

RECLAMATION

Managing Water in the West

Water Supply Committee Meeting

Reservoir Operations

January 12, 2018

Corey Loveland, Water Operations Manager
Upper Snake Field Office, BOR



U.S. Department of the Interior
Bureau of Reclamation

Outline:

- Upper Snake Reservoir Status
- Jan 1 Volume Forecasts
- Individual Reservoir Status
- Jackson/Palisades/American Falls Operations Plan

01/11/2018



System:

87% Capacity

152% of Avg

165% of LY

(1.39 MAF more)



LWQI 69 cfs

WODI 9 cfs



SHYI 5409 cfs

SNAI 4878 cfs



Milner
33732/50000
67% Full
MILI 7270 cfs

MINI 7505 cfs

Lake Walcott
91571/95180
96% Full

Henrys Lake
82412/90000
92% Full
HENI 25 cfs

Island Park
119458/135205
88% Full
ISLI 496 cfs

ANTI 1954 cfs

REXI 2673 cfs

TEAI 559 cfs

LORI 2665 cfs

HELI 3350 cfs

WTXI 293 cfs

SIFI 5116 cfs

BFTI 4899 cfs

Grassy Lake
13128/15180
86% Full

FLGY 447 cfs

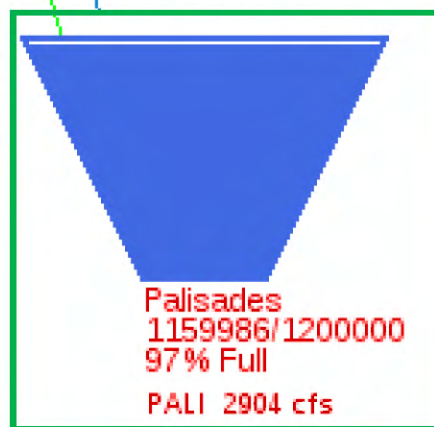


JKSY 1786 cfs

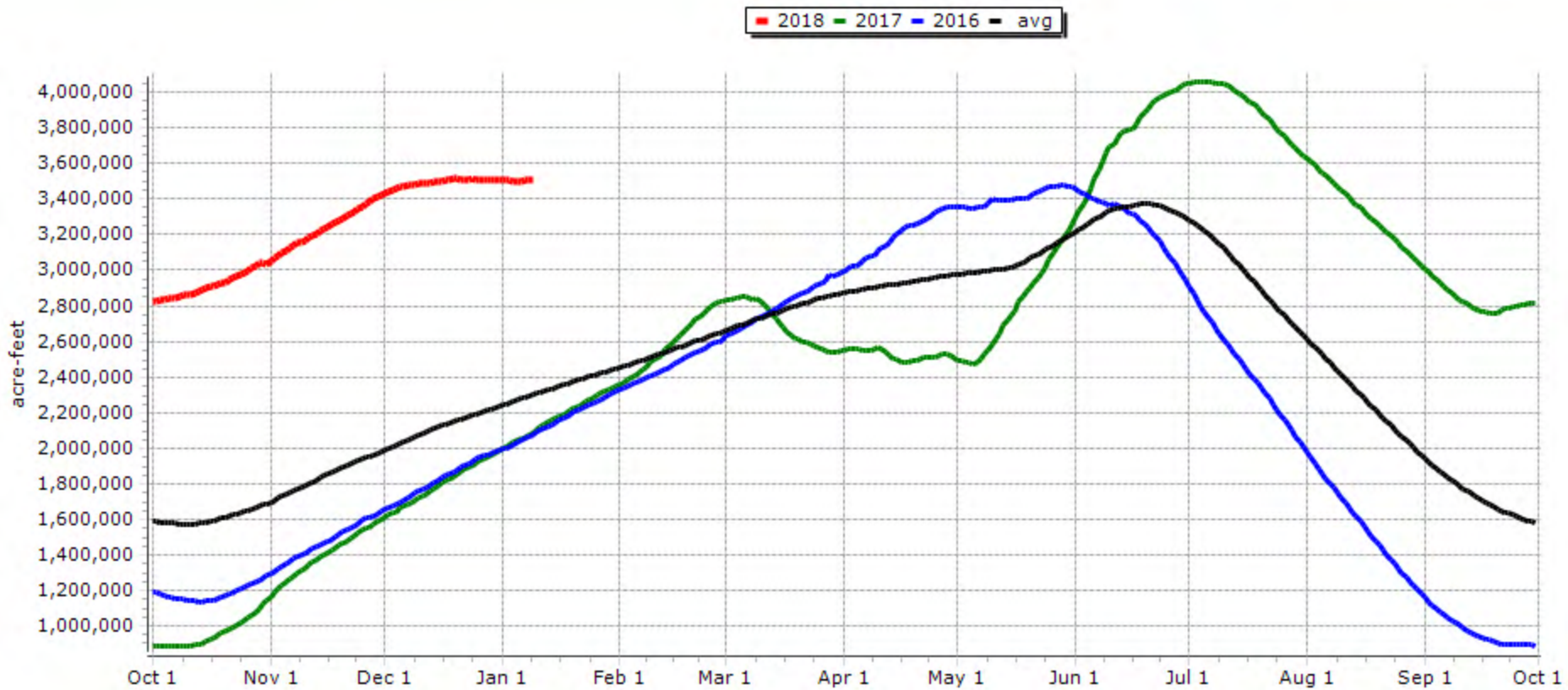
ALPY 2174 cfs

GREY 314 cfs

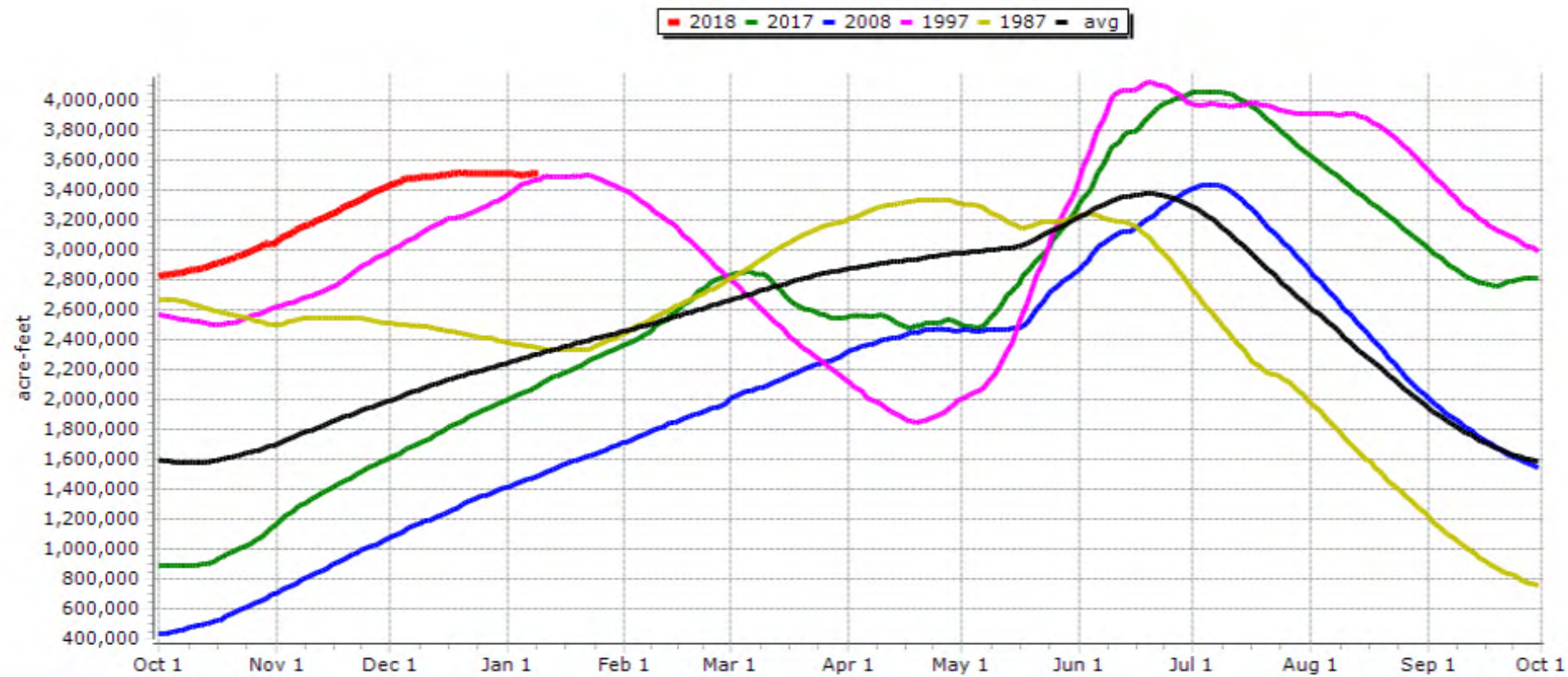
SALY 607 cfs



