

RECLAMATION

Managing Water in the West

Henry's Fork Watershed Council Meeting

Upper Snake Reservoir Operations Update

March 13, 2018

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Upper Snake Field Office, BOR



U.S. Department of the Interior
Bureau of Reclamation

2018 March 1 Runoff Forecasts (Mar – July)

as of 3/1/18

Forecast Volume:

- **Heise = 110% Average*** (2/1: 109%) **(3.8 MAF)** (2/1: 3.93 MAF)
- **Jackson = 116% Average** **(924 KAF)**
- **Ririe = 54% Average*#** (2/1: 77%) **(36.5 KAF)** (2/1: 55 KAF)
- **Little Wood = 60% Average*** (2/1: 71%) **(52 KAF)** (2/1: 64 KAF)
- **Island Park = 101% Average** (2/1: 101%) **(247.3 KAF)** (2/1: 274 KAF)

* Coordinated Forecast with USACE

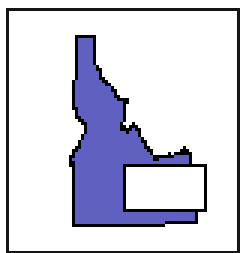
Mar-Jun Forecast Period

% Average based on 1981-2010 period

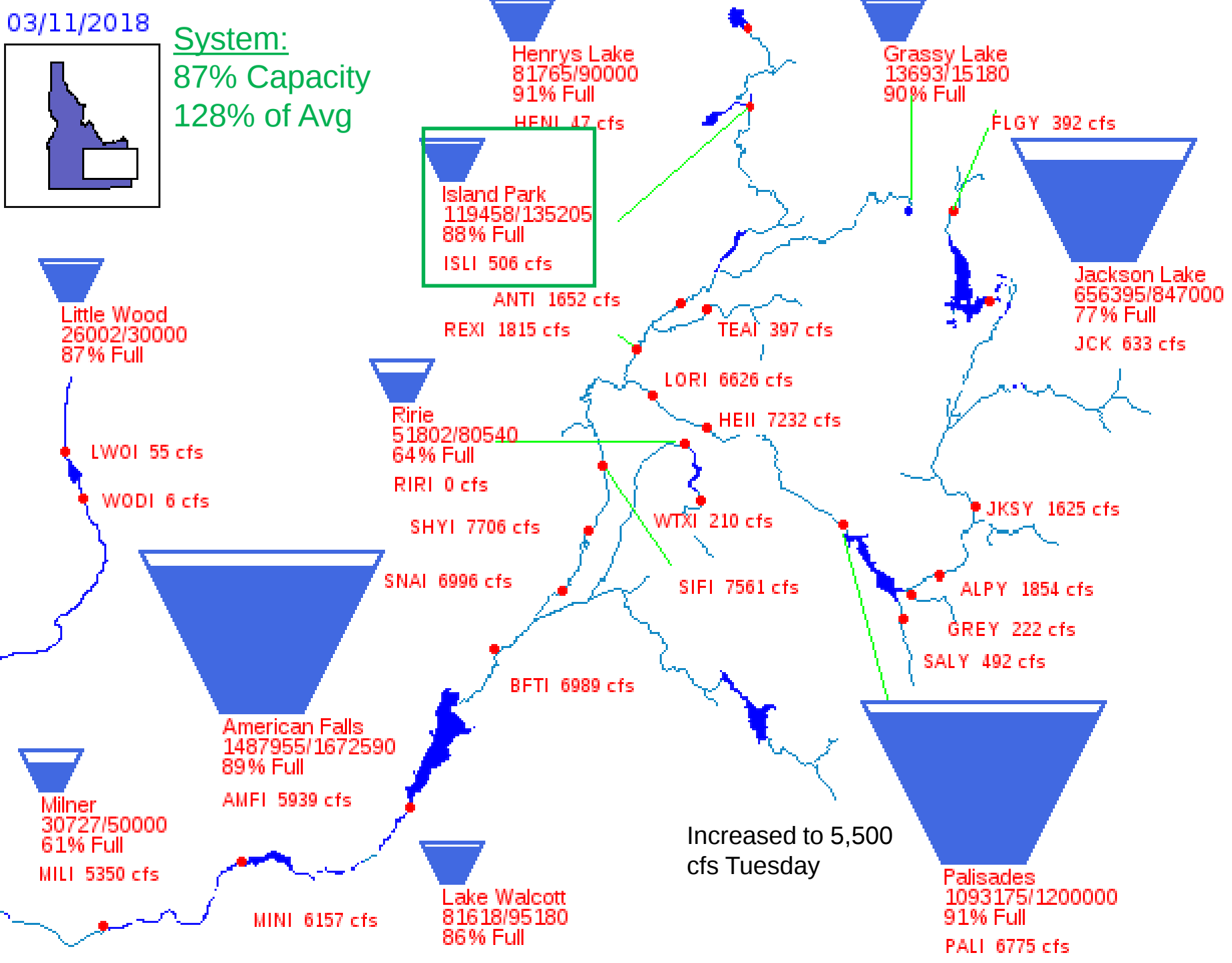
Assumes normal subsequent conditions

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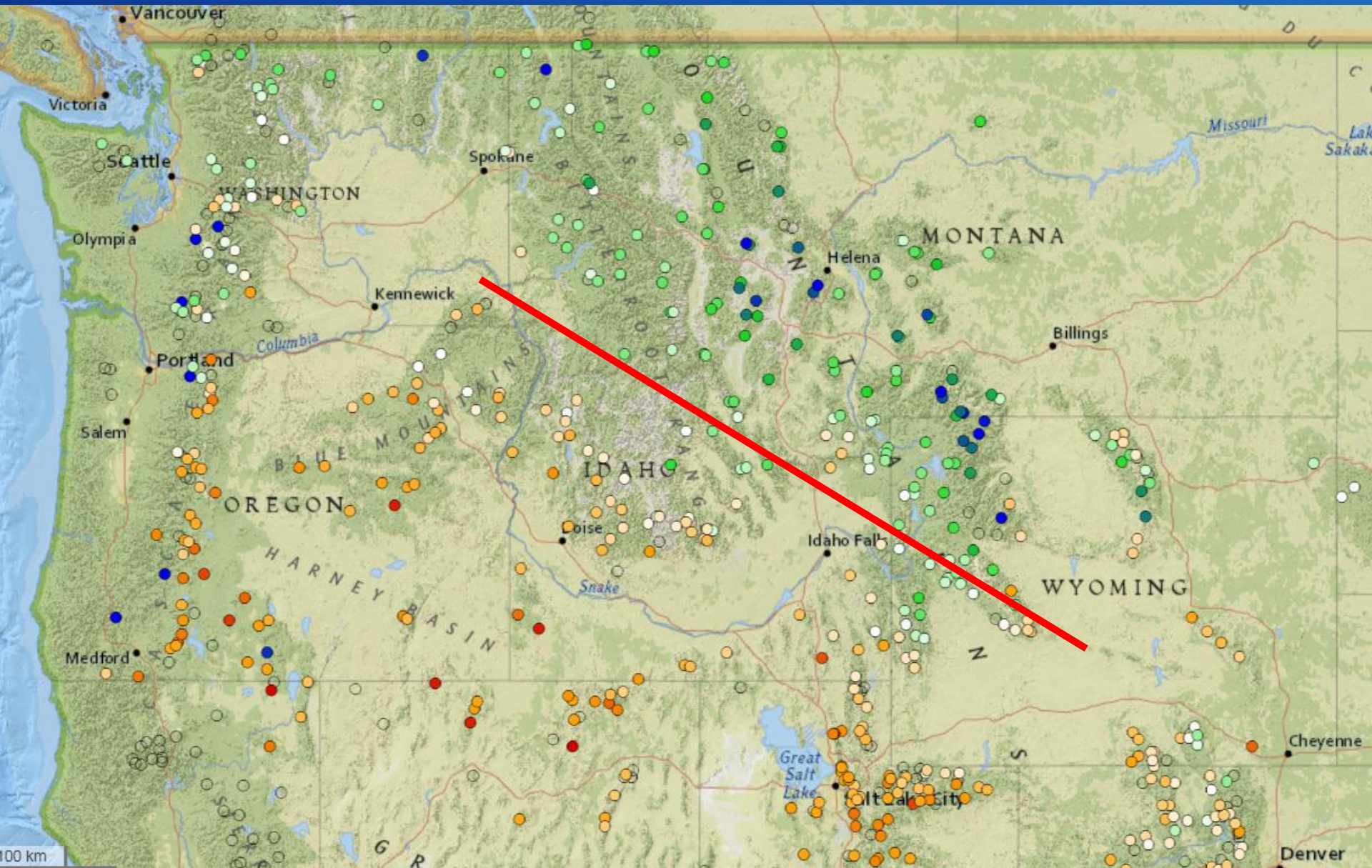
03/11/2018



