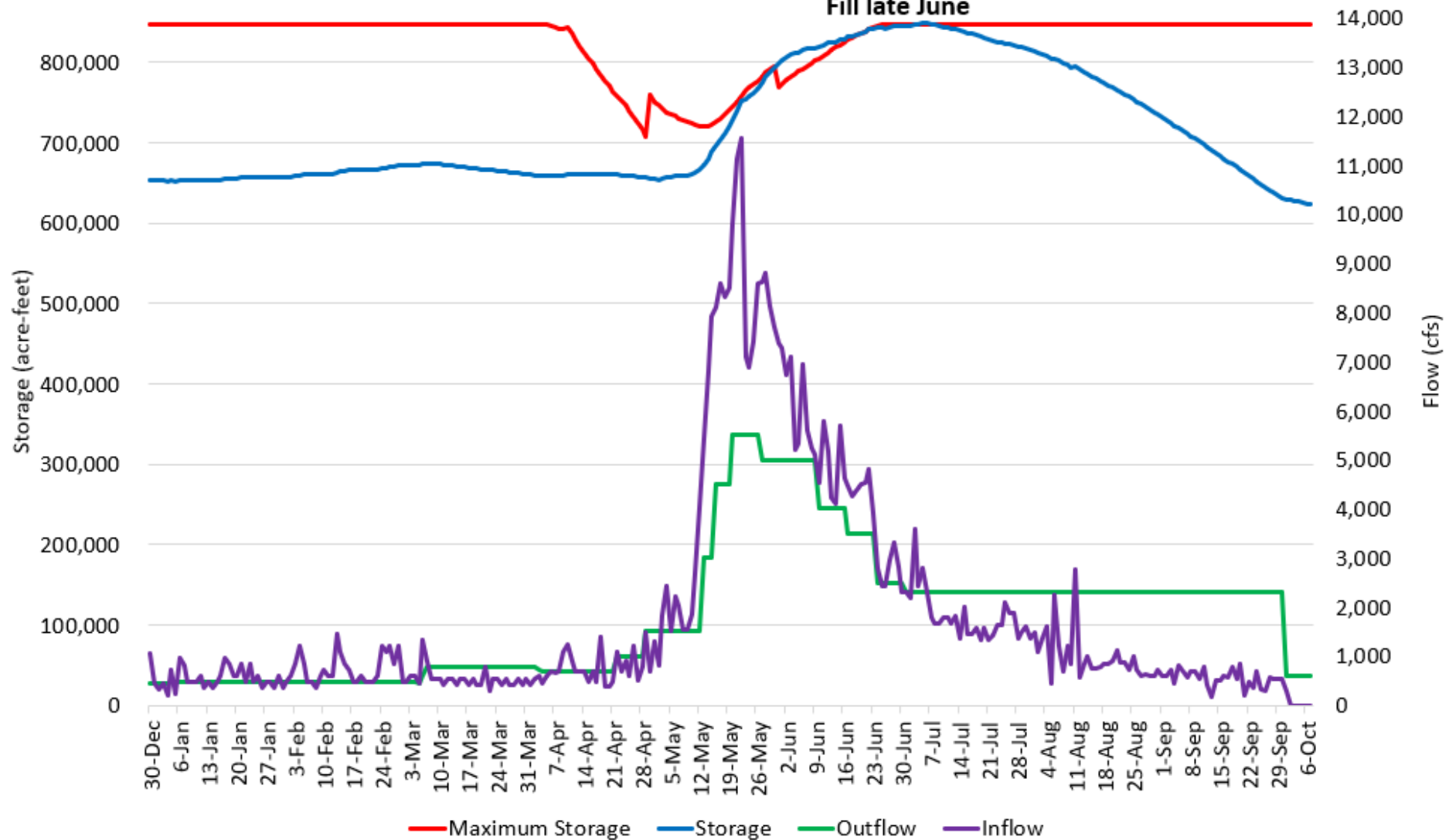
Fill late June



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Jackson Lake (1993 Scenario)

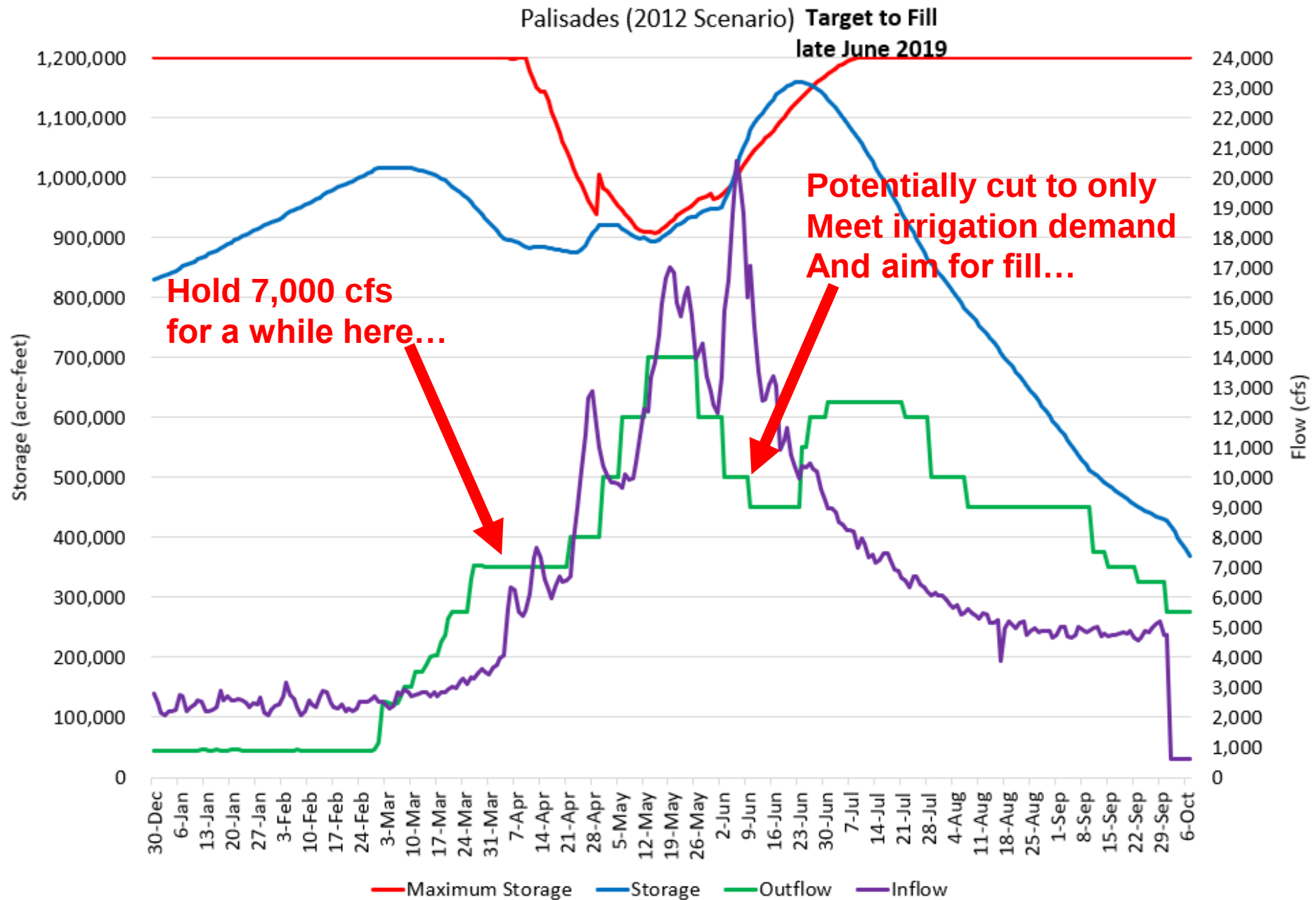
Fill late June



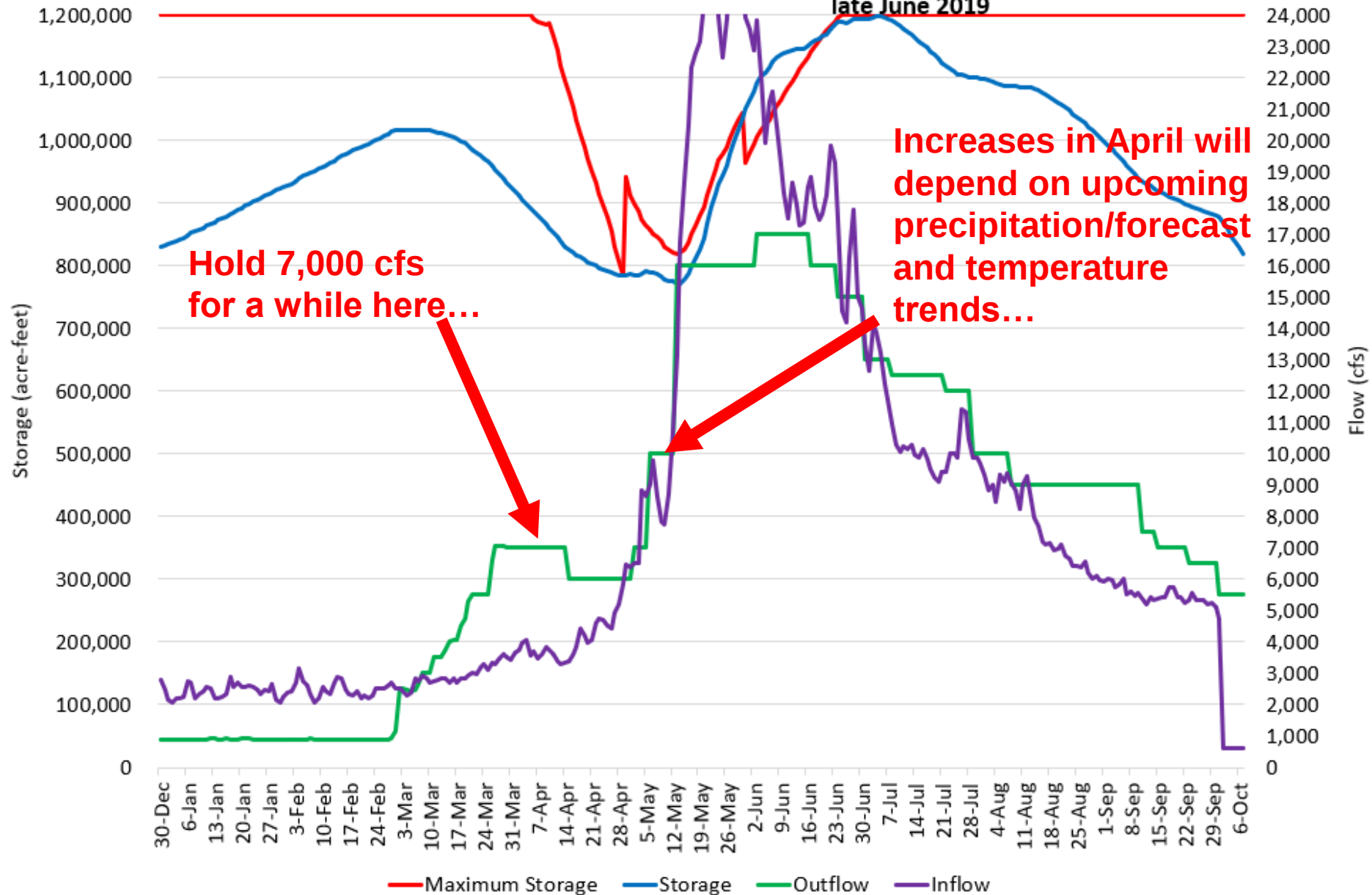
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Palisades