Totals System Storage



RECLAMATION



Wet: 2017
Avg: 2008
Dry: 1987

RECLAMATION

2018 January Runoff Forecasts

as of 1/1/18

- Heise = 108% Average*#
- Ririe = 88% Average*+
- Little Wood = 85% Average*#
- Island Park = 96% Average# (PCA Forecast)

*Coordinated USBR and USACE Forecast

#Jan-Jul Forecast Period

+Jan-Jun Forecast Period

% Average based on 1981-2010 period

Assumes normal subsequent conditions

RECLAMATION

CURRENT
MONTHLY FORECAST SUMMARY
January 01 2018

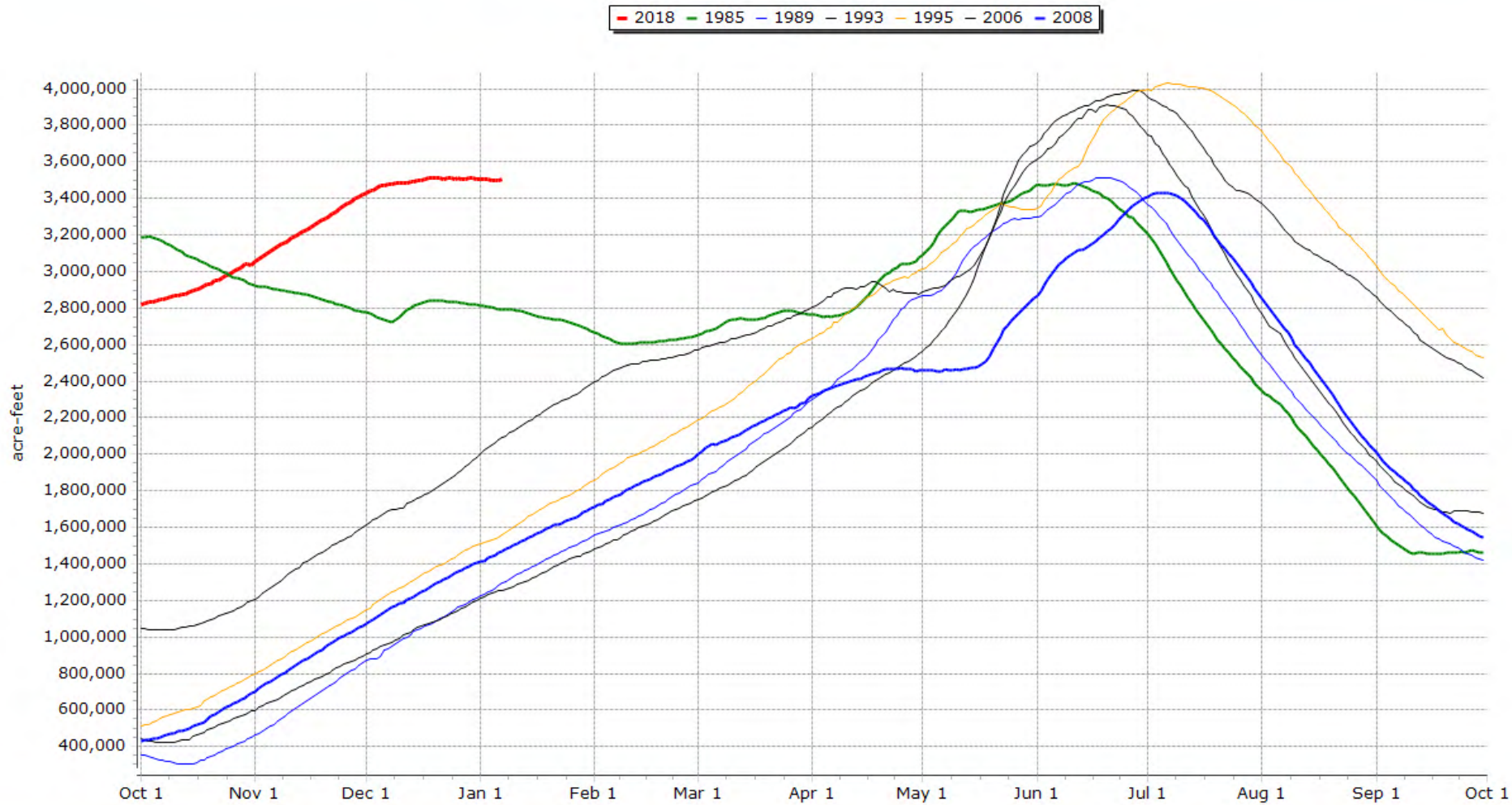
FORECAST	FORECAST PERIOD	1981-2010 AVERAGE (1000AF)	NORMAL SUBSEQUENT CONDITIONS		120% NORMAL SUBSEQUENT CONDITIONS		80% NORMAL SUBSEQUENT CONDITIONS	
			FORECAST (1000AF)	PERCENT NORMAL	FORECAST (1000AF)	PERCENT NORMAL	FORECAST (1000AF)	PERCENT NORMAL
		AVE	NORM	%	HIGH	%	LOW	%
HEISE*	JAN-JUL	3789.7	4100.0	108				
JACKSON LAKE	JAN-JUL	860.6	961.7	112	1093.0	127	830.4	96
ISLAND PARK**	JAN-JUL	302.9	290.1	96				
TETON	JAN-JUL	450.9	449.7	100	517.6	115	381.8	85
RIRIE*	JAN-JUN	73.8	65.0	88				
LITTLE WOOD*	JAN-JUL	93.9	80.0	85				