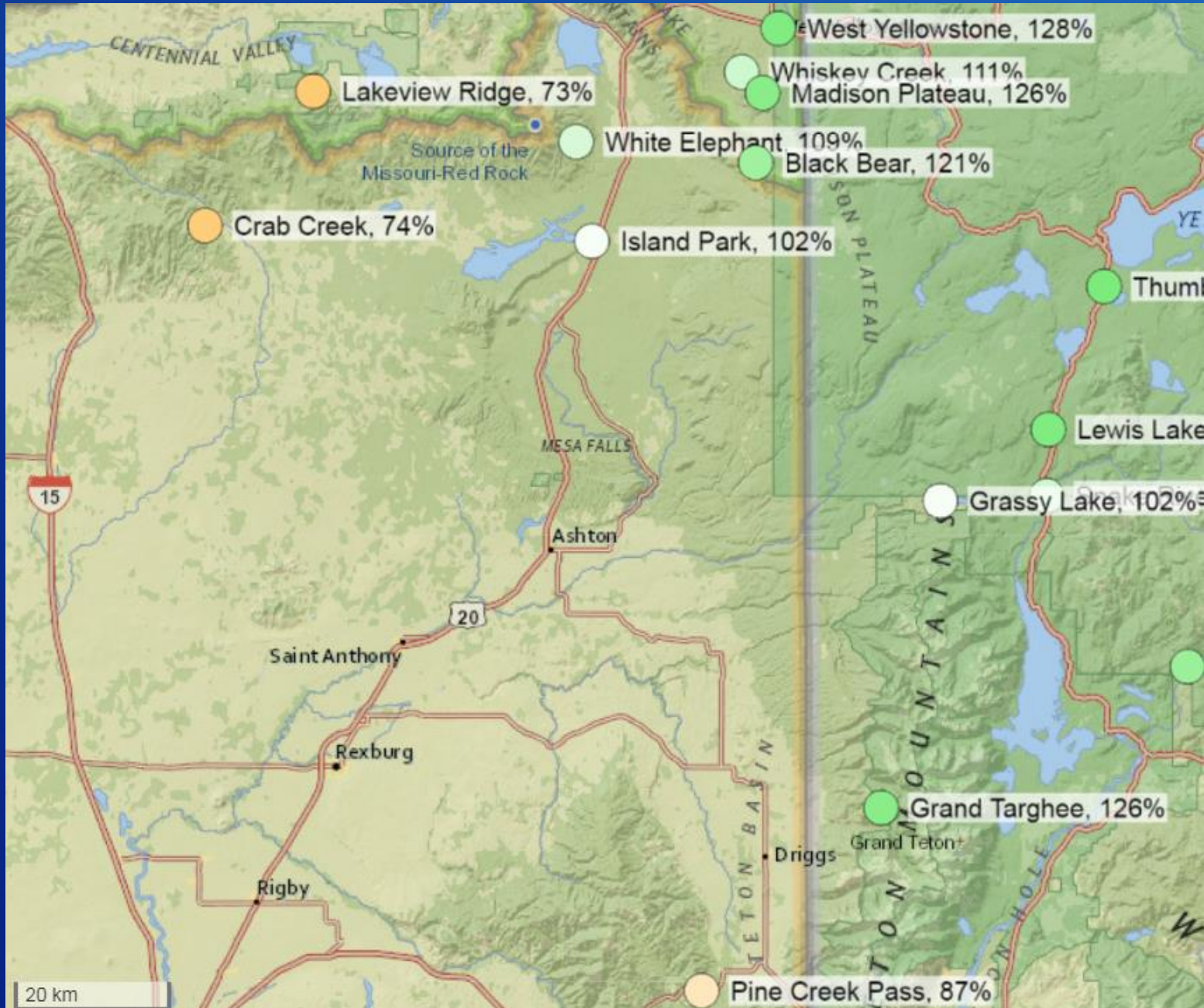
System:
87% Capacity
128% of Avg



2018 Jet Stream Pattern in Pacific Northwest

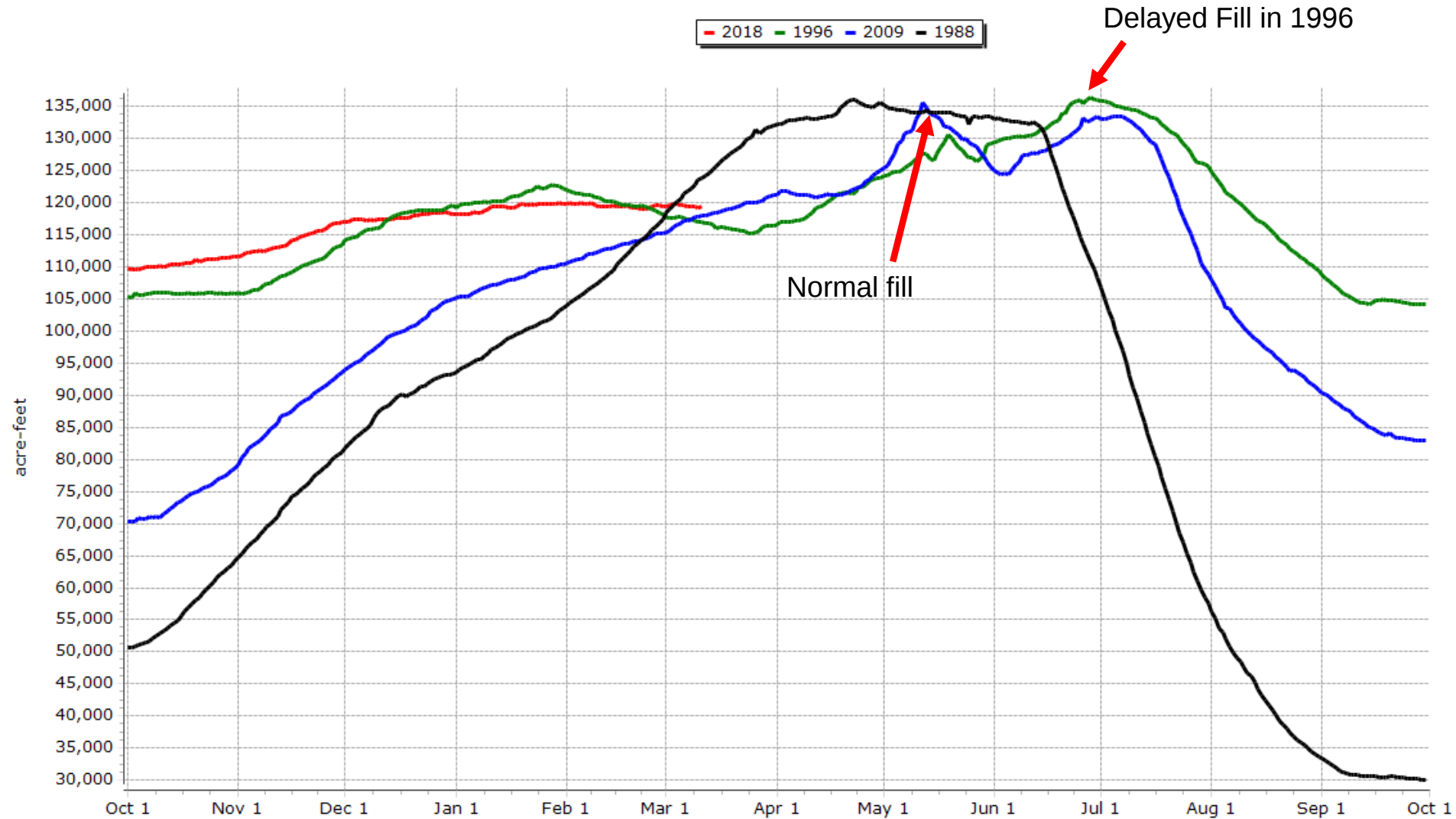


Henrys Fork Snowpack Conditions



Island Park Dam Similar Storage Years

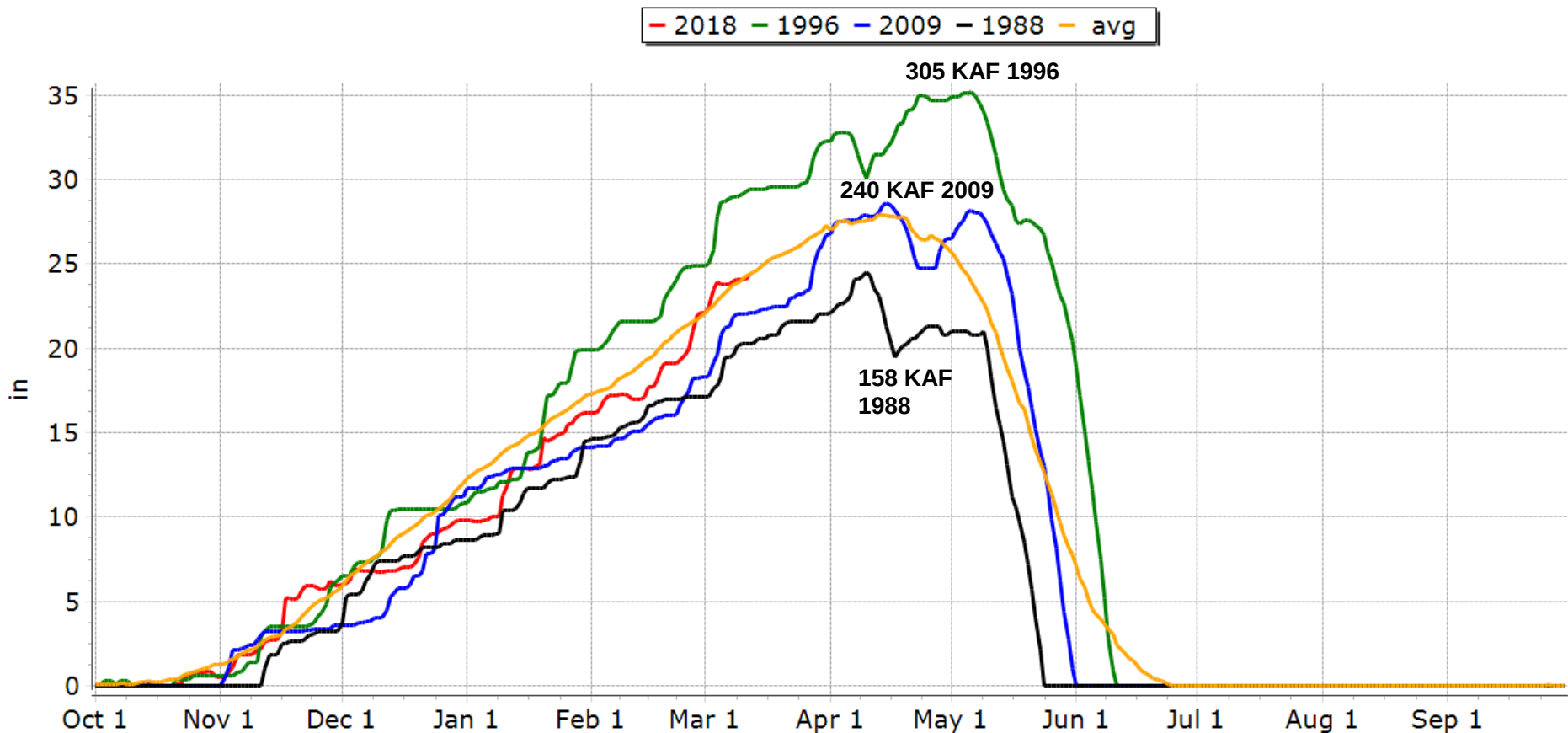
Island Park Dam and Reservoir, ID Elevation:6302.000



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Island Park Dam Snowpack in Similar Storage Years