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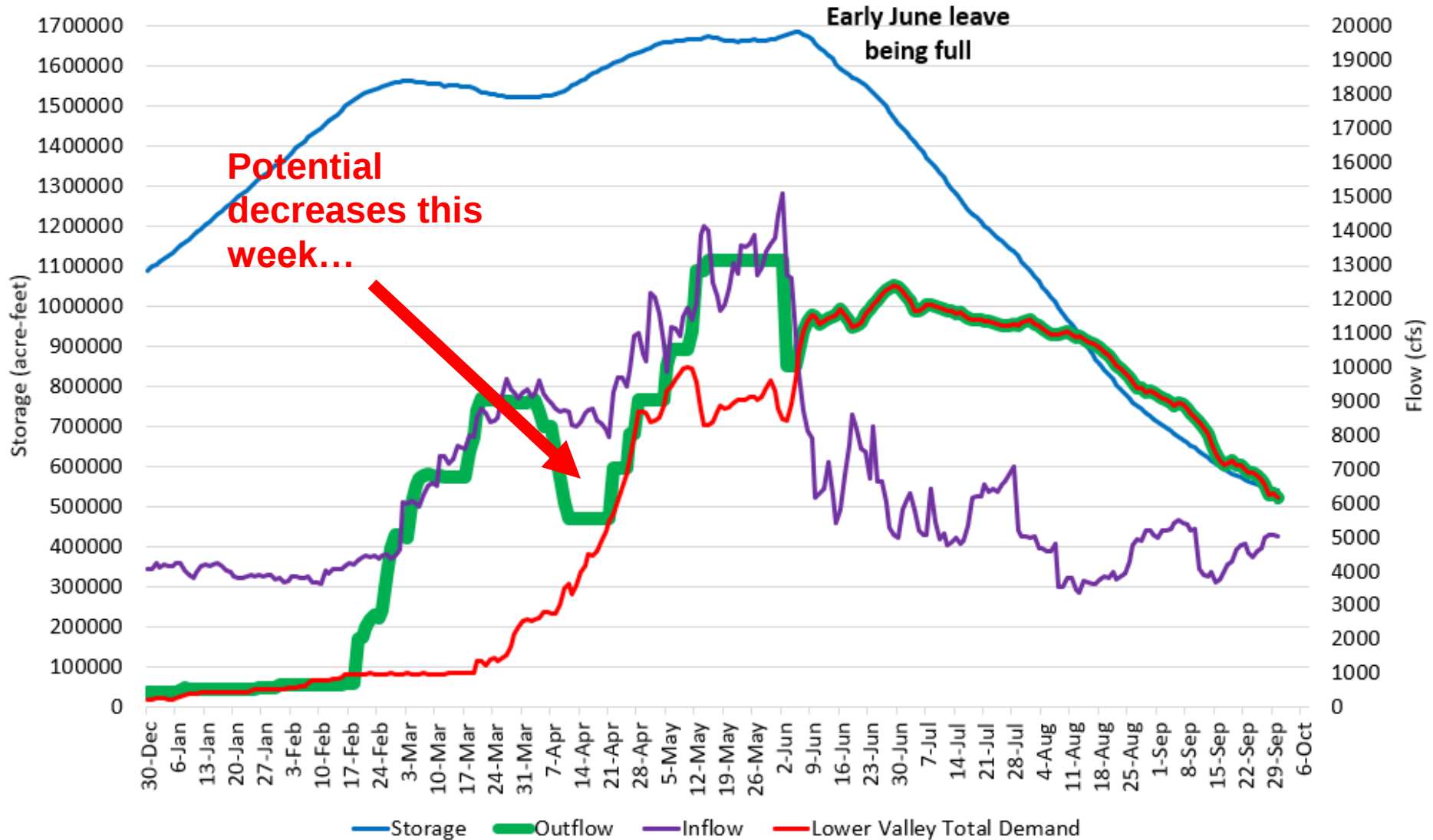
Palisades (1993 Scenario) Target to Fill
late June 2019



American Falls

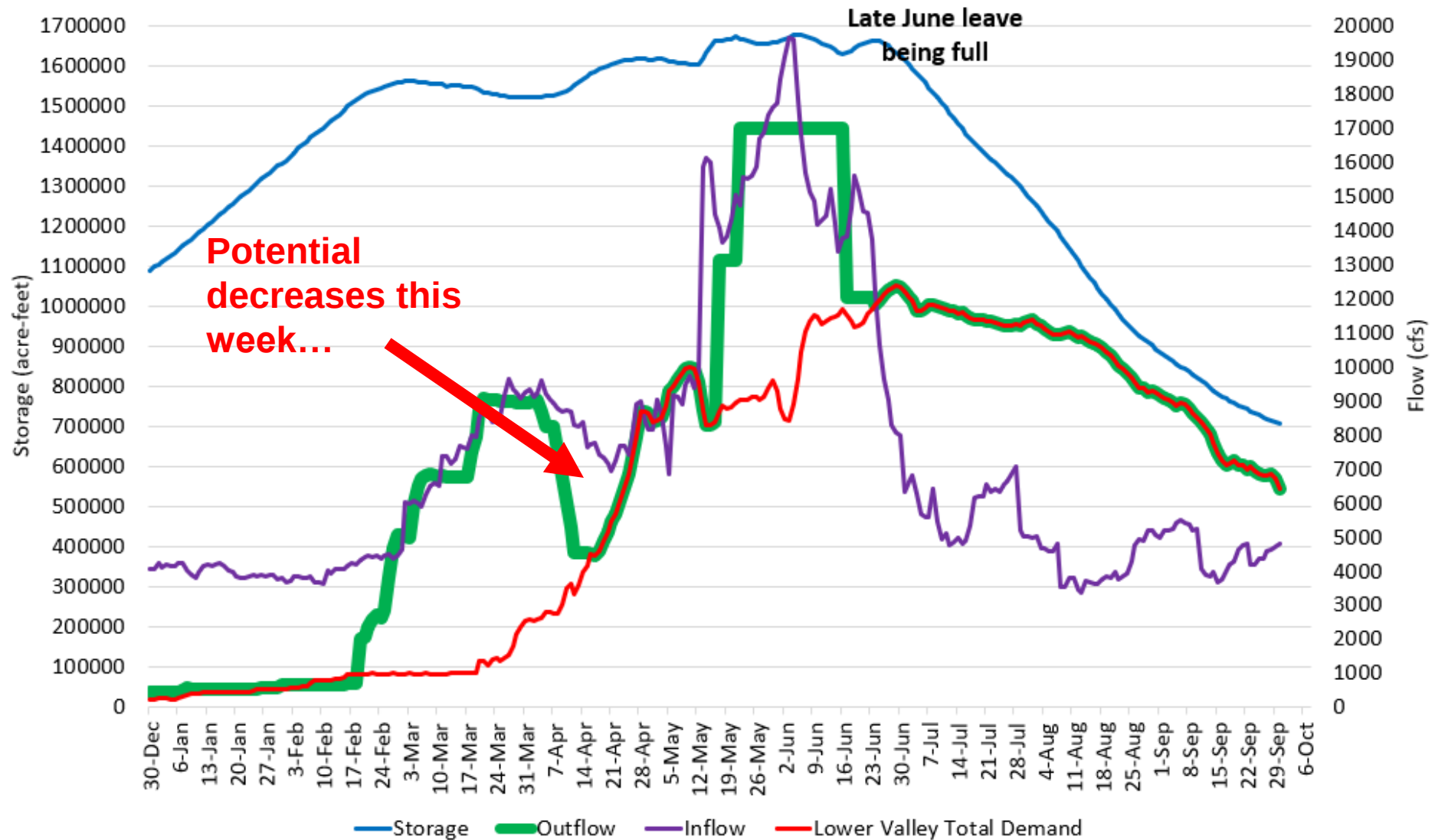
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American Falls (2012 Scenario)



