

# RECLAMATION

*Managing Water in the West*

## Bighorn Lake/Yellowtail Dam Operations

November 12, 2014

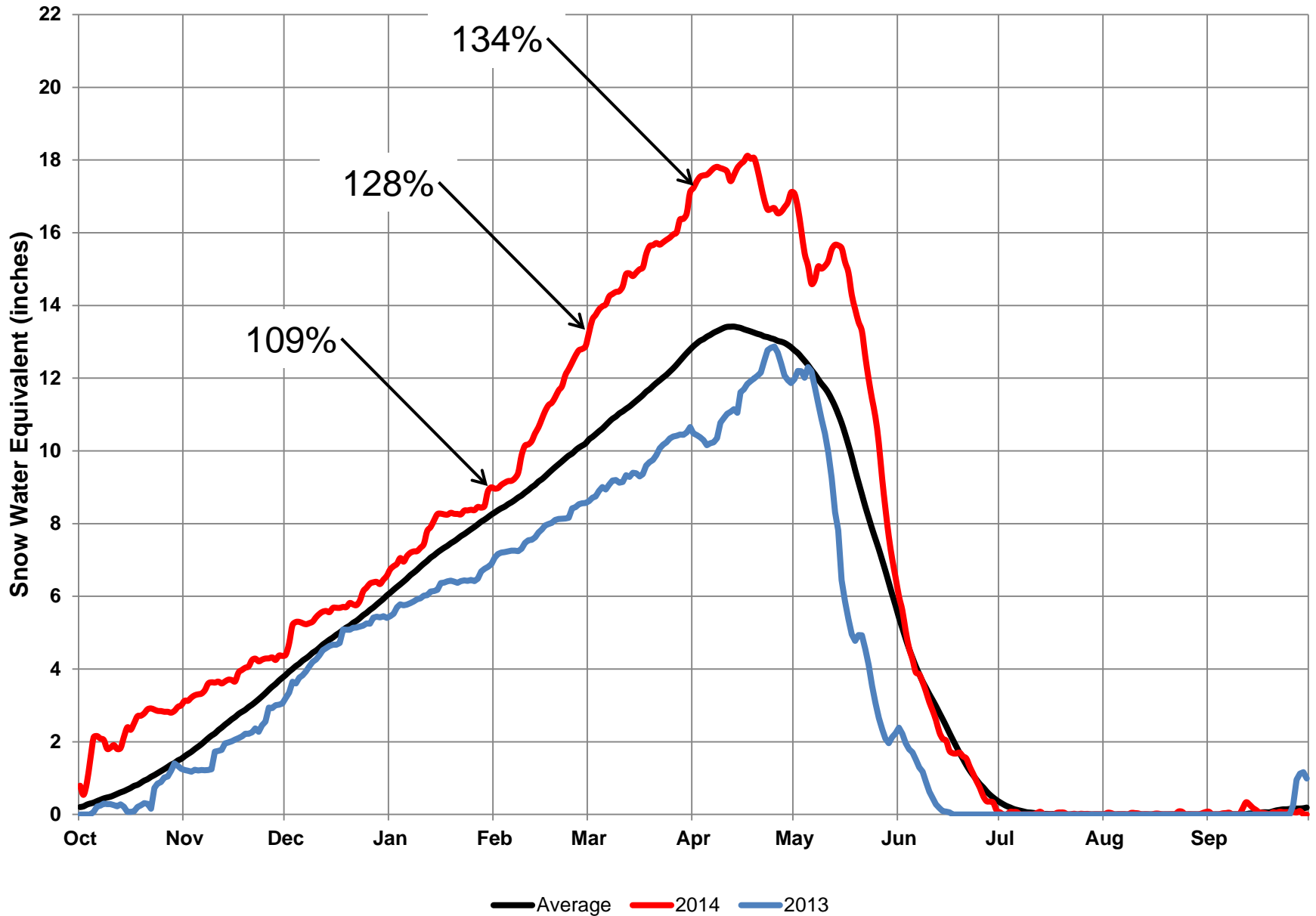


U.S. Department of the Interior  