*Coordinated with USACE

**PCA Forecast

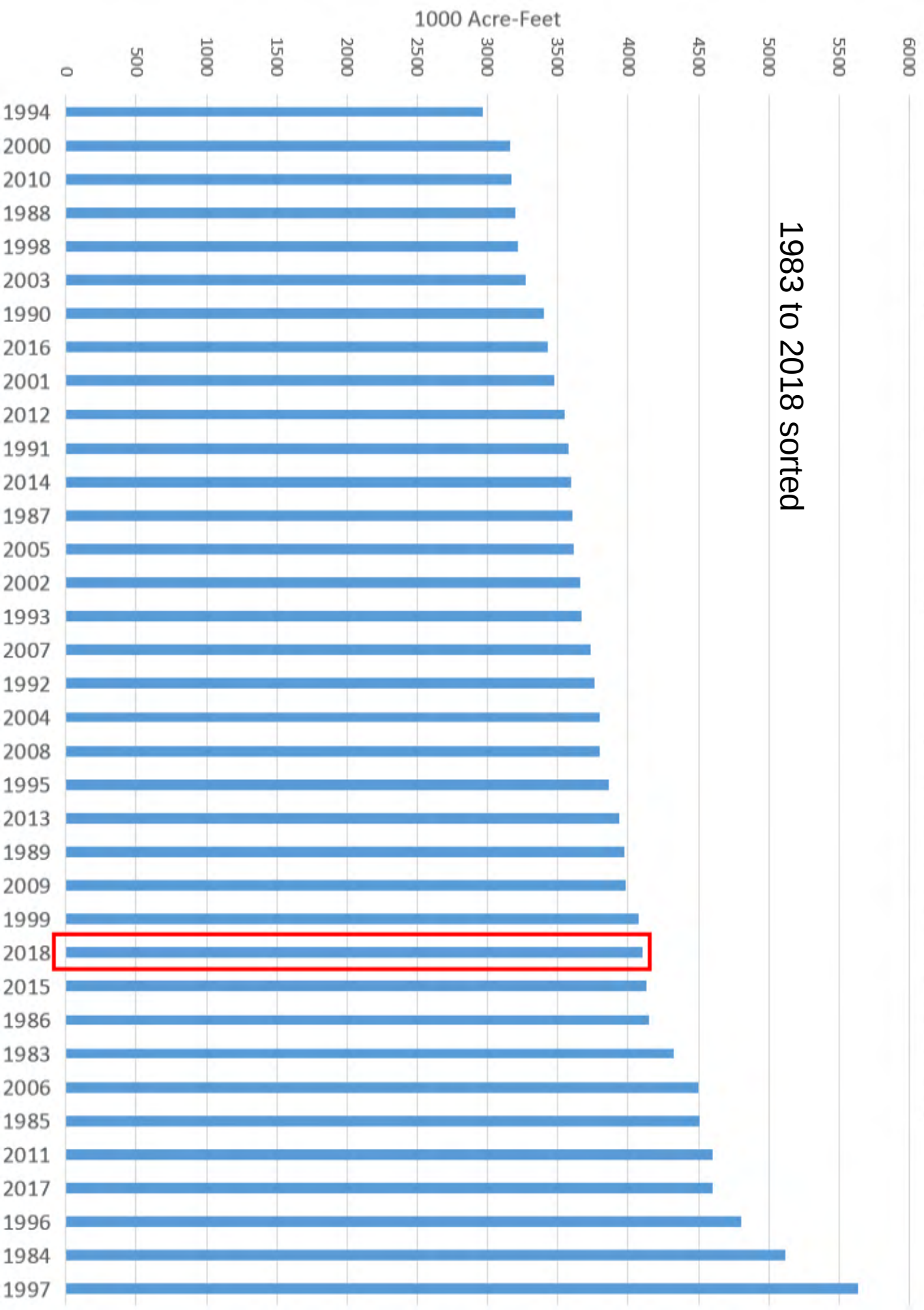
RECLAMATION

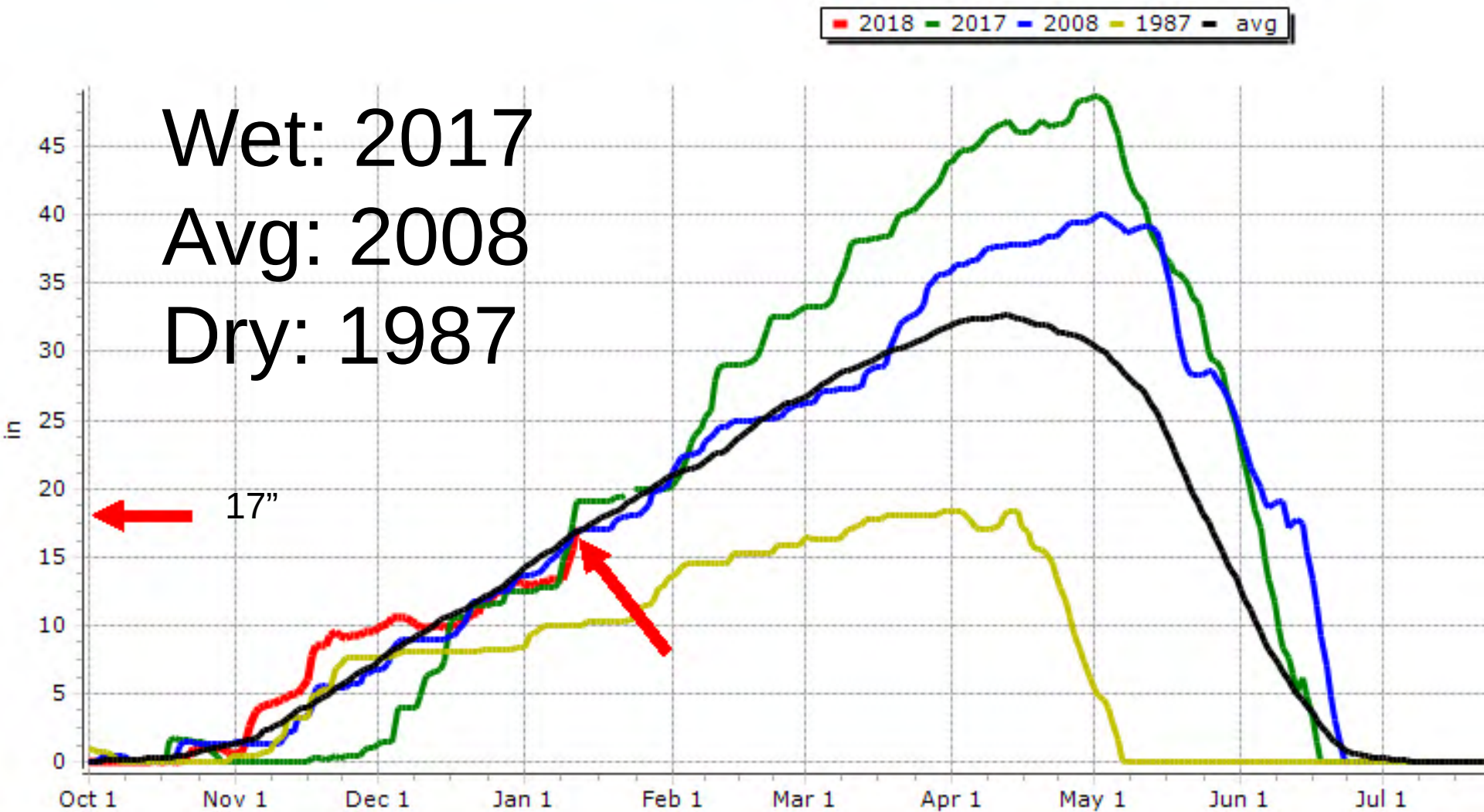
Snake System - Similar Water Years of Runoff to Jan 2018 Forecast



January Heise Forecast (January through July Runoff)