WHITE ELEPHANT Elevation:7710.000



Avg: 2009

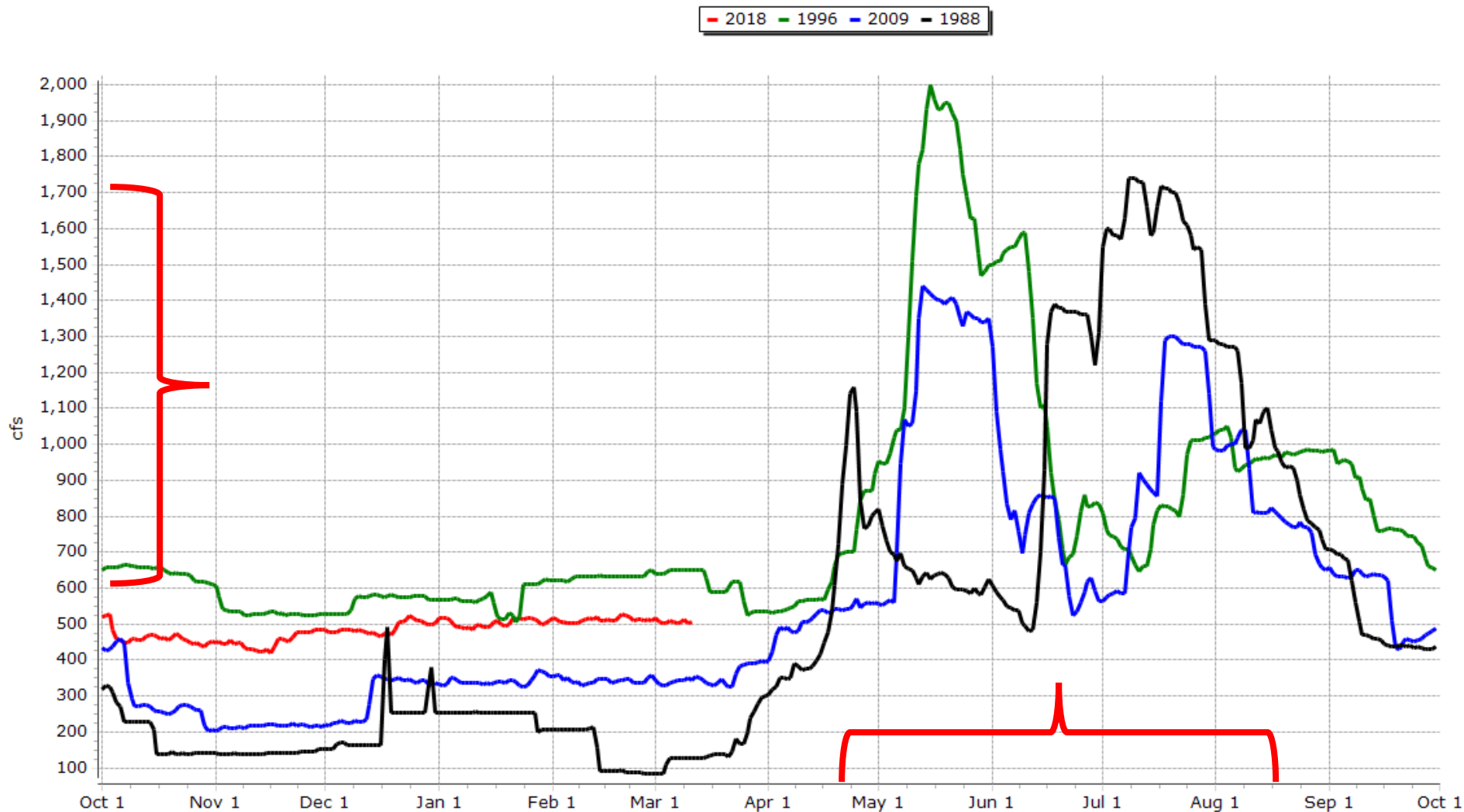
Dry: 1988

Wet: 1996

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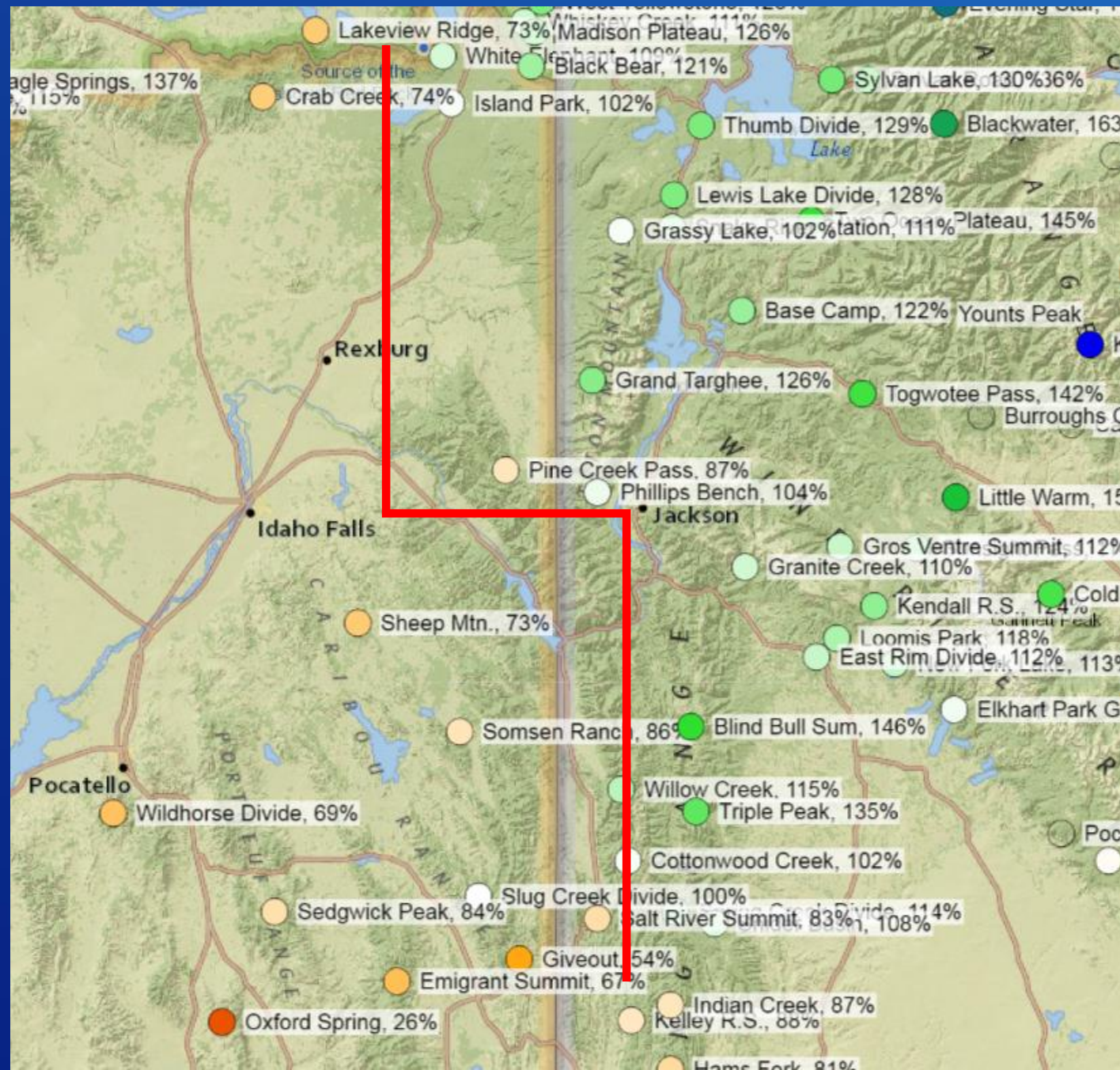
Island Park Dam Discharge in Similar Storage Years

Henrys Fork near Island Park, ID Elevation:6225.000



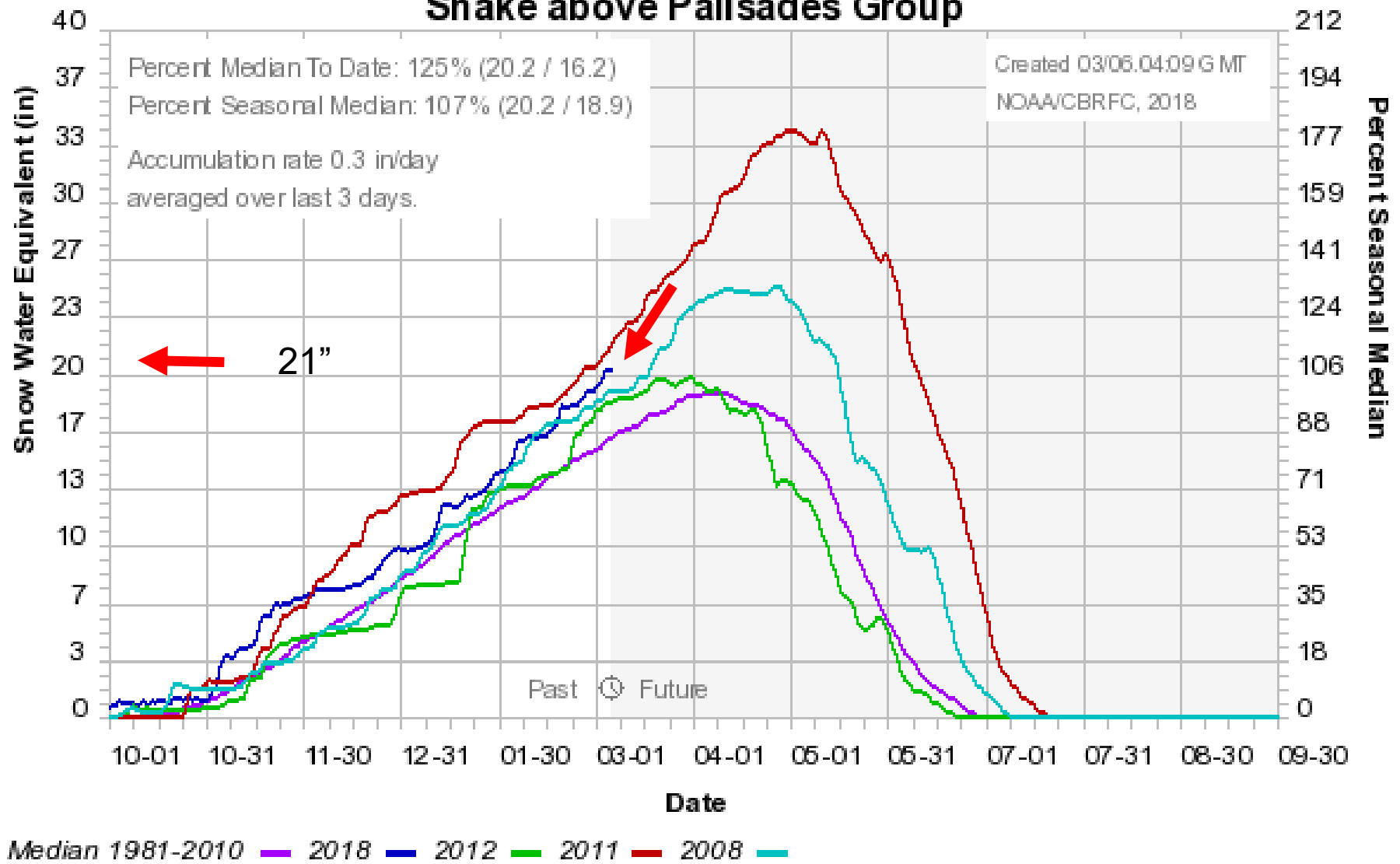
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Upper Snake Basin Snowpack Conditions