Bureau of Reclamation

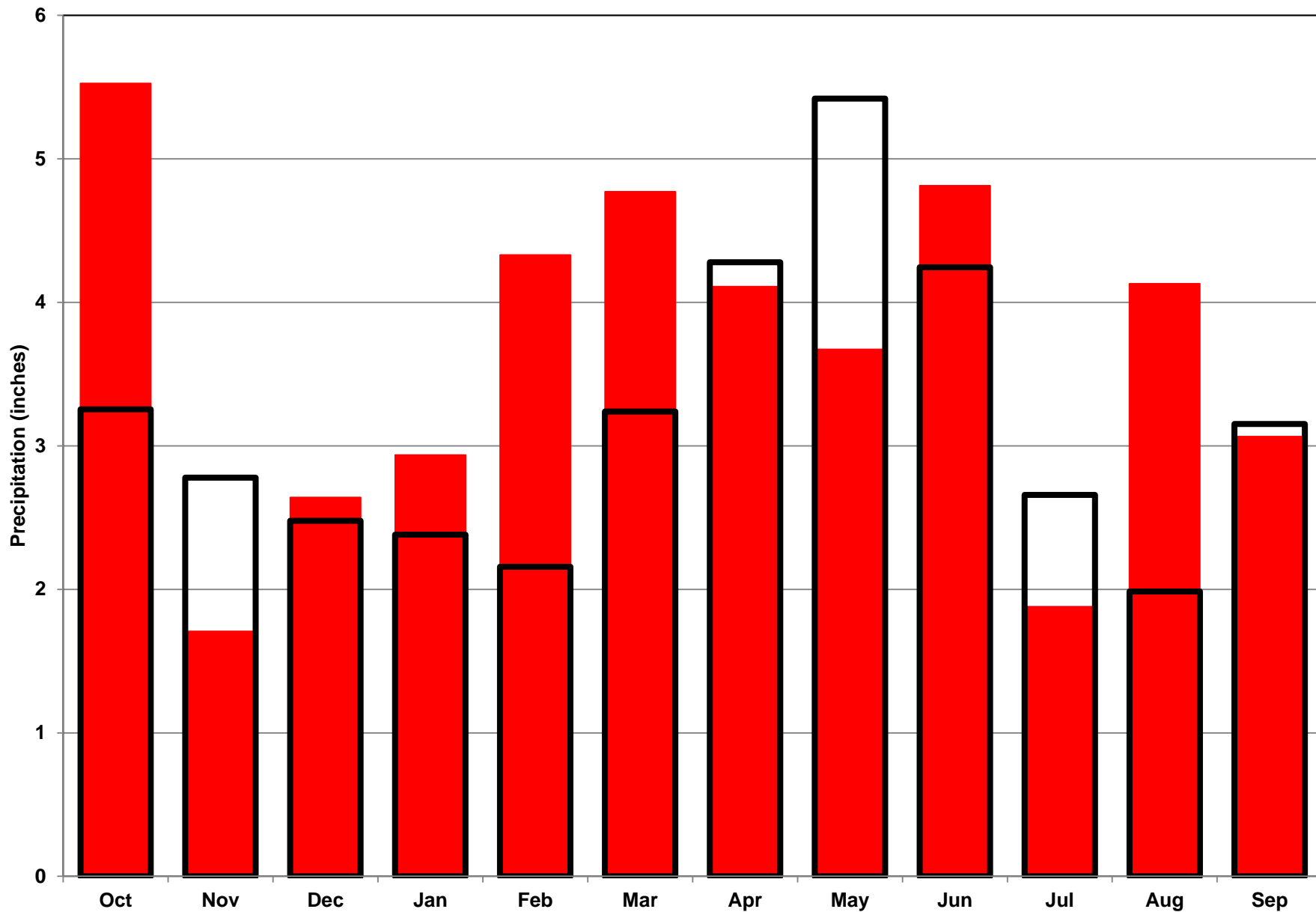
# Water Year 2014 Review

RECLAMATION

# Mountain Snowpack

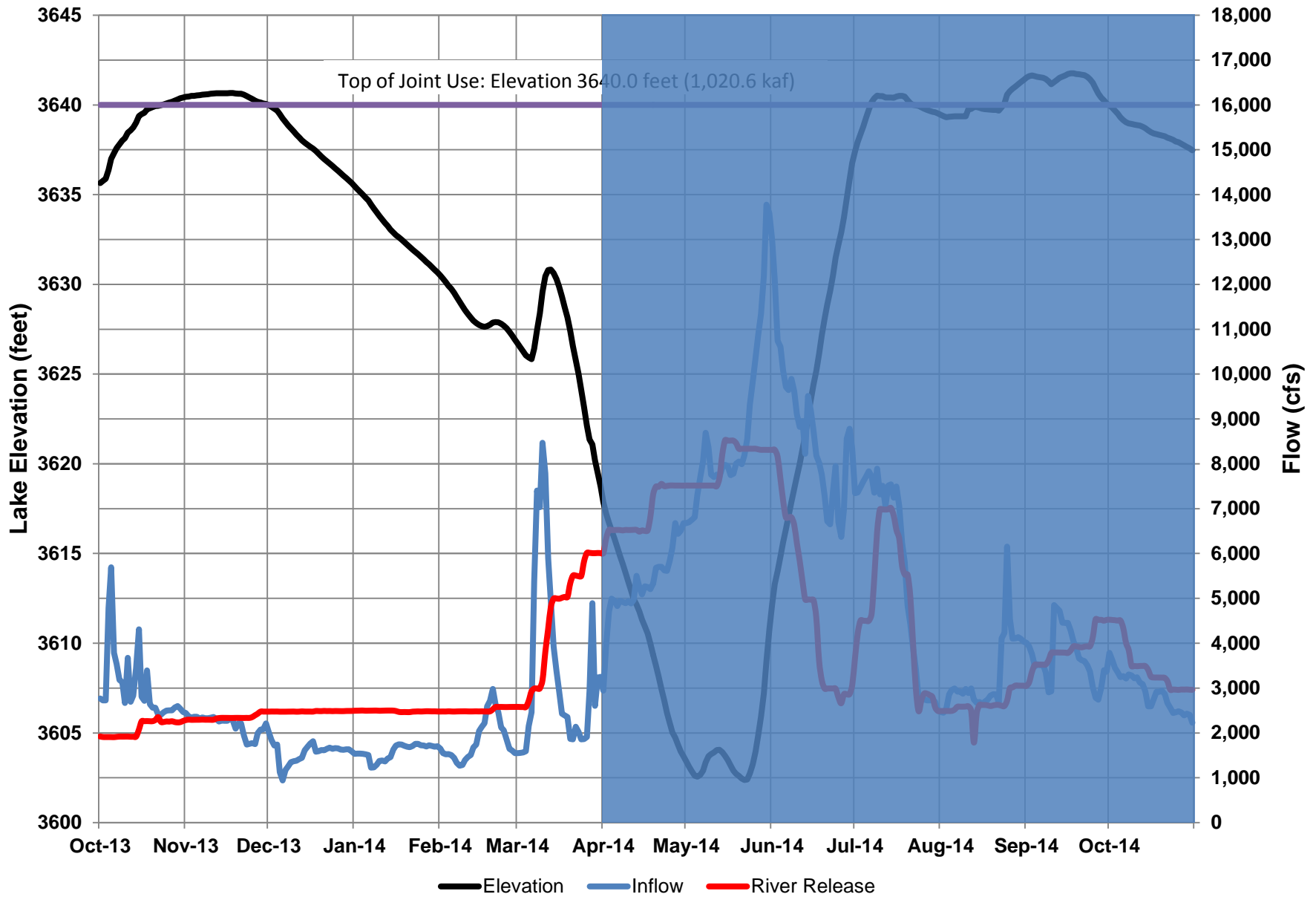


# Bighorn River Basin Precipitation