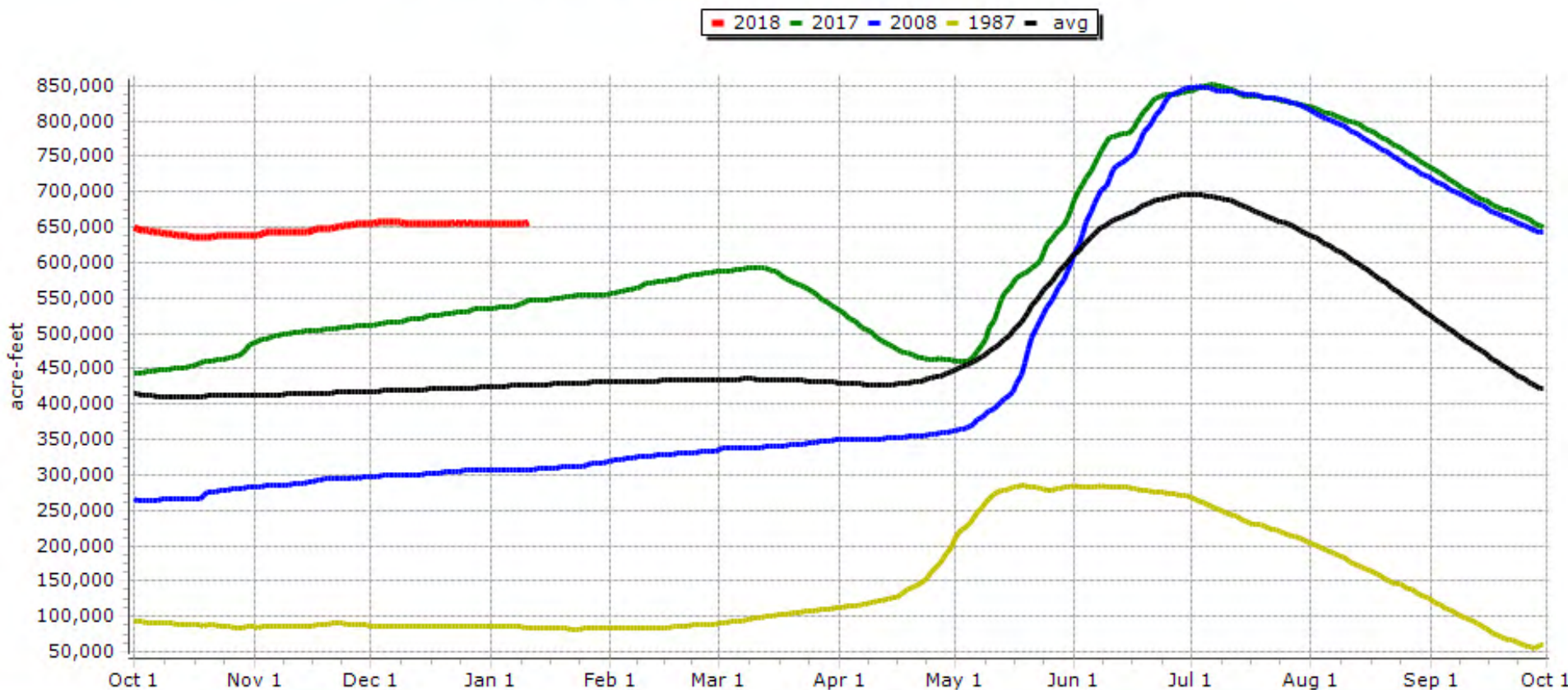
1983 to 2018 sorted





Jackson Storage

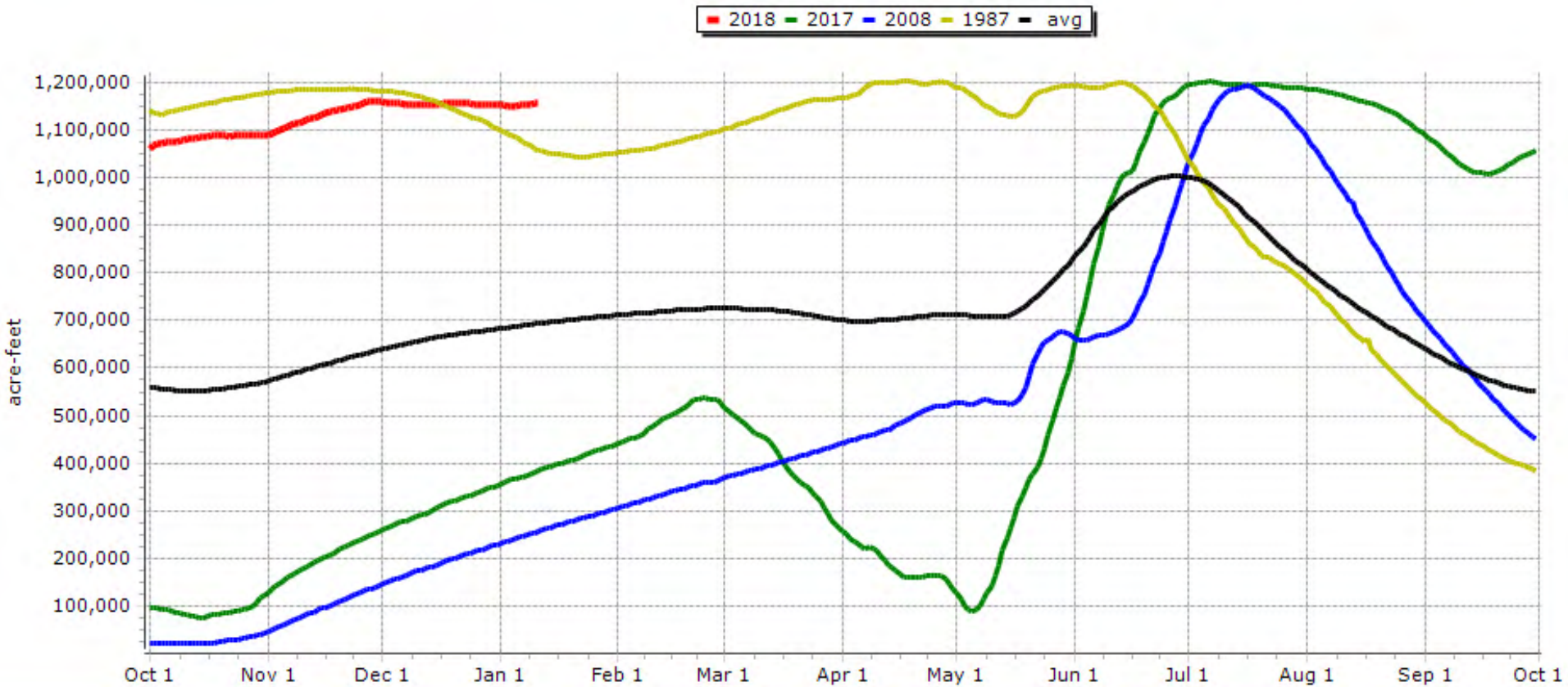
Jackson Lake at Dam on Snake River near Moran, WY Elevation:6789.000