Colorado Basin River Forecast Center

Snake above Palisades Group



Avg: 2008

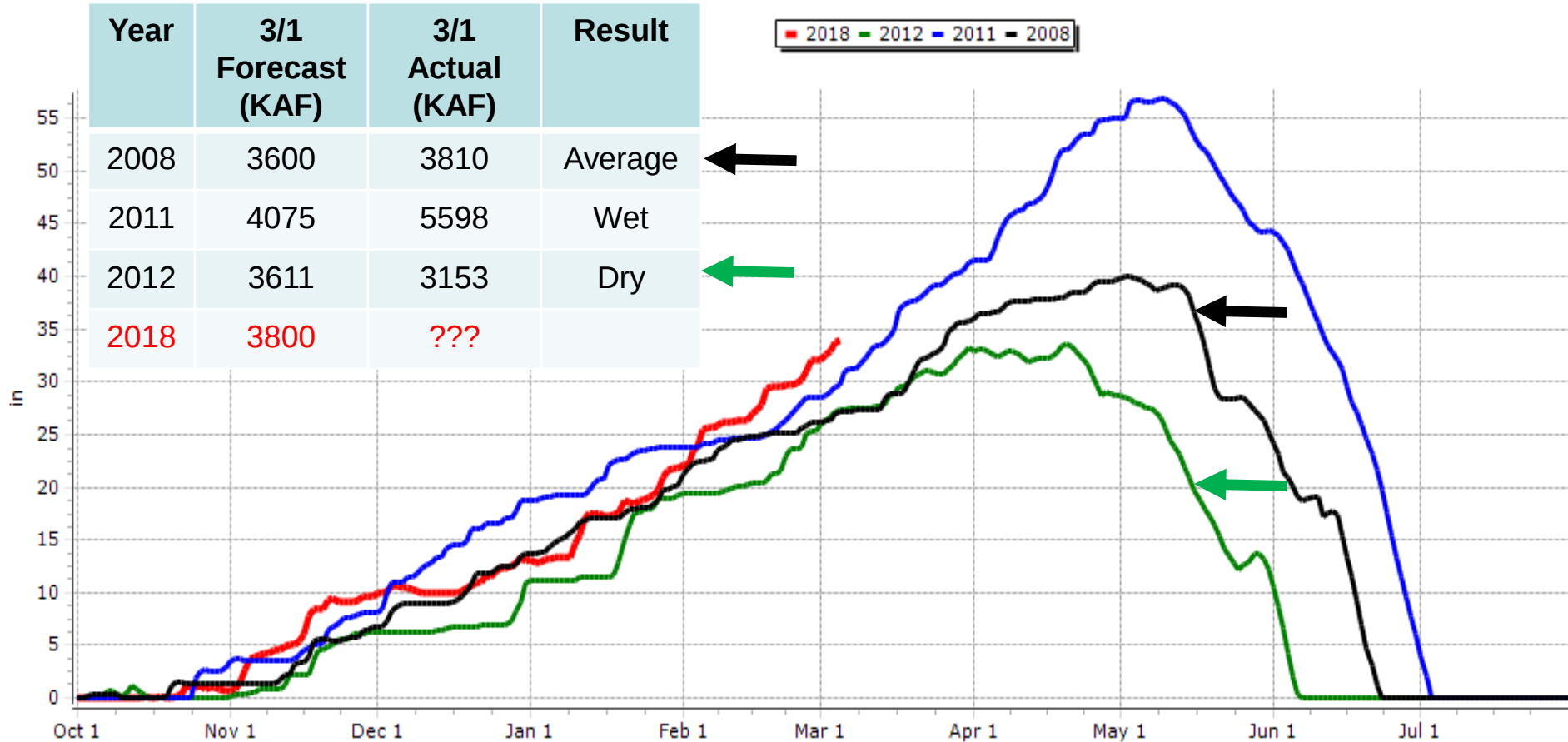
Dry: 2012

Wet: 2011

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March 1 Forecast vs. Actual Heise Runoff