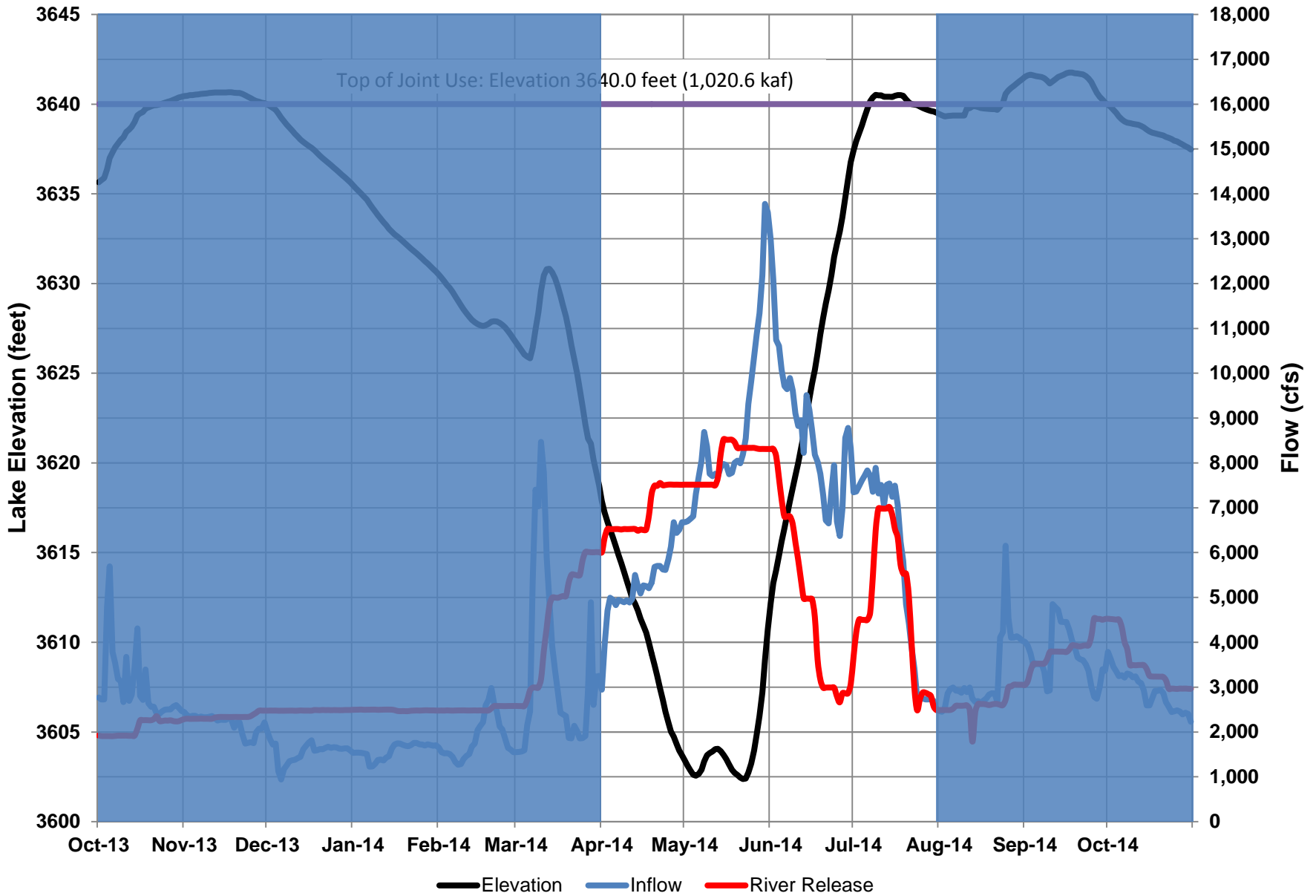


RECLAMATION

# Bighorn Lake Operations 2014



# Bighorn Lake Operations 2014

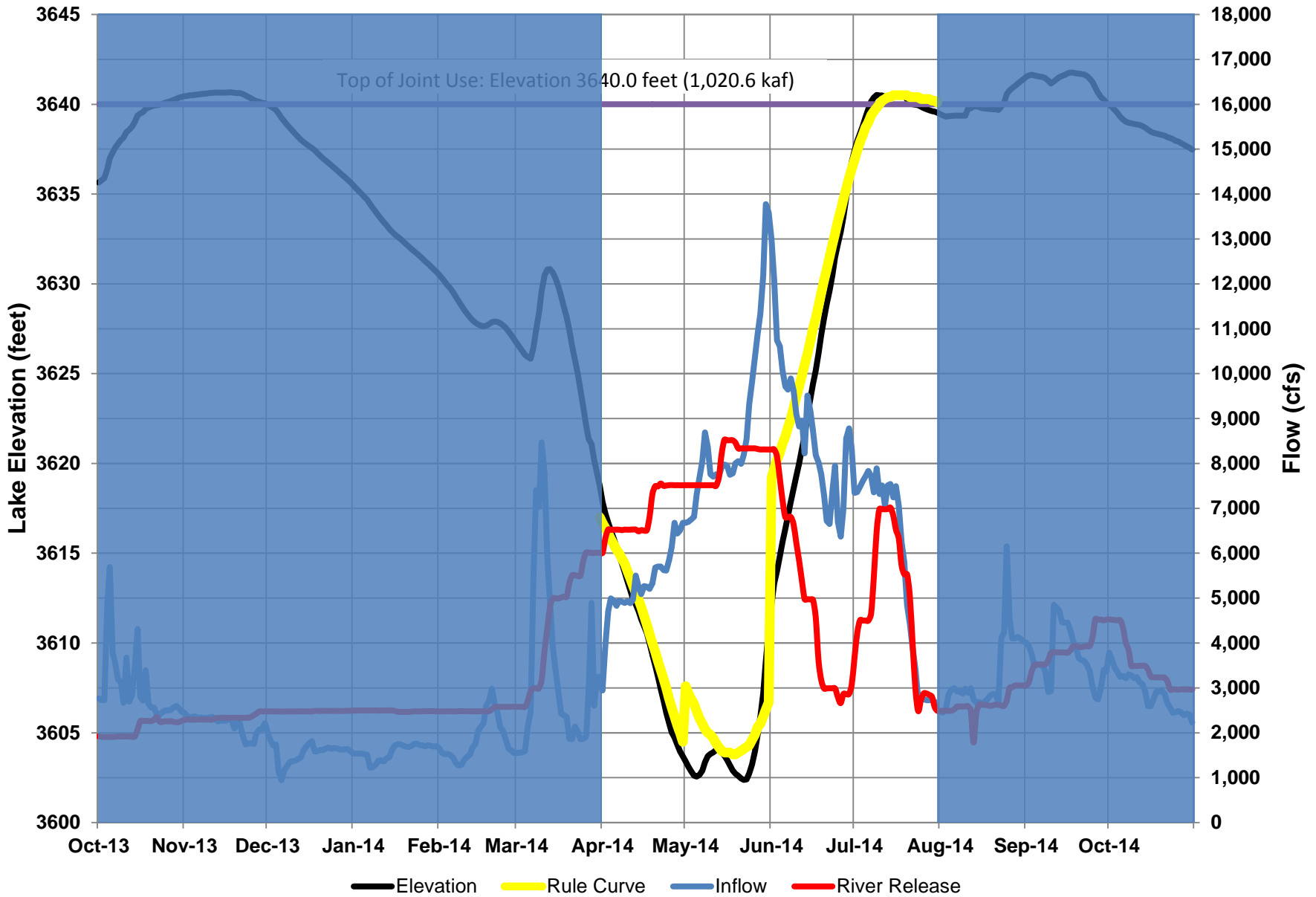


RECLAMATION

# 2014 April-July Forecasts & Rule Curve Targets

<u>Date</u>	<u>Apr-Jul Forecast</u>	<u>% of Avg</u>	<u>Rule Curve Min Elev.</u>	<u>Date</u>
Jan. 1	1,143,200	107%	3613.3	5/06
Feb. 1	1,140,000	107%	3613.3	5/06
Mar. 1	1,646,700	154%	3606.8	5/16
April 1	1,960,800	183%	3600.4	5/18
May 1	1,952,400	183%	3603.8	5/18
June 1	1,633,384	153%	3619.2	6/01
<b>Actual</b>	<b>1,724,900</b>	<b>161%</b>		