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American Falls (1993 Scenario)

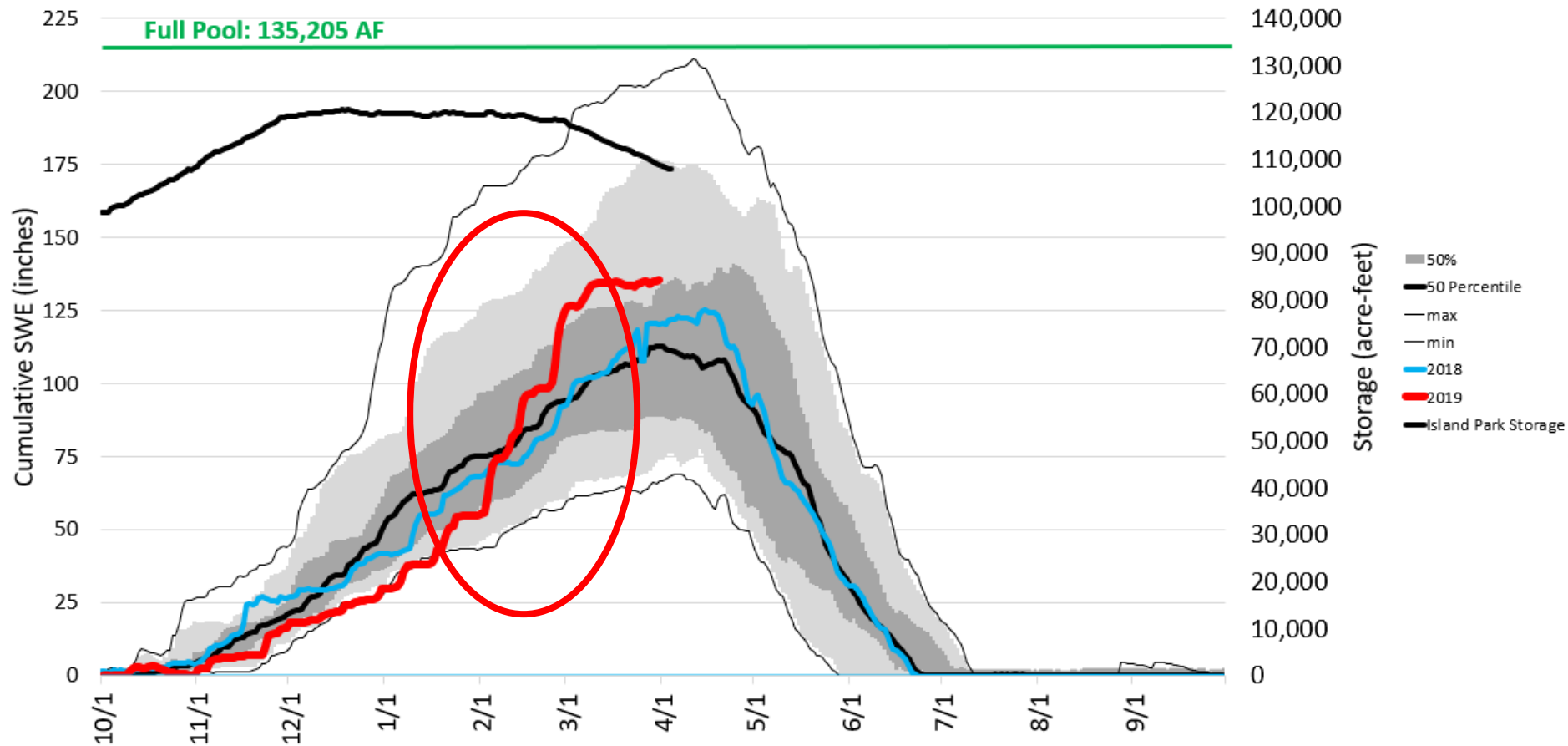


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Island Park Reservoir

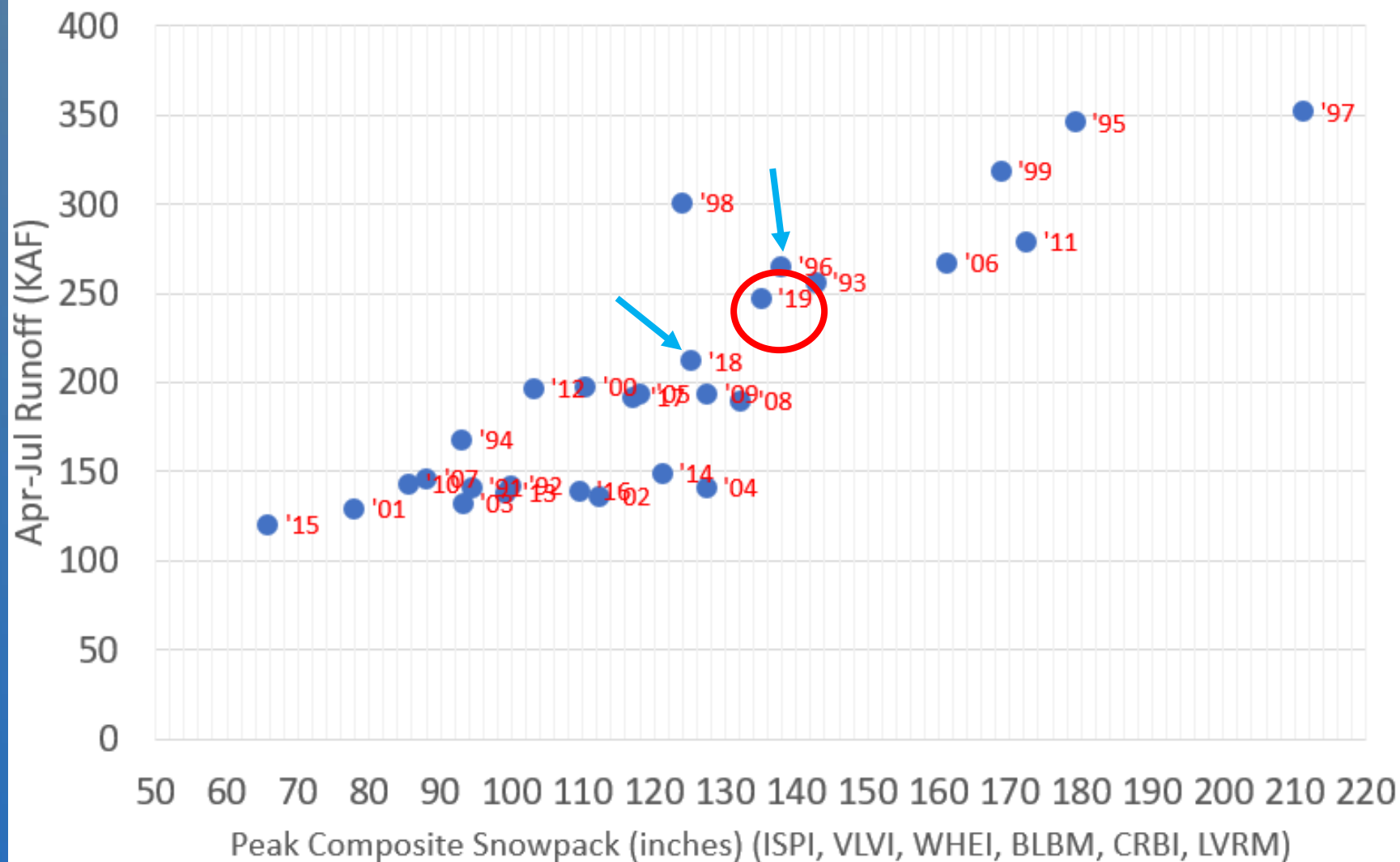
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Island Park Snowpack - Storage Trend



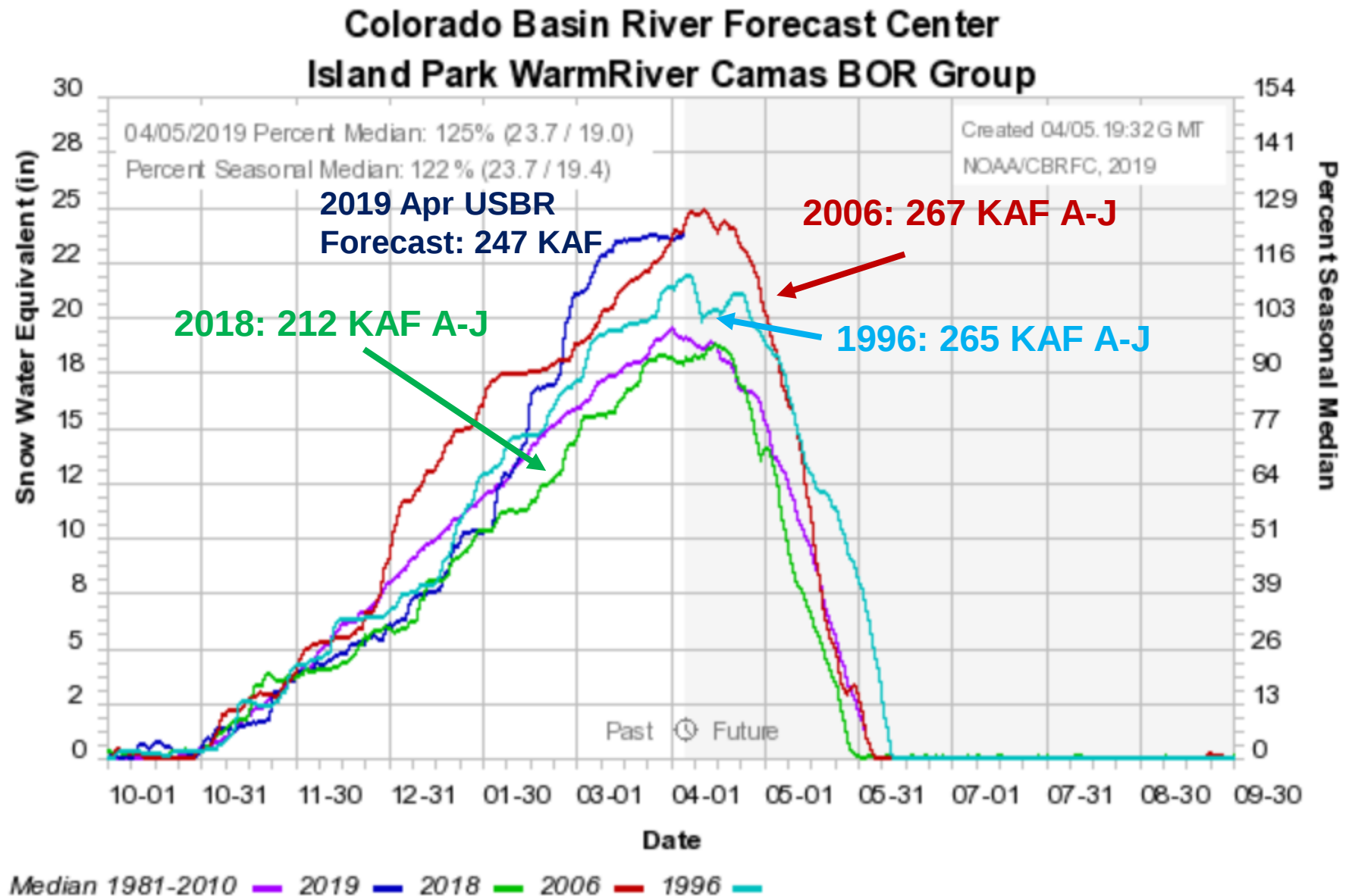
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Peak Snow - Runoff Comparison - Island Park Dam