RECLAMATION

Palisades Storage

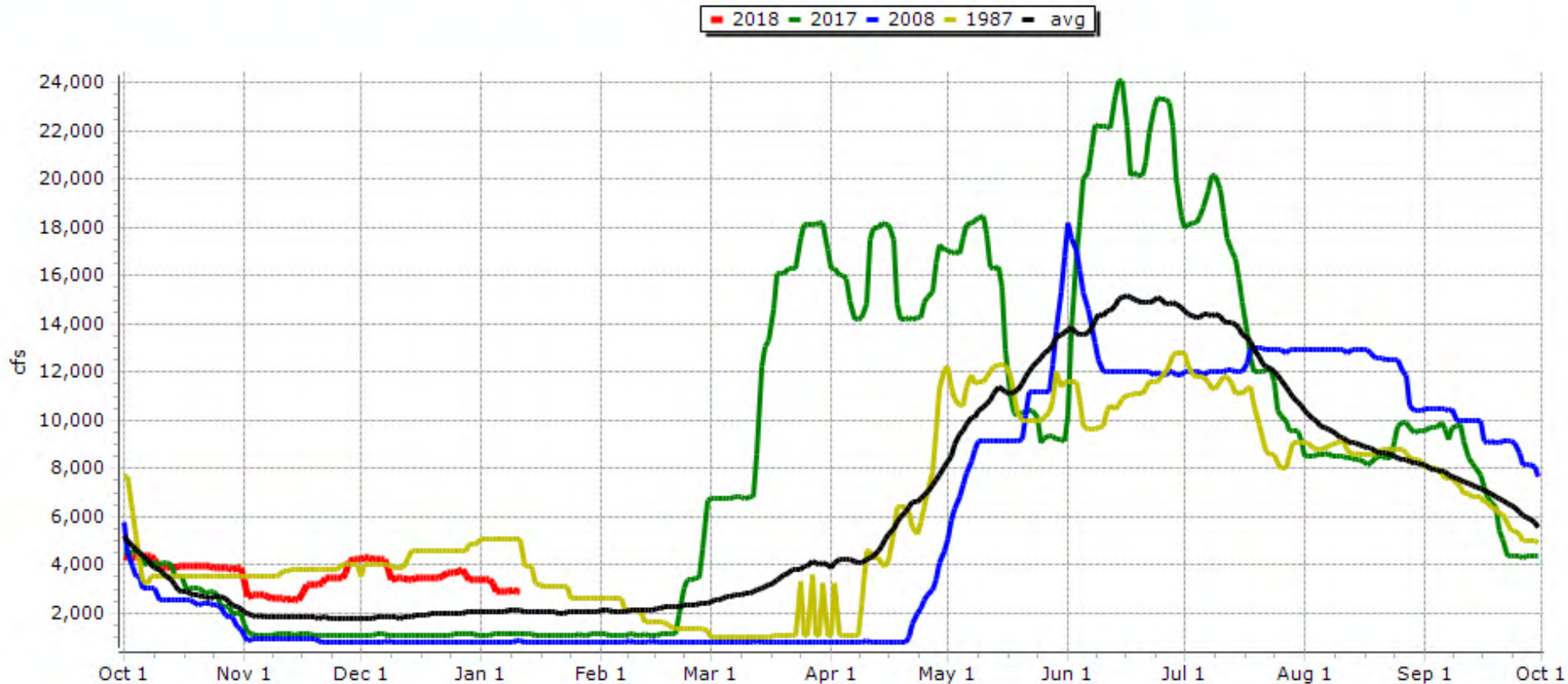
Palisades Reservoir near Irwin, ID Elevation:5353.000



RECLAMATION

Palisades Releases

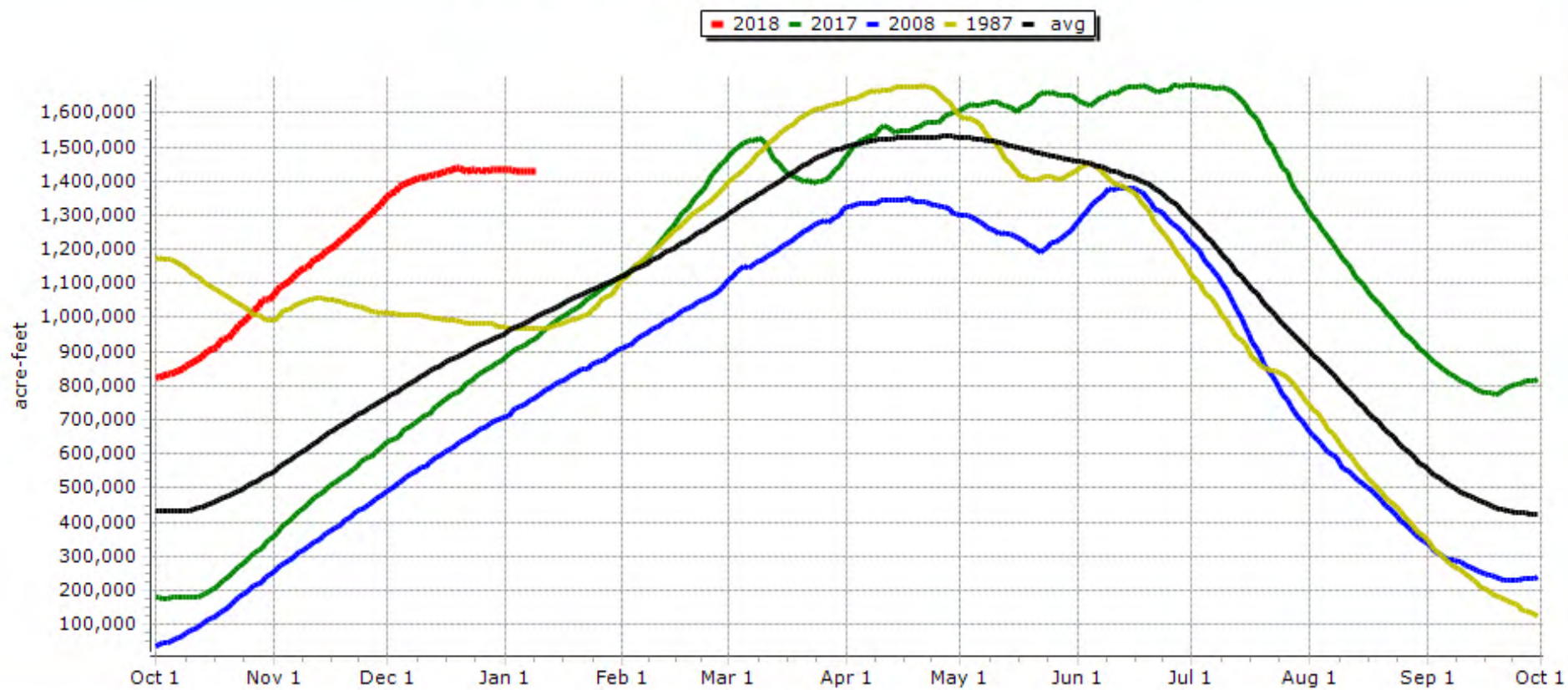
Snake River near Irwin, ID Elevation:5353.000