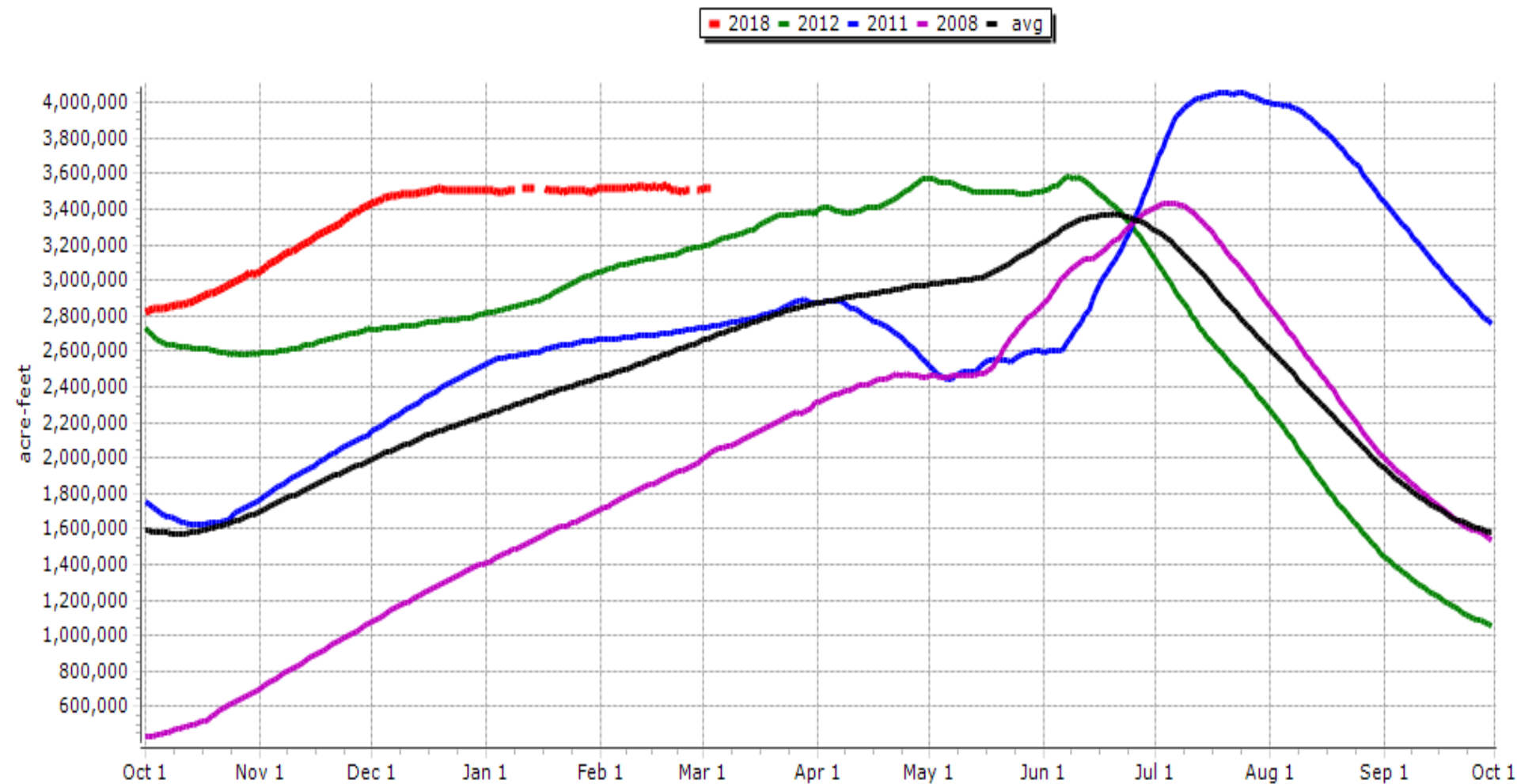
LEWIS LAKE DIVIDE Elevation: 7850.000



2008 Avg (111% Jan-Jul actual)

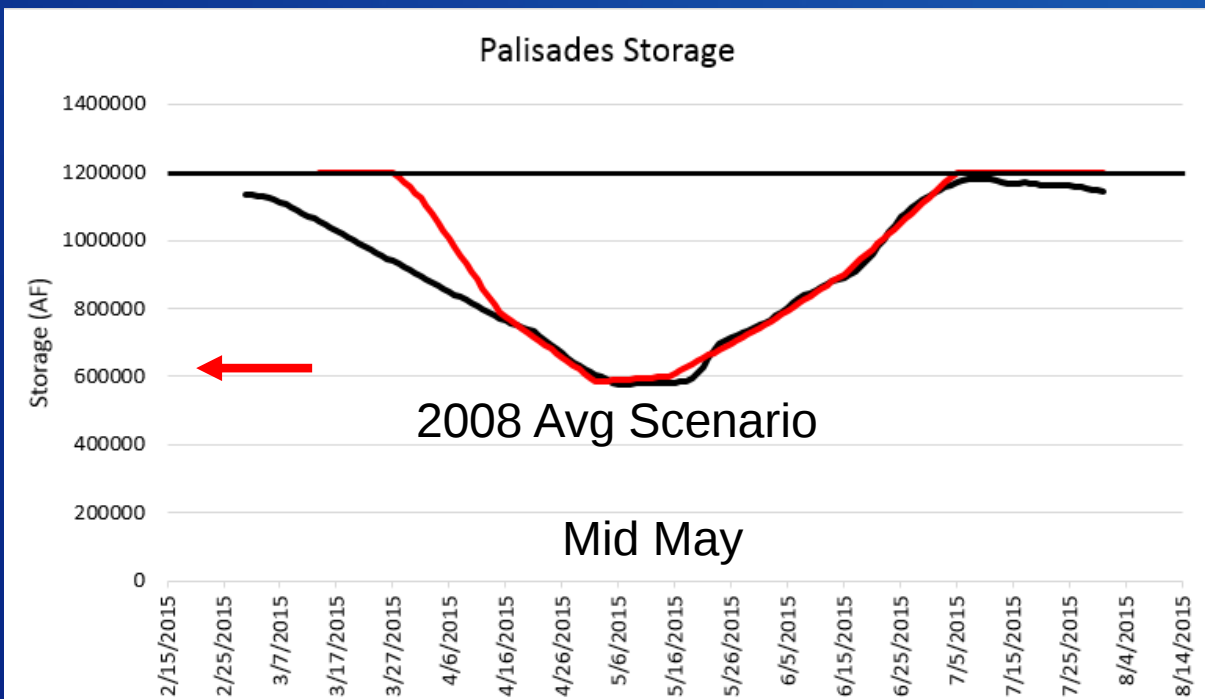