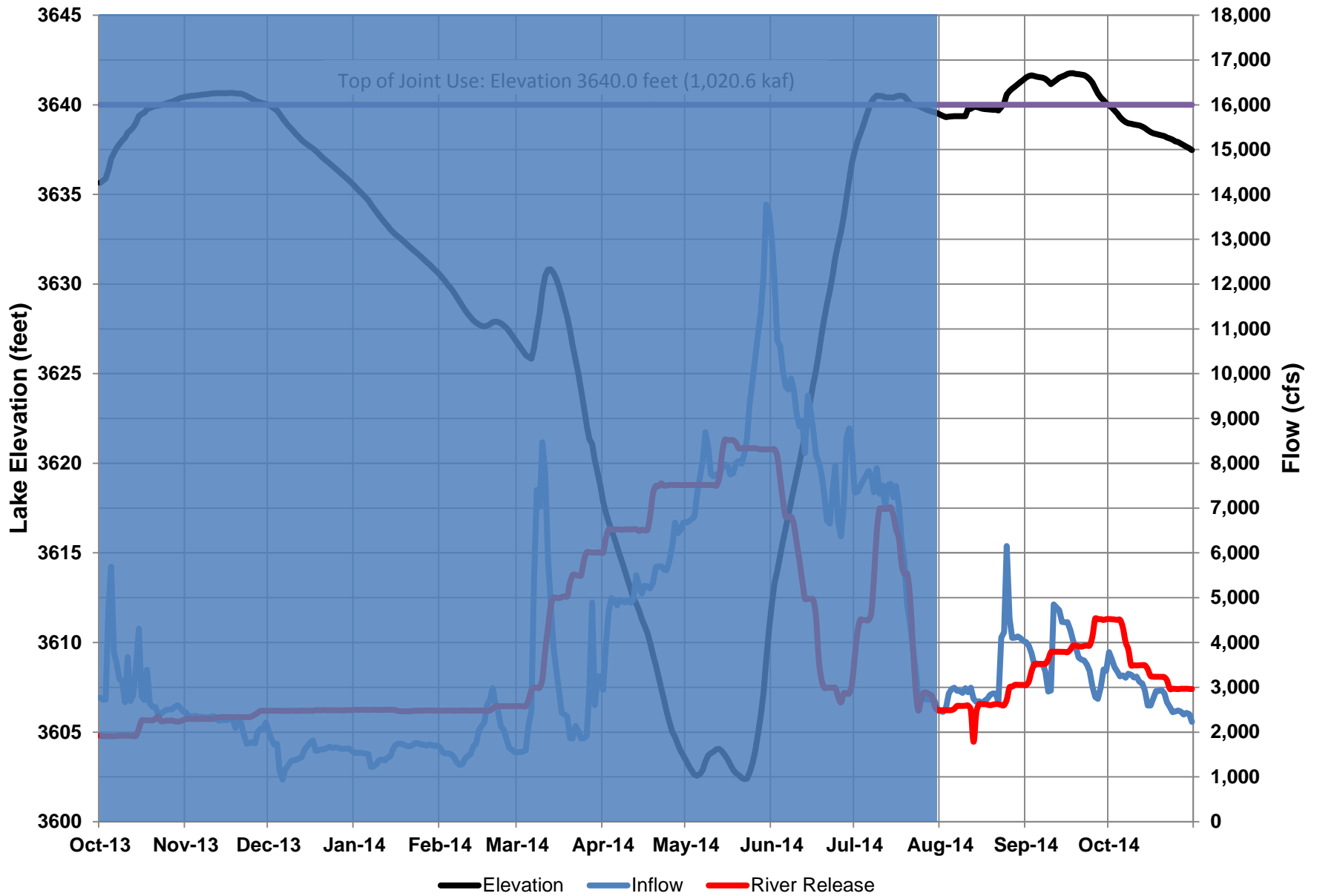
# Bighorn Lake Operations 2014