RECLAMATION

American Falls Storage

American Falls Reservoir at American Falls, ID Elevation:4370.000

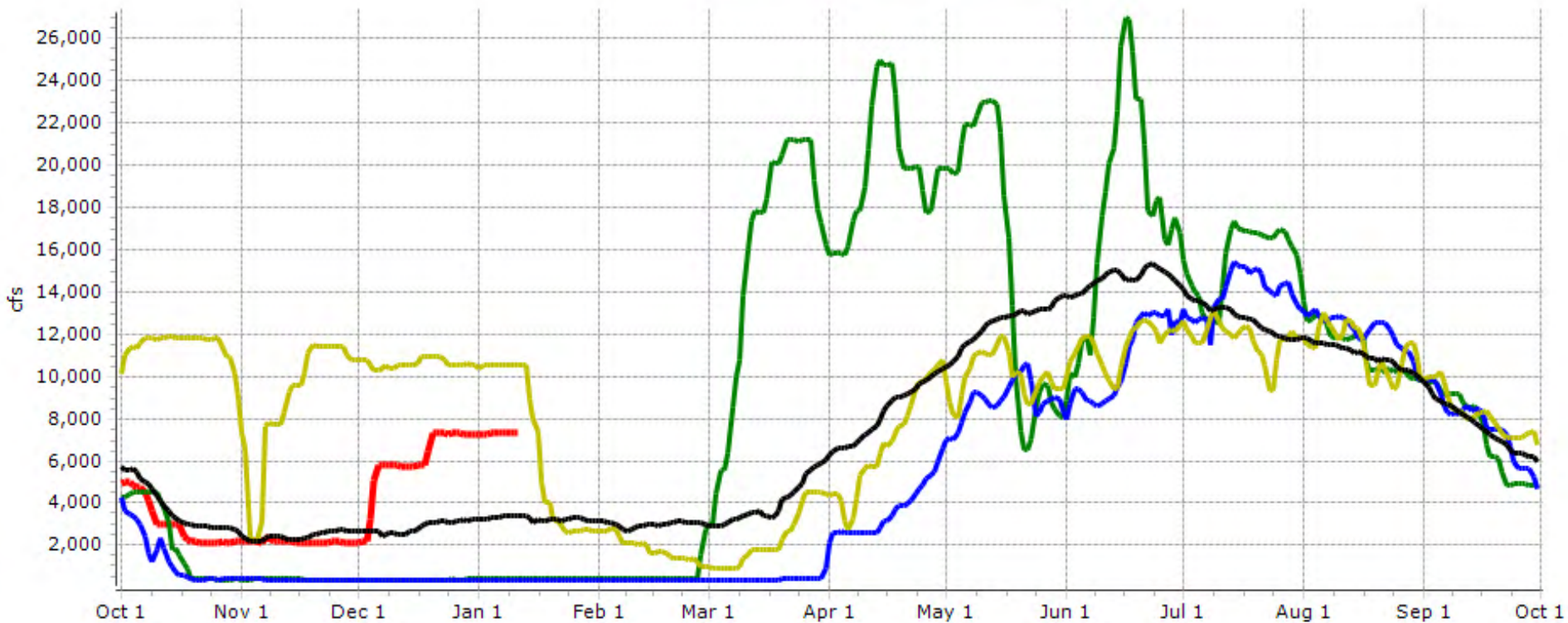


RECLAMATION

American Falls Releases

Snake River at Neeley, ID Elevation:4242.000

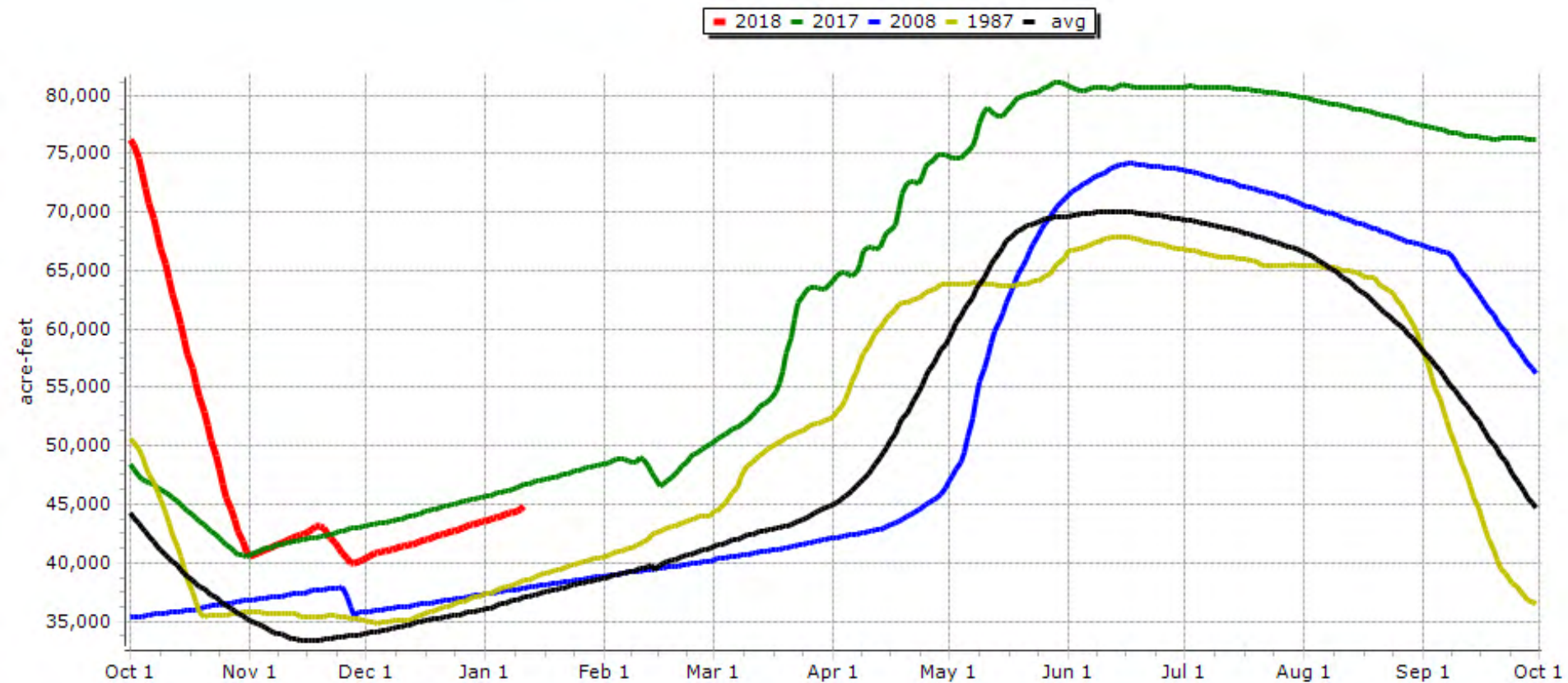
2018 2017 2008 1987 avg



RECLAMATION

Ririe Storage

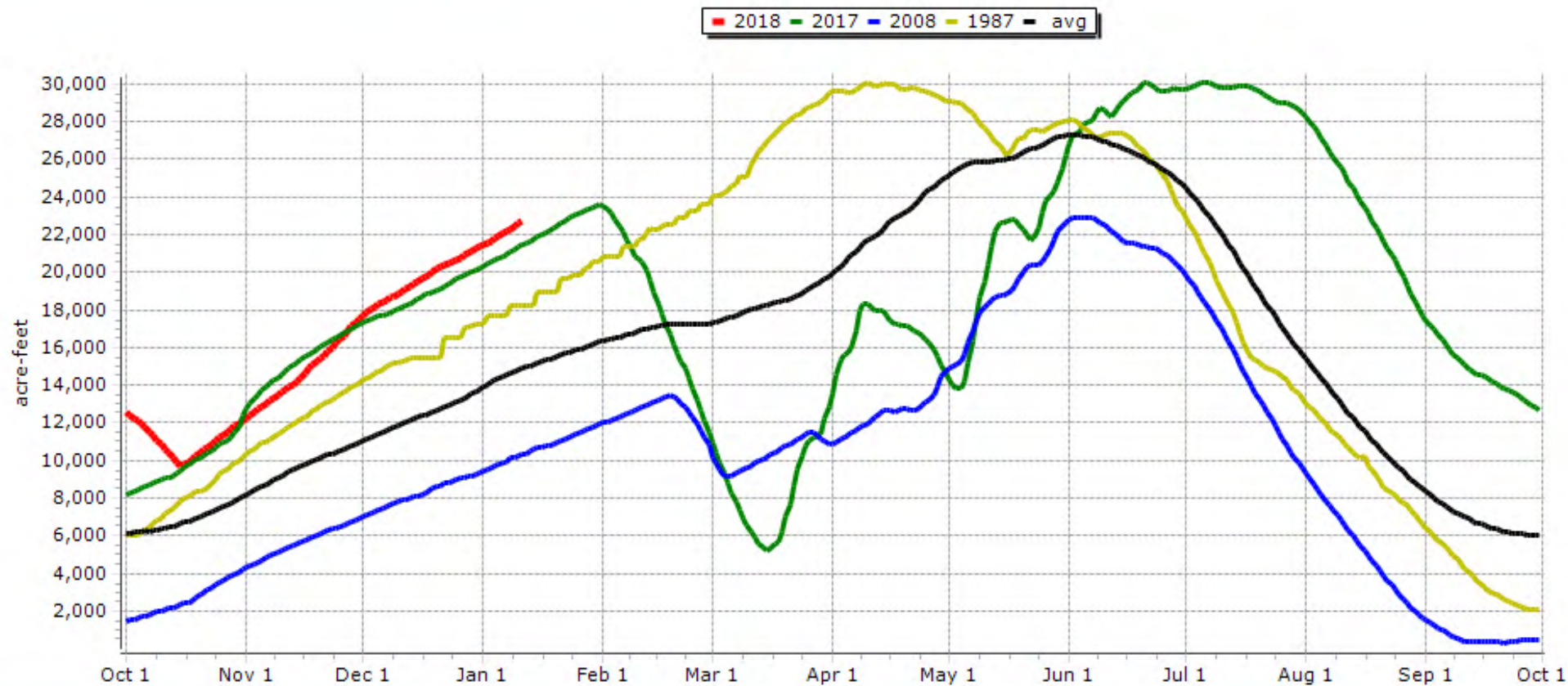
Ririe Dam and Lake near Ririe, ID Elevation:5119.000