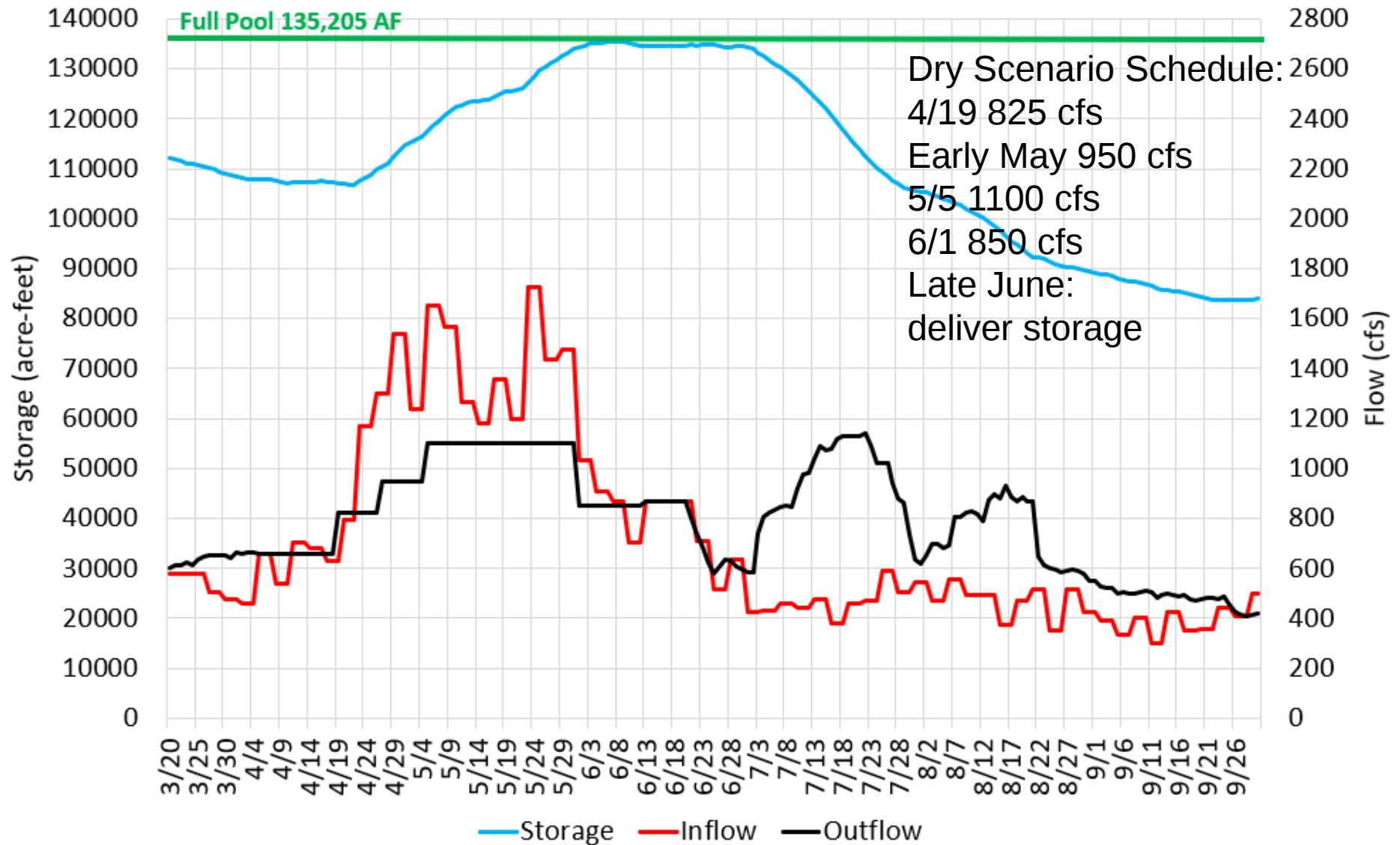
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Island Park Snow Comparison