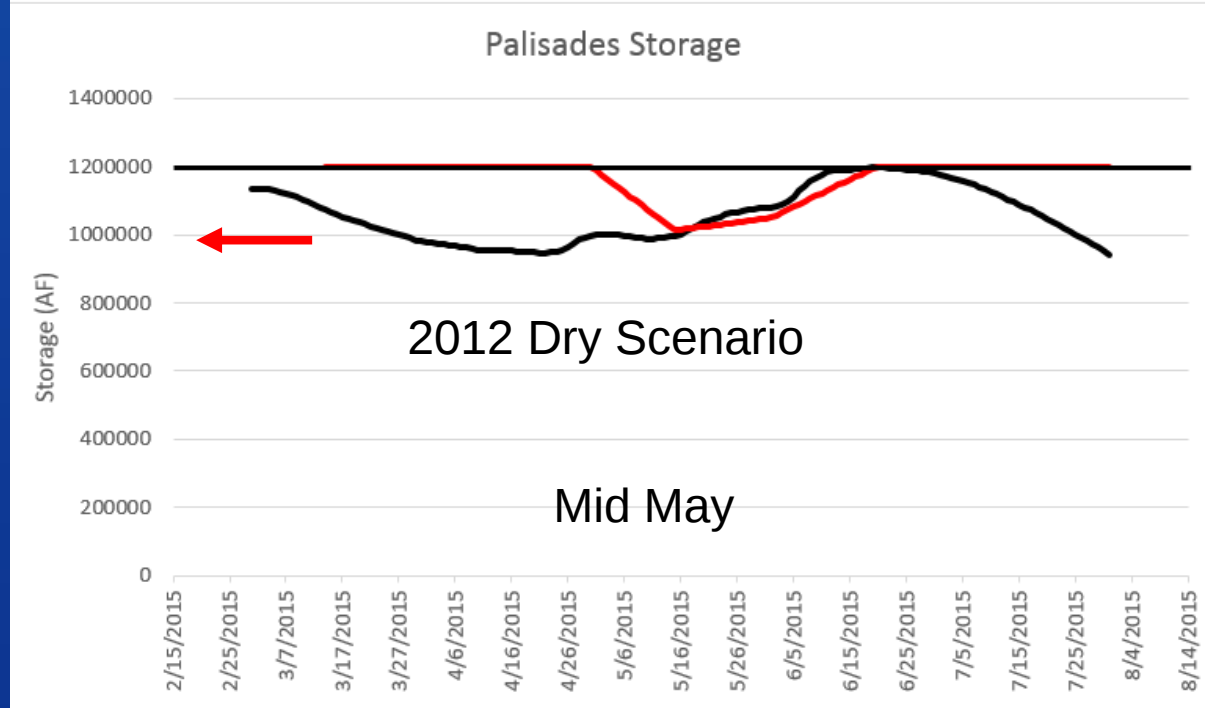
2012 Dry (92% Jan-Jul actual)

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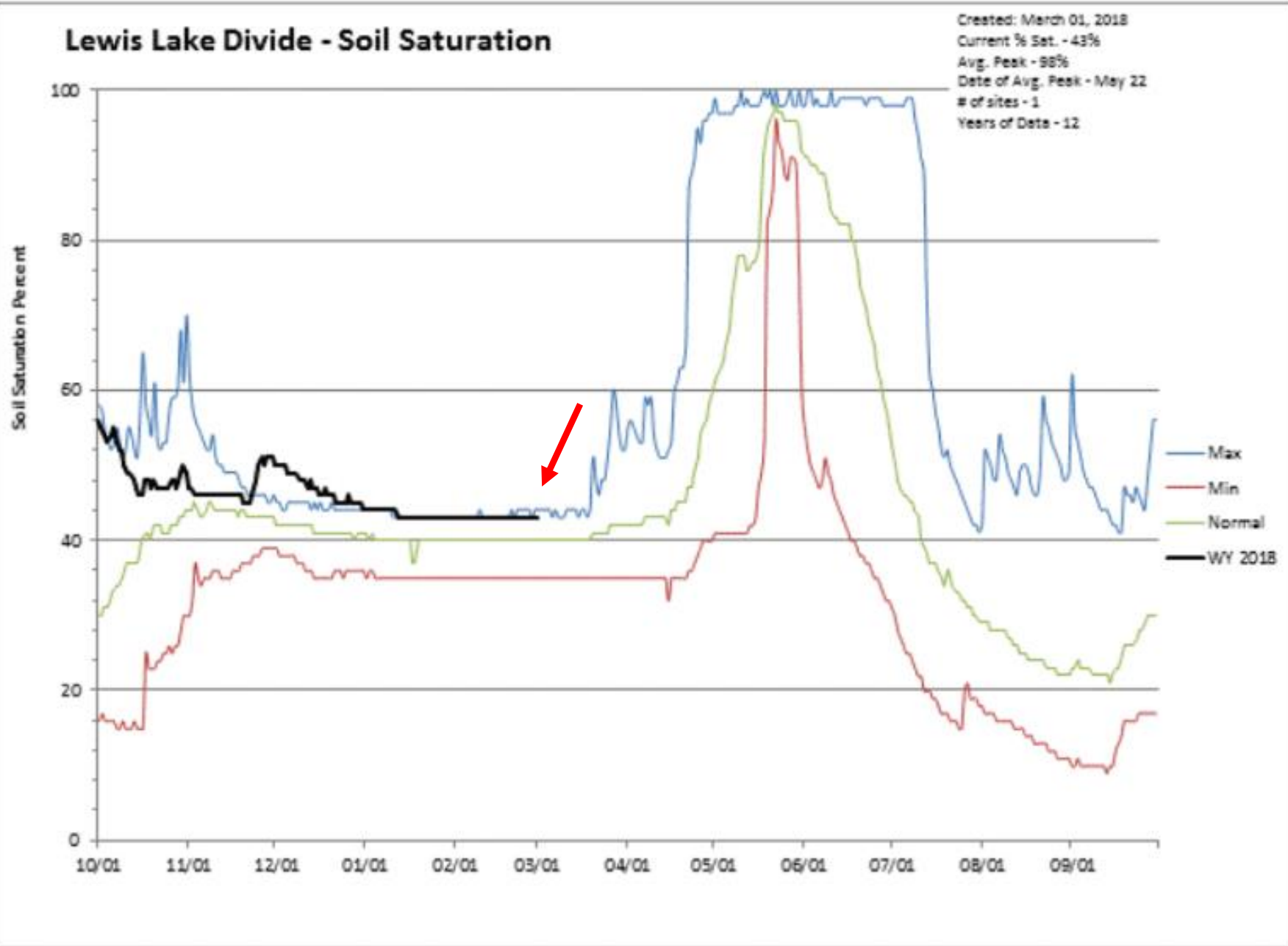