RECLAMATION

Little Wood Storage

Little Wood Dam and Reservoir near Carey, ID Elevation:5100.000



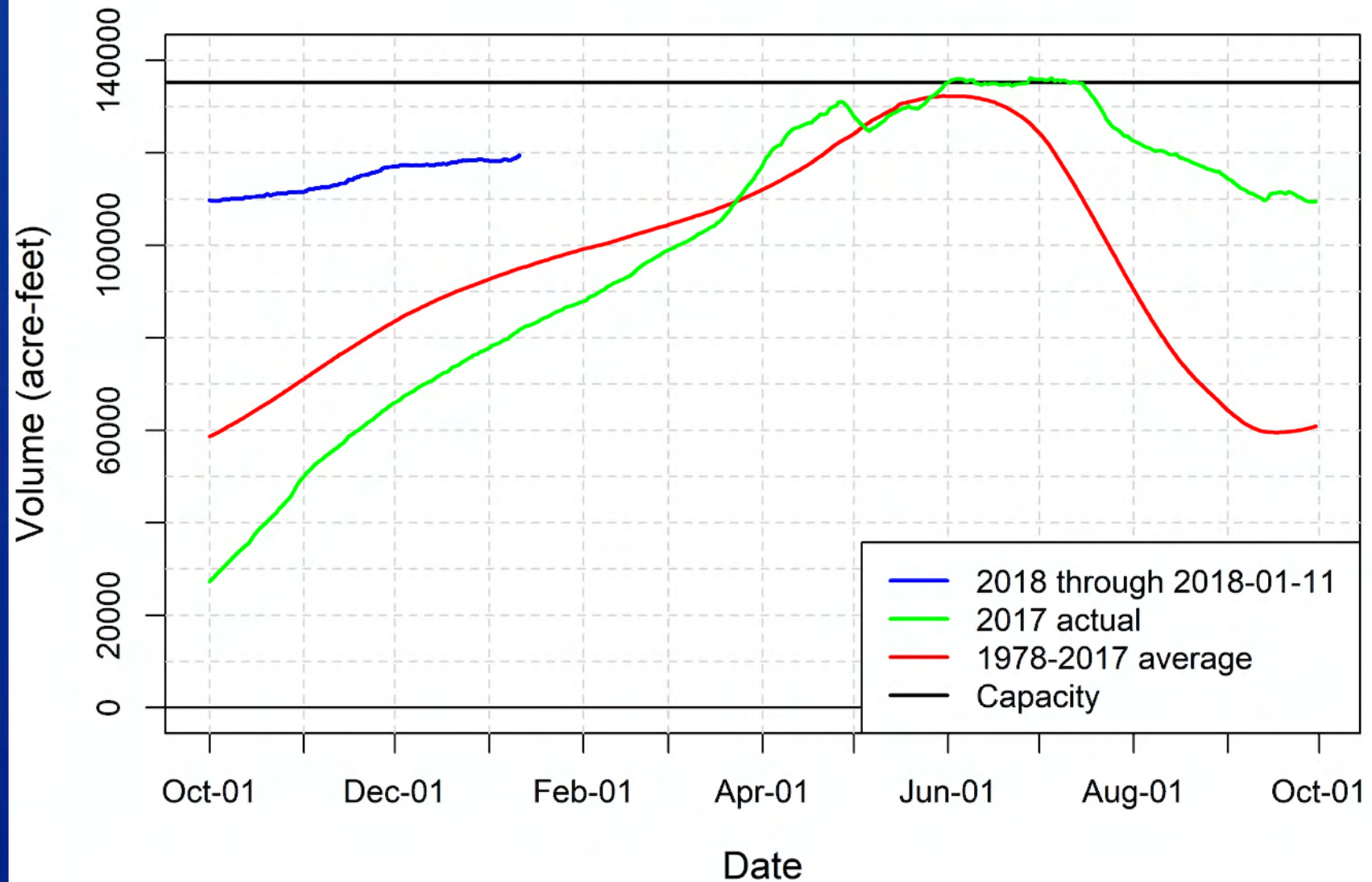
RECLAMATION

From Rob Van Kirk's (from Henrys Fork Foundation) email today:

- WOW! Precipitation totals yesterday at the higher elevations from Island Park southward to Pine Creek Pass ranged from 0.9 inch at Island Park to 1.6 inches at Grassy Lake.
- Watershed-total precipitation increased to 93% of average for the date, and SWE increased to 97% of average.
- Island Park Reservoir has gained 1,211 ac-ft over the past week, due primarily to direct precipitation on the reservoir surface.