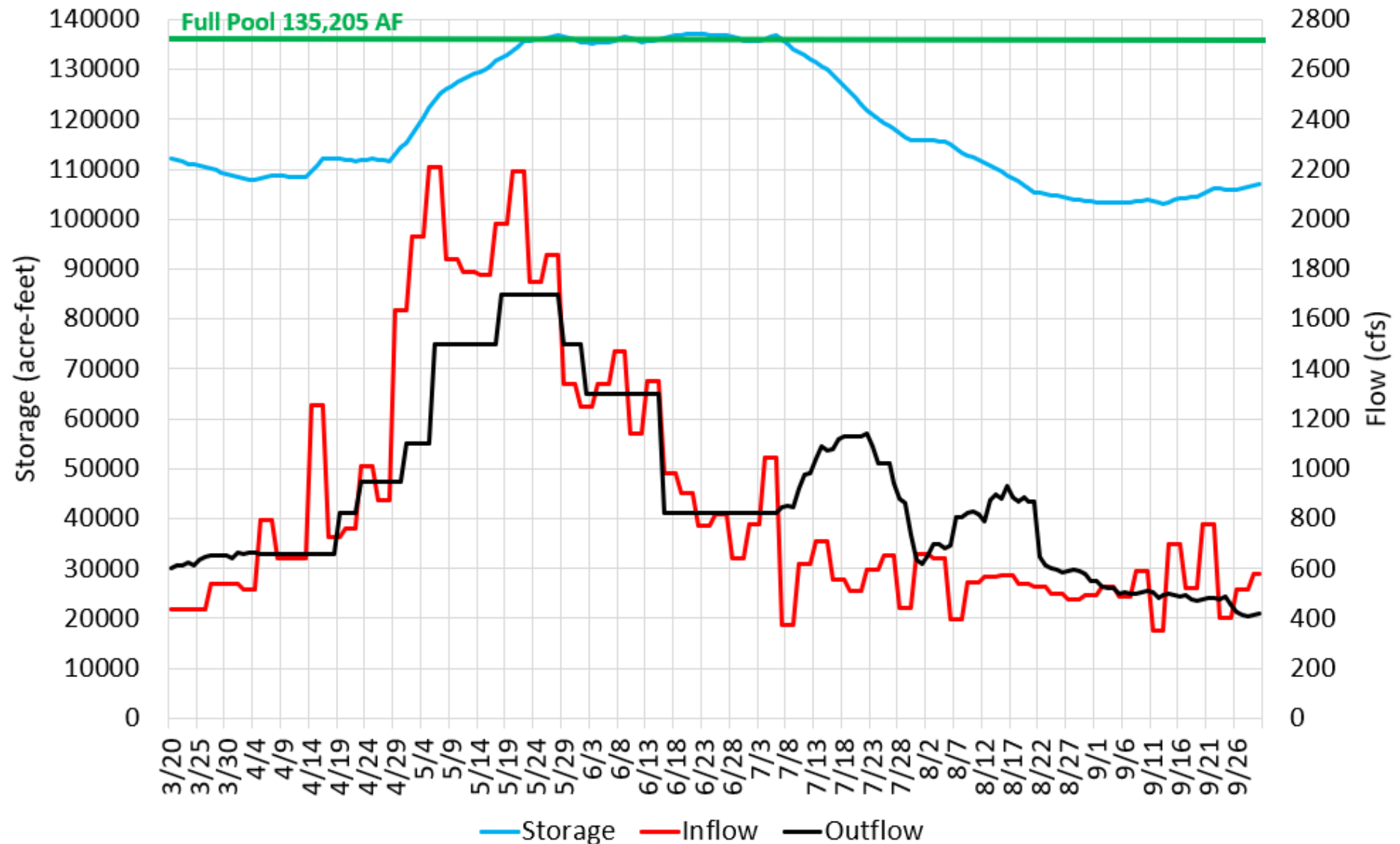


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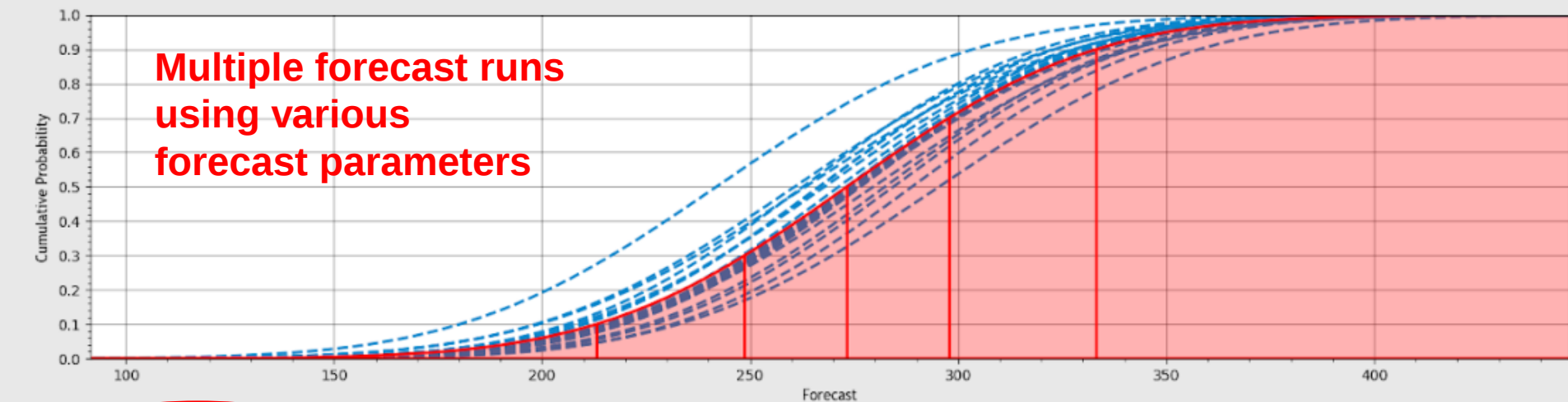
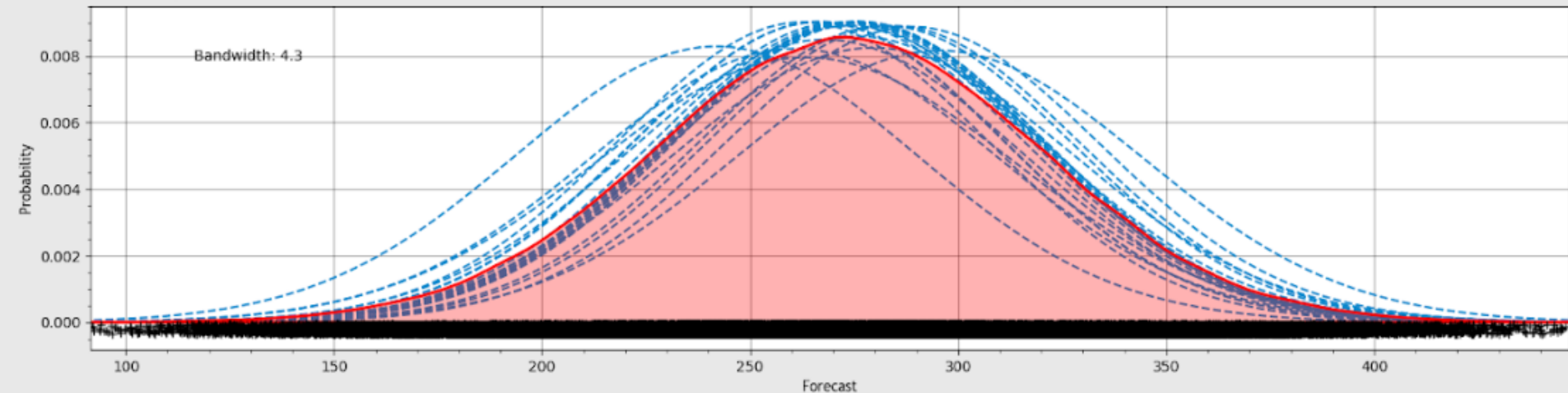
2019 Island Park Dam Projection (2018 inflows)



2019 Island Park Dam Projection (2006 inflows)



April 1, 2019 - Island Park Reservoir April-July Runoff Volume Forecast



0%: 213.0

30%: 248.7

50%: 273.3

90%: 297.8

95%: 333.2

10%: 213 KAF

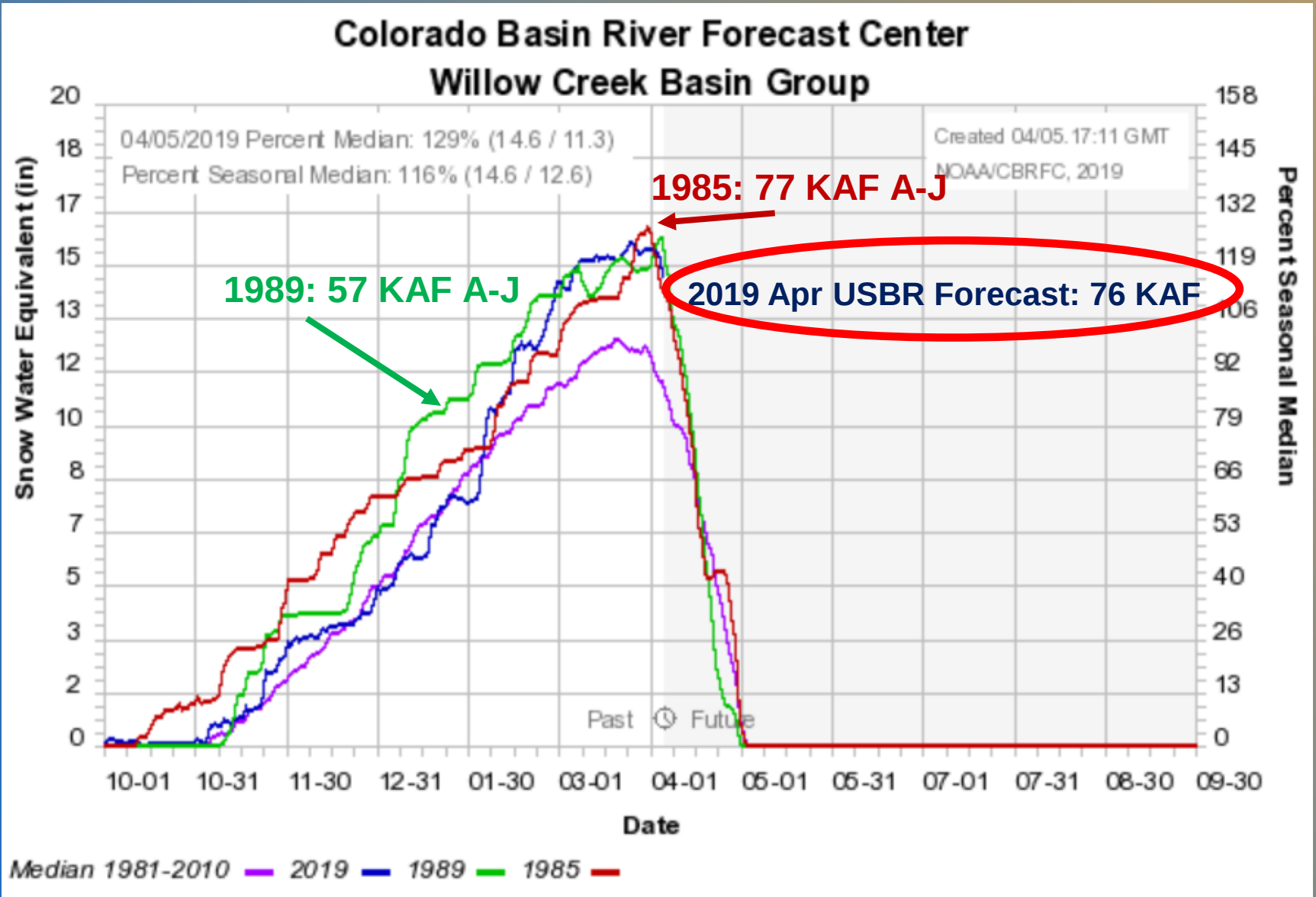
50%: 273 KAF

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Ririe Reservoir

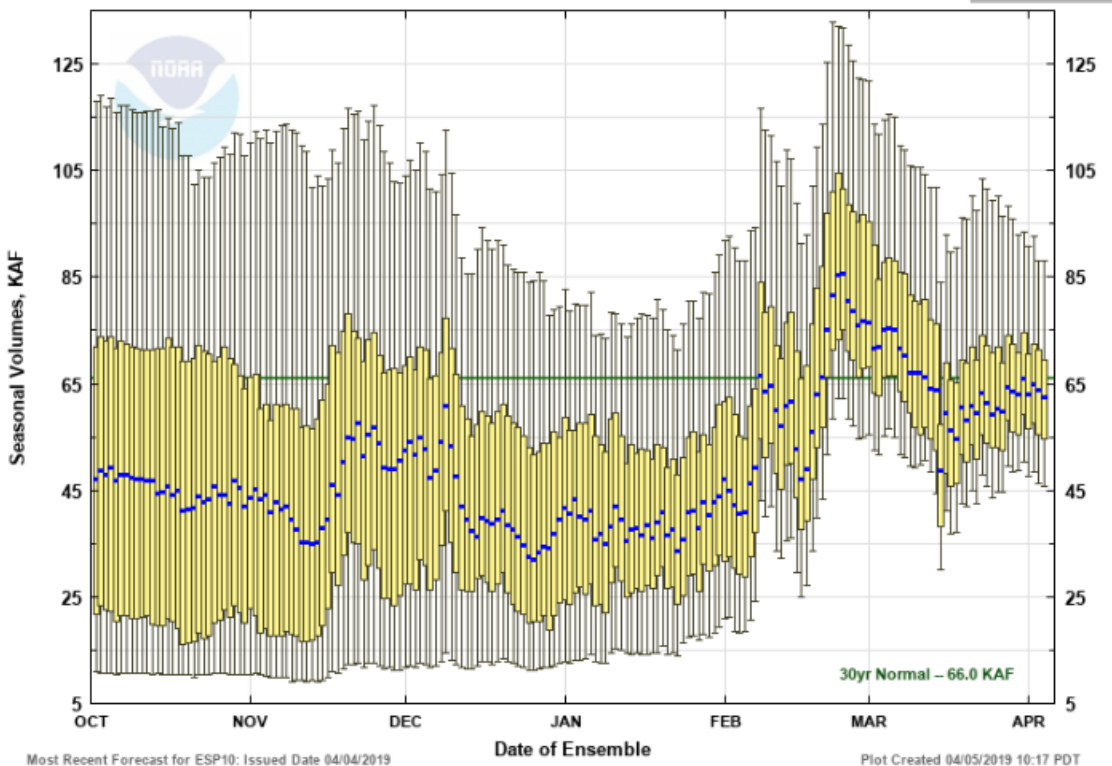
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Ririe Snow Comparison