Avg: 2008 Dry: 2012 Wet: 2011

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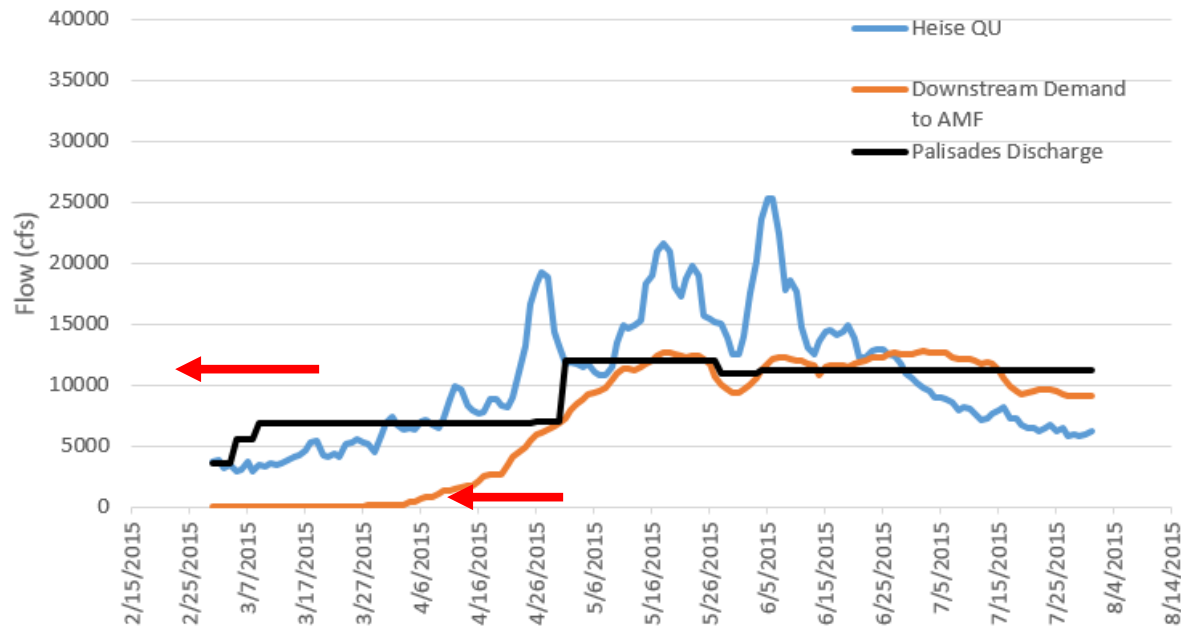
Lewis Lake Divide - Soil Saturation



High Inflows into PAL and also High Soil Moisture

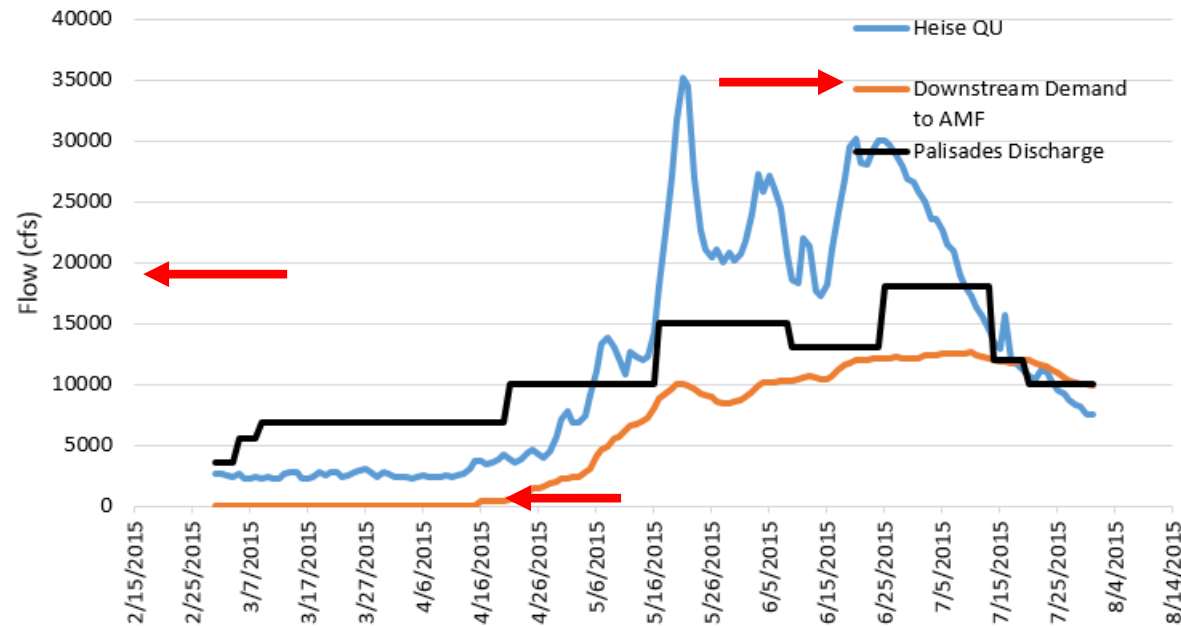
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Palisades Releases in Dry Scenario (2012)



*Spring YCT freshet likely in May

Palisades Releases in Average Scenario (2008)

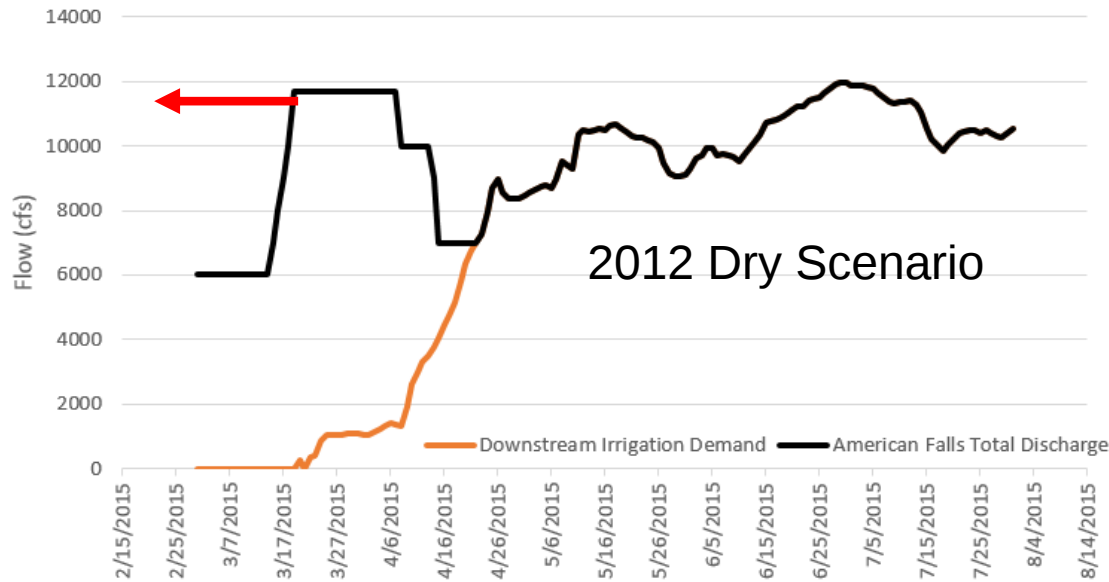


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May go up in the last half of March when we start to get into 100 KAF remaining