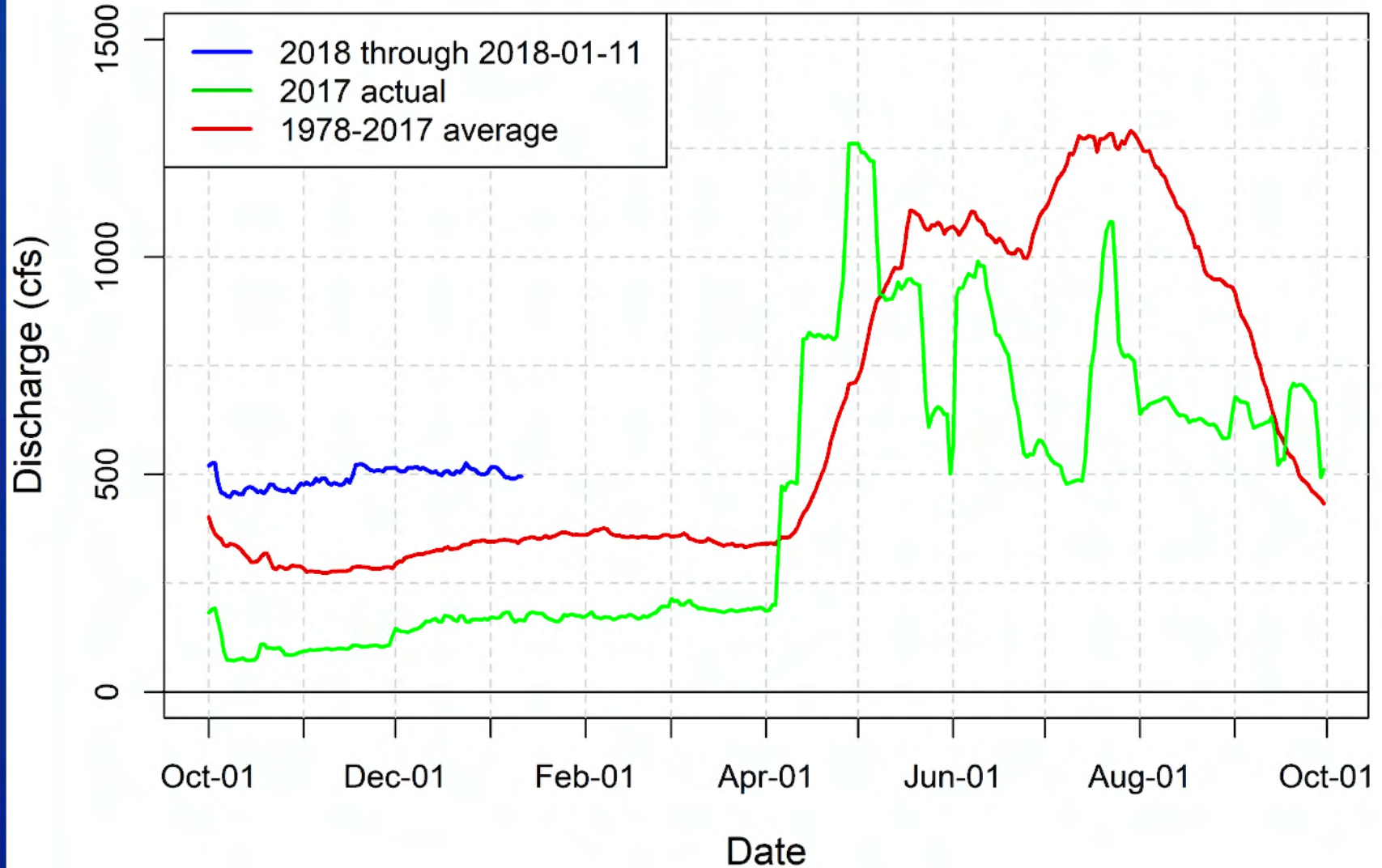
RECLAMATION

Island Park Reservoir Volume



RECLAMATION

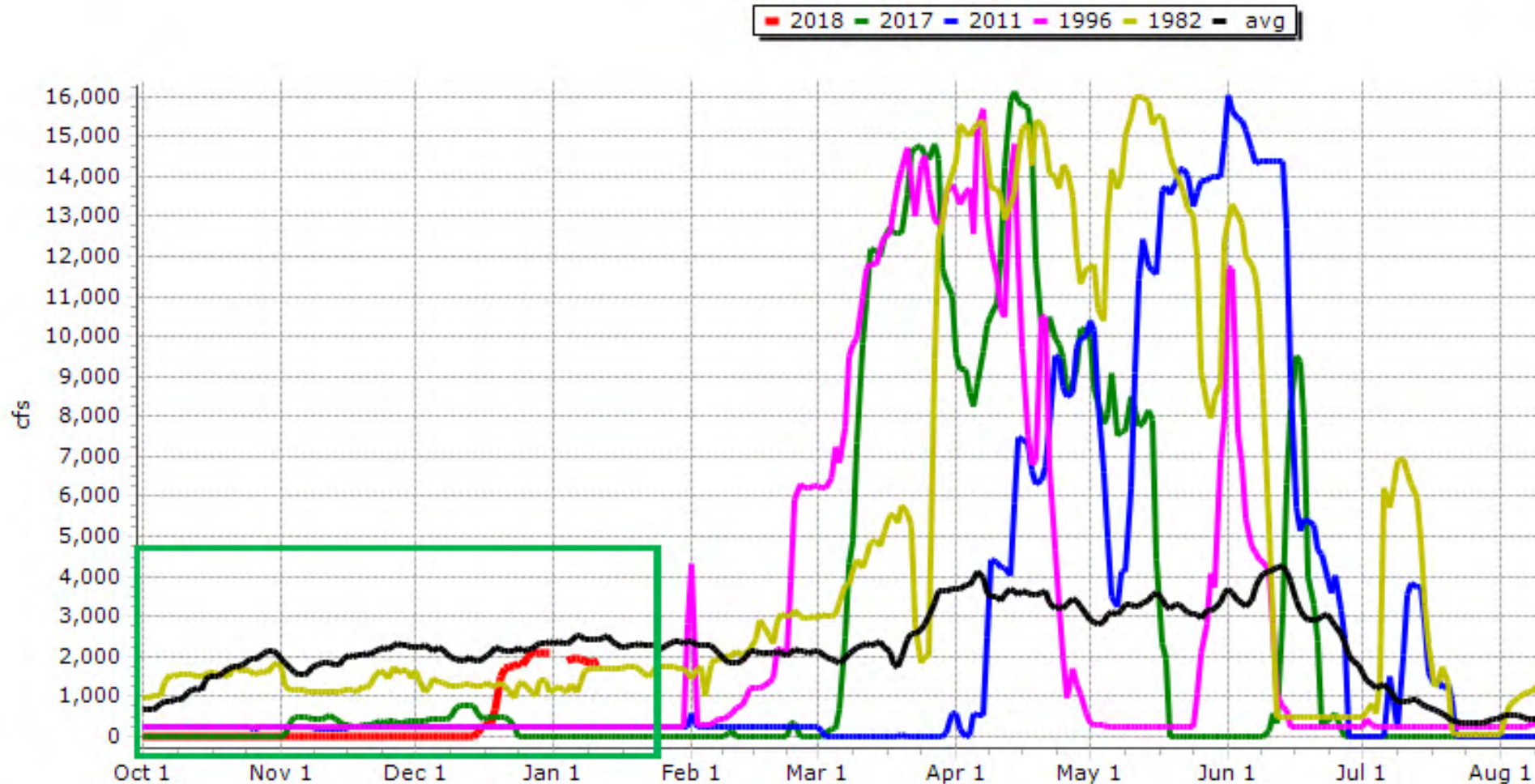
Outflow from Island Park Reservoir



RECLAMATION

Milner Discharge

Snake River at Milner, Idaho Elevation:4063.000



RECLAMATION

Preliminary PAL/JCK Operational Plan*

- Palisades Dam – Current discharge = 2,900 cfs.
Discharge to stay the same until late winter.
- American Falls – Current discharge = 7,300 cfs.
Discharge likely to remain steady in the near term.

Open storage space will continue to be approximately 200,000 acre-feet, which Reclamation plans to maintain throughout the winter. The operation of passing inflow will likely continue through the winter months into February/March when a much better picture of snowpack and forecasted spring runoff inflows are known. If future precipitation goes very dry, BOR will fill the reservoir in February/March (~16 days to fill)

- Current Inflow = 6,400 cfs (1981-2010 Average = 6,100 cfs)
- Current Snow Status: 97% of today's date median snow water equivalent above American Falls Dam (45% of Median Peak)
- Current Water Year-to-date Precipitation: 89% of average above American Falls Dam

- Milner Dam
- Current power plant flow rate = 5,400 cfs. Current flow rate through the spillway = 1,900 cfs.
- Total discharge from Milner Dam = 7,300 cfs.
- Ririe Dam
- Current discharge = 0 cfs. Ririe Reservoir is currently rising by approximately 90 acre-feet per day.

- Island Park Dam
- Current Discharge = 500 cfs. Inflows are essentially matching outflow leaving the pool fairly constant.