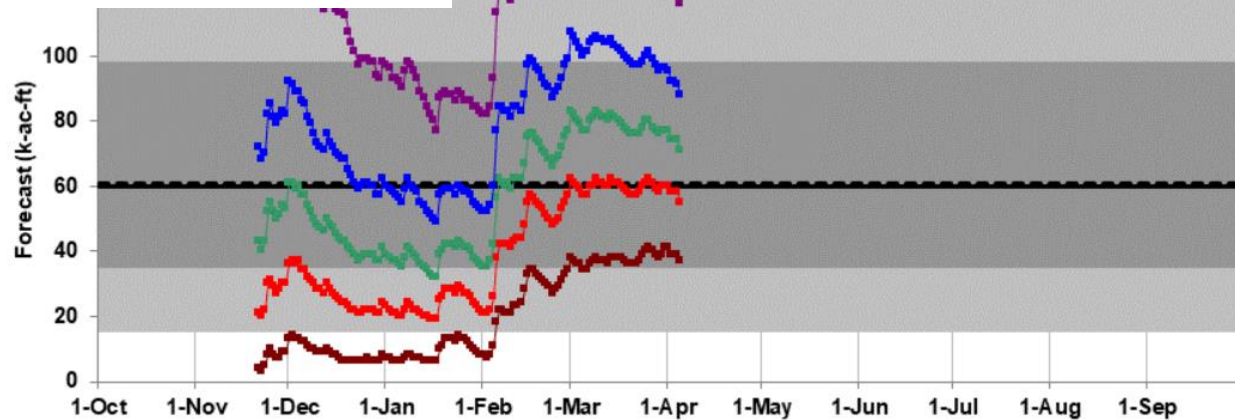
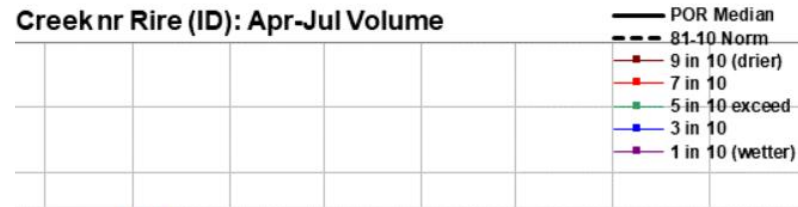
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Water Supply Forecasts WILLOW CREEK - NEAR RIRIE Period APR to JUL - Water Year 2019