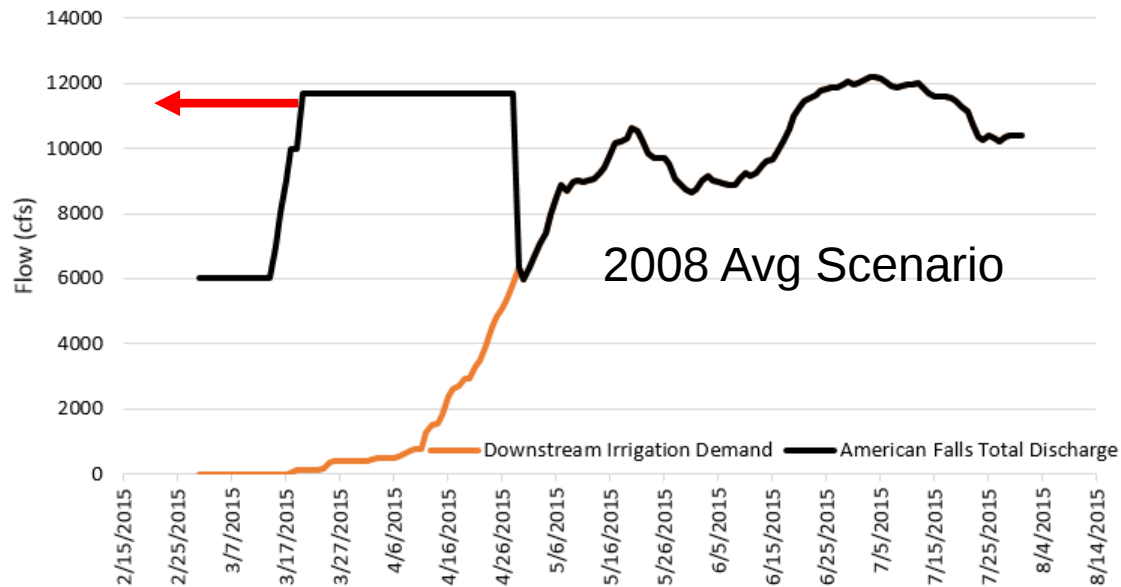
Possibly reach 50 KAF when we peak the outflow at about 11,700 cfs.

American Falls Releases



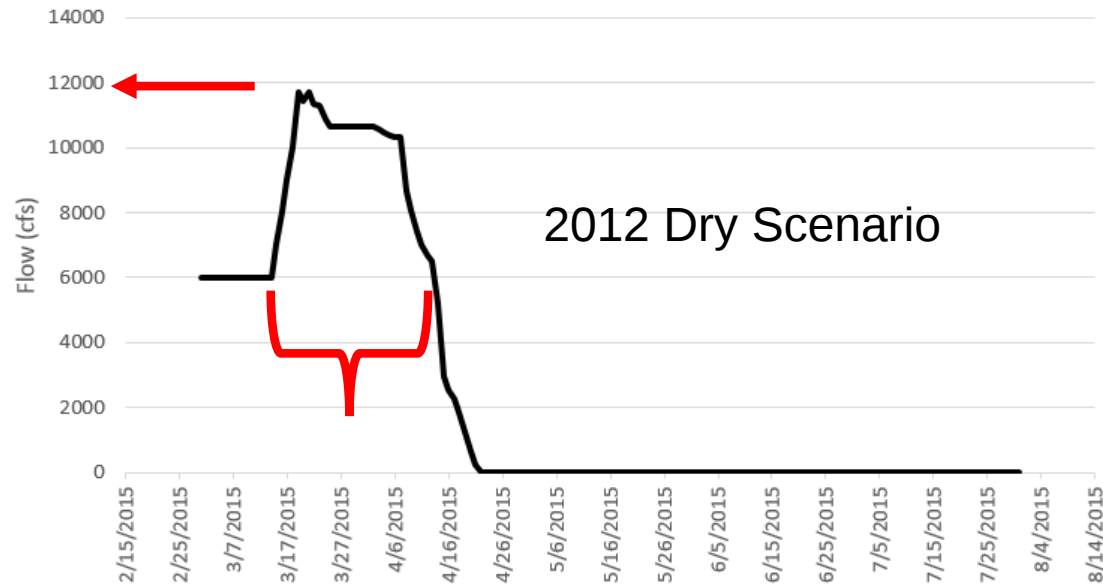
At 11,700 cfs from 3/21 to 4/7

American Falls Releases

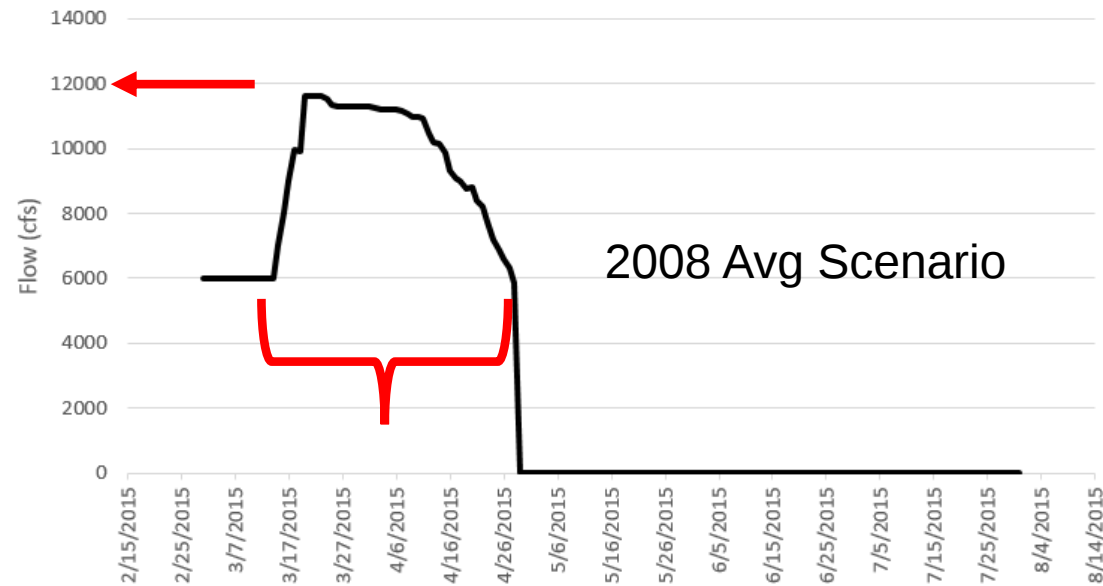


At 11,700 cfs from 3/21 to 4/28

Milner Flow



Milner Flow



Preliminary Operational Plan*

- Palisades Dam – Recently increased releases, Total release of 6,800 cfs, short of full power plant capacity (7,300). Should maintain until around April, but will continue to reassess with potential changes in snowpack and inflows.
- American Falls – increase from Palisades, will be stored in American Falls. Aim for about 100 KAF of space. Increased this morning by 500 cfs (total of 6,400 cfs)
- Milner – Match changes from upstream.
- No scheduled changes at other facilities- (maintaining or filling).

*SUBJECT TO CHANGE

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