USBR Forecast: 76 KAF
RFC Forecast: 62 KAF
NRCS Forecast: 71 KAF

Creek nr Rire (ID): Apr-Jul Volume

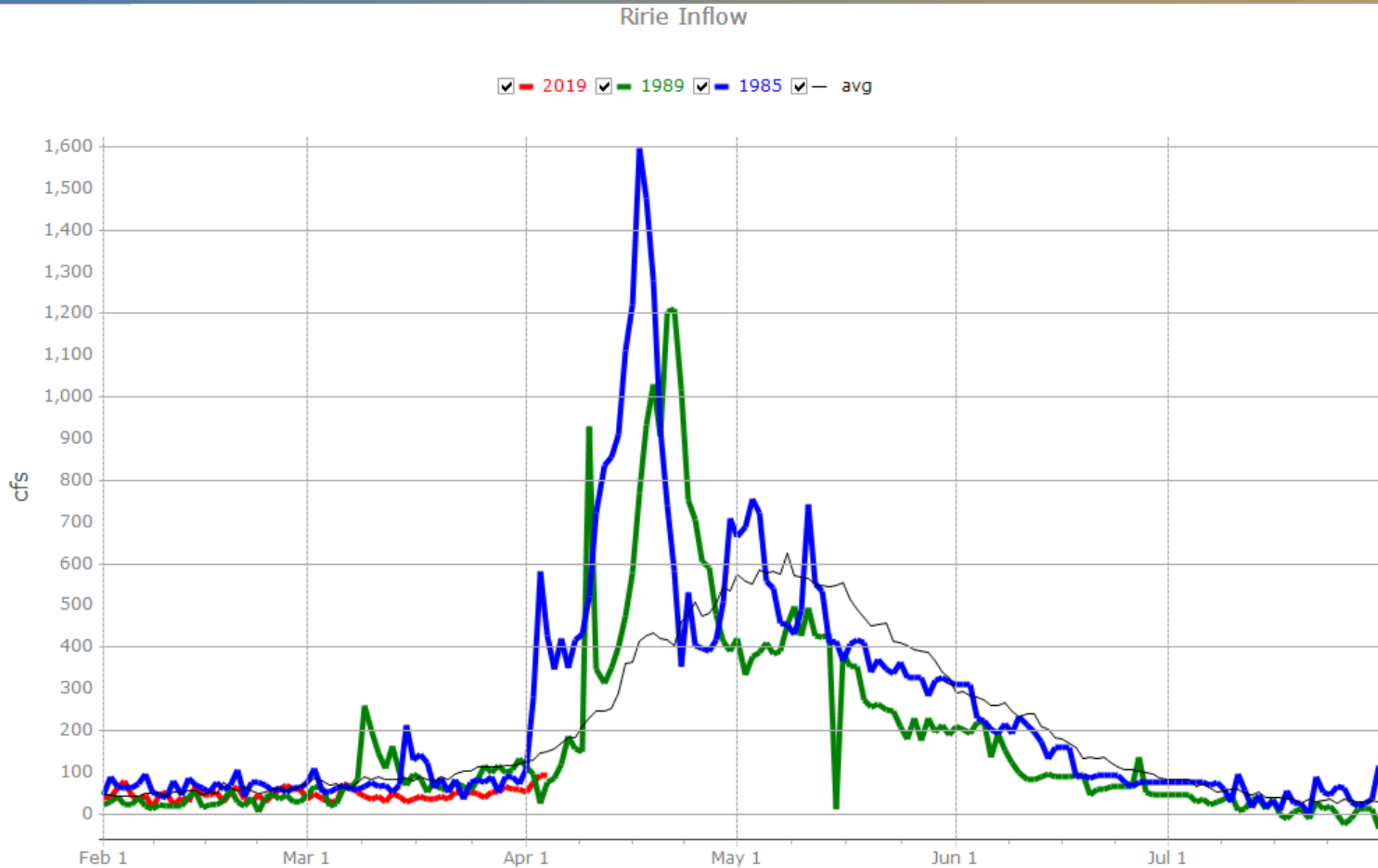


Created 6:59 Apr 5 2019

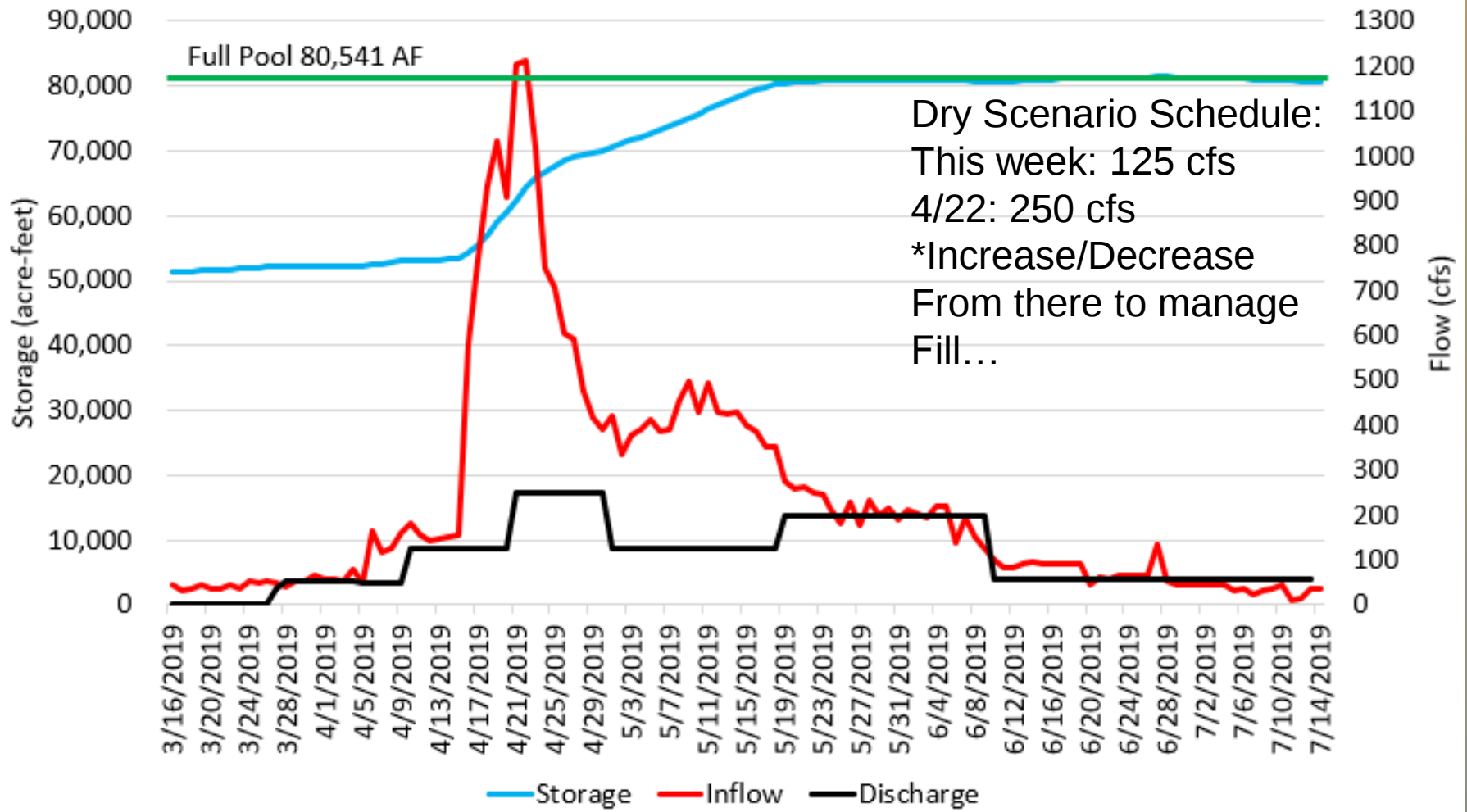


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Ririe Runoff Comparison

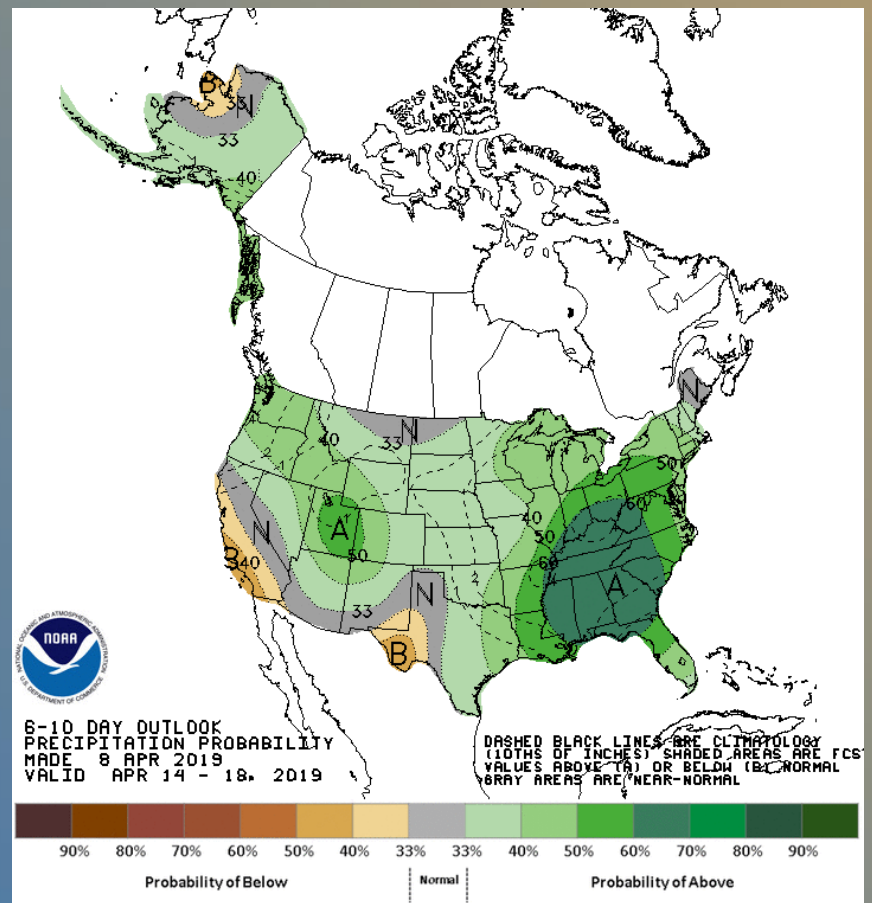
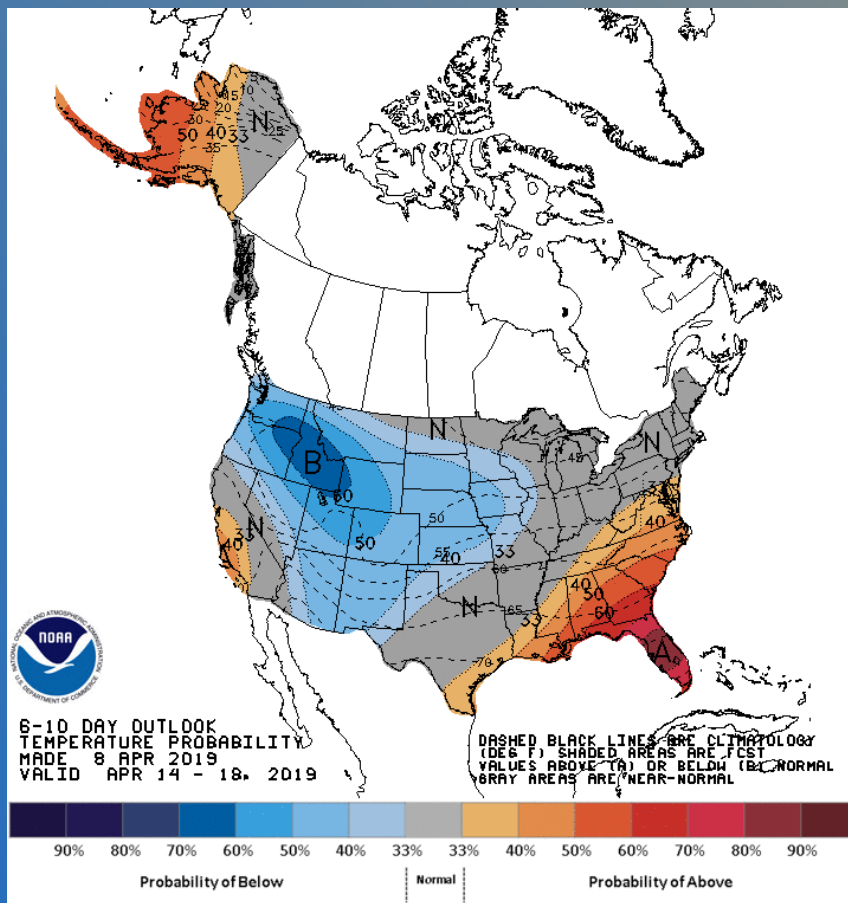


1989 (drier) Ririe Regulation



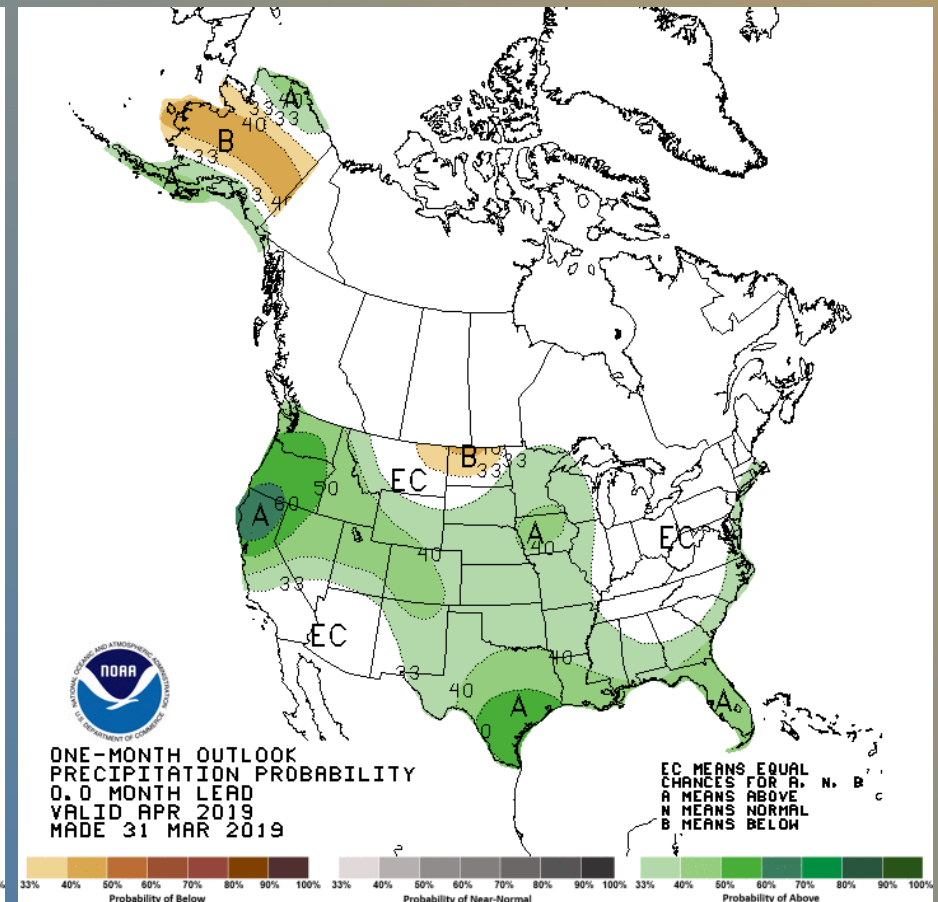
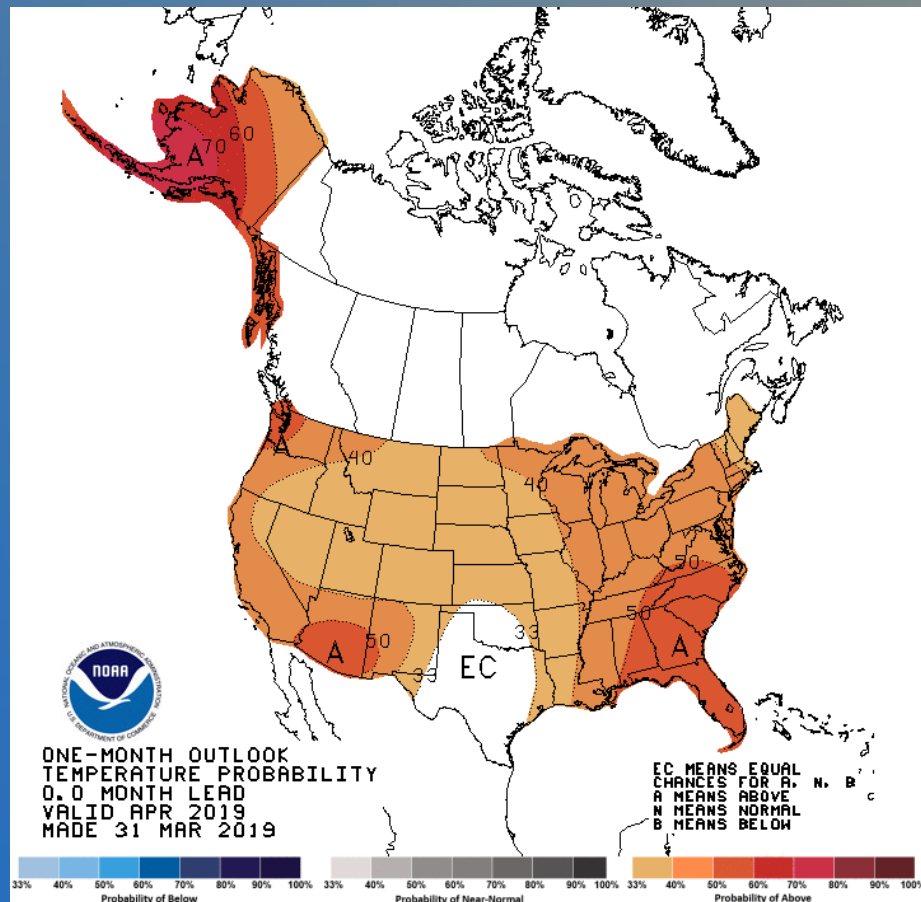
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6-10 Day Forecast



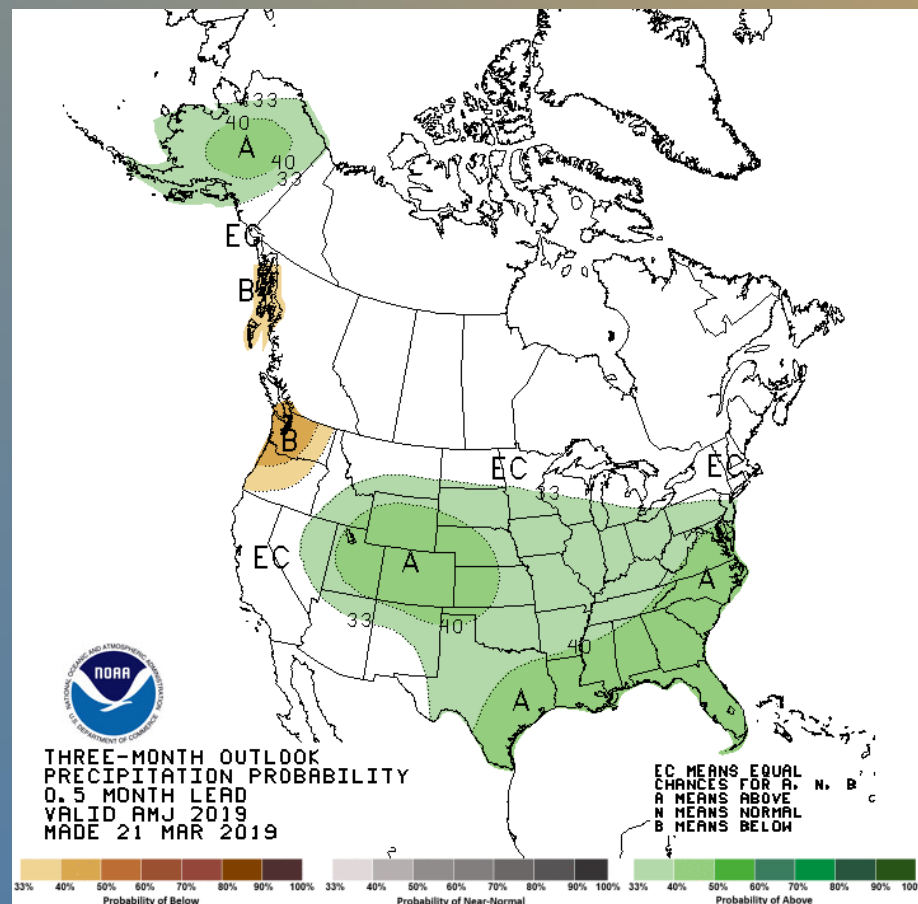
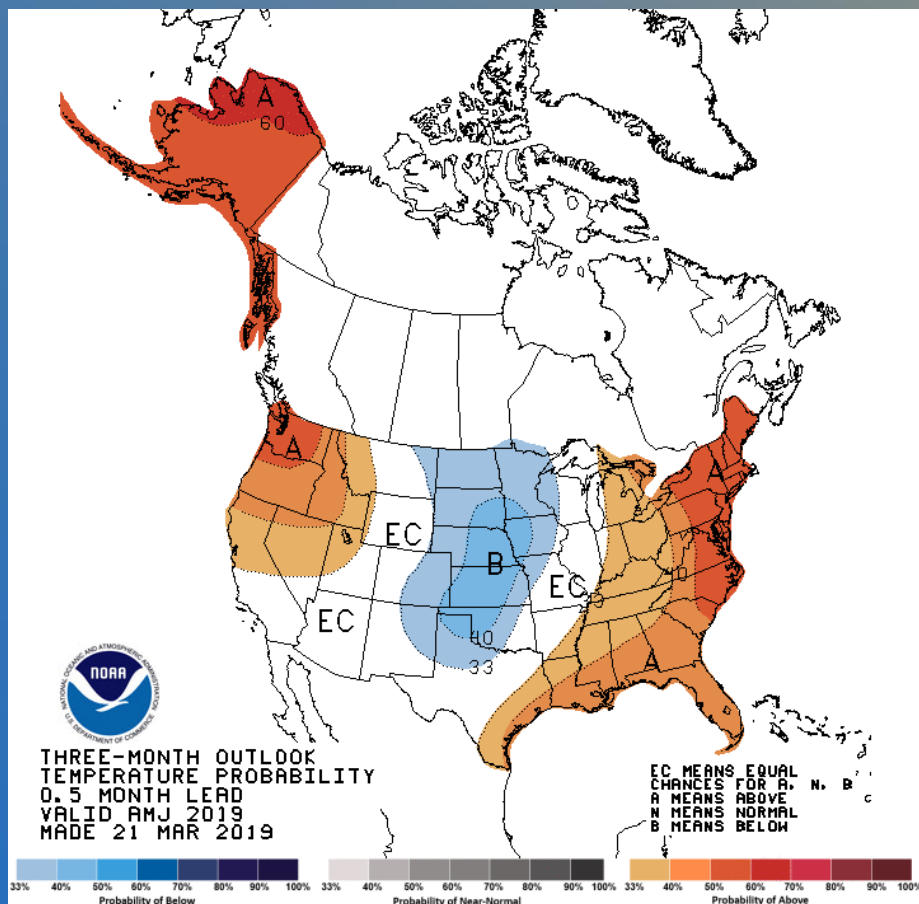
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April NOAA Climate Outlook



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April/May/June NOAA Climate Outlook



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2019 Windshield Tour

- **Jackson Wyoming Public Information Session**
Thursday May 23rd 5:30 pm, 49'er Inn Conference Room, Jackson, WY
- **Windshield Snow Survey Tour**
Friday May 24th 7:30 am,
Signal Mountain Lodge



Reclamation is available to provide transportation for participants. If you need transportation, please contact us as soon as possible so we can make arrangements as some years space can be limited. **We will depart from Reclamation's Heyburn office on May 23rd at 9:00AM.** and arrive at the Water District 01 office in Idaho Falls around 11:00AM. Lunch will be at the Idaho Falls Chuck-A-Rama, 999 South 25th East. Following lunch, we will proceed to Jackson.

A block of rooms has been reserved at the 49'er Inn for the night of Thursday, May 23rd. The room rate is \$99.00, plus tax. **Please contact the 49'er Inn no later than Thursday, May 16th to ensure your room reservation.** The 49'er Inn can be reached at (307) 733-7550; please

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Operational Summary*

- **Jackson Lake** – make increases late April to manage fill.
- **Palisades** – make increases late April to manage fill.
- **Ririe** – make increases today to 125 cfs.
- **Island Park** – make increase within next 10-14 days (~825 cfs)
- **Grassy Lake** – fill without a managed release.
- **American Falls** – decrease flows this week to manage fill.
- **Minidoka** – decrease flows this week to manage fill.

***Subject to Change based on future conditions**

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