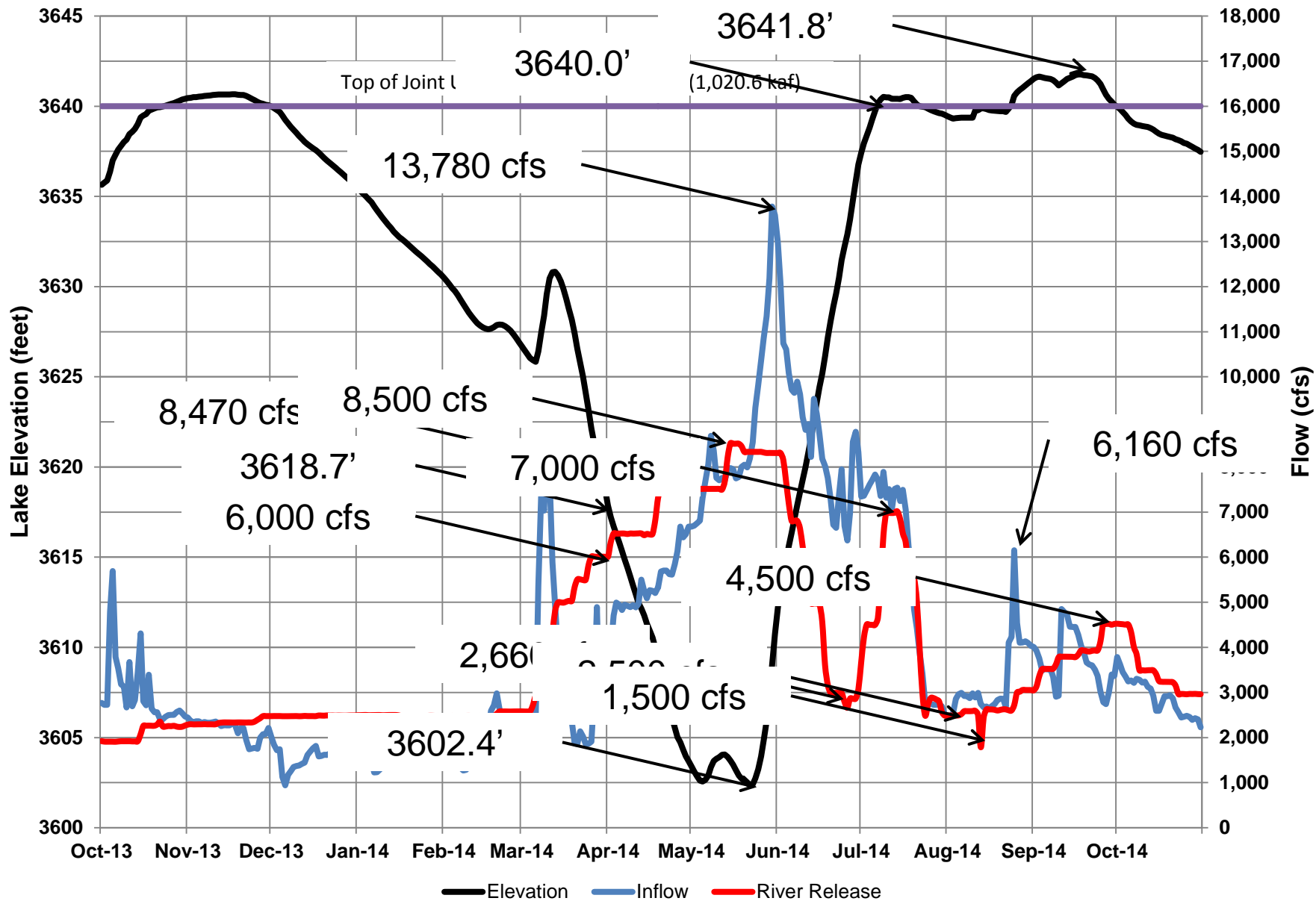
RECLAMATION



# Bighorn Lake Operations 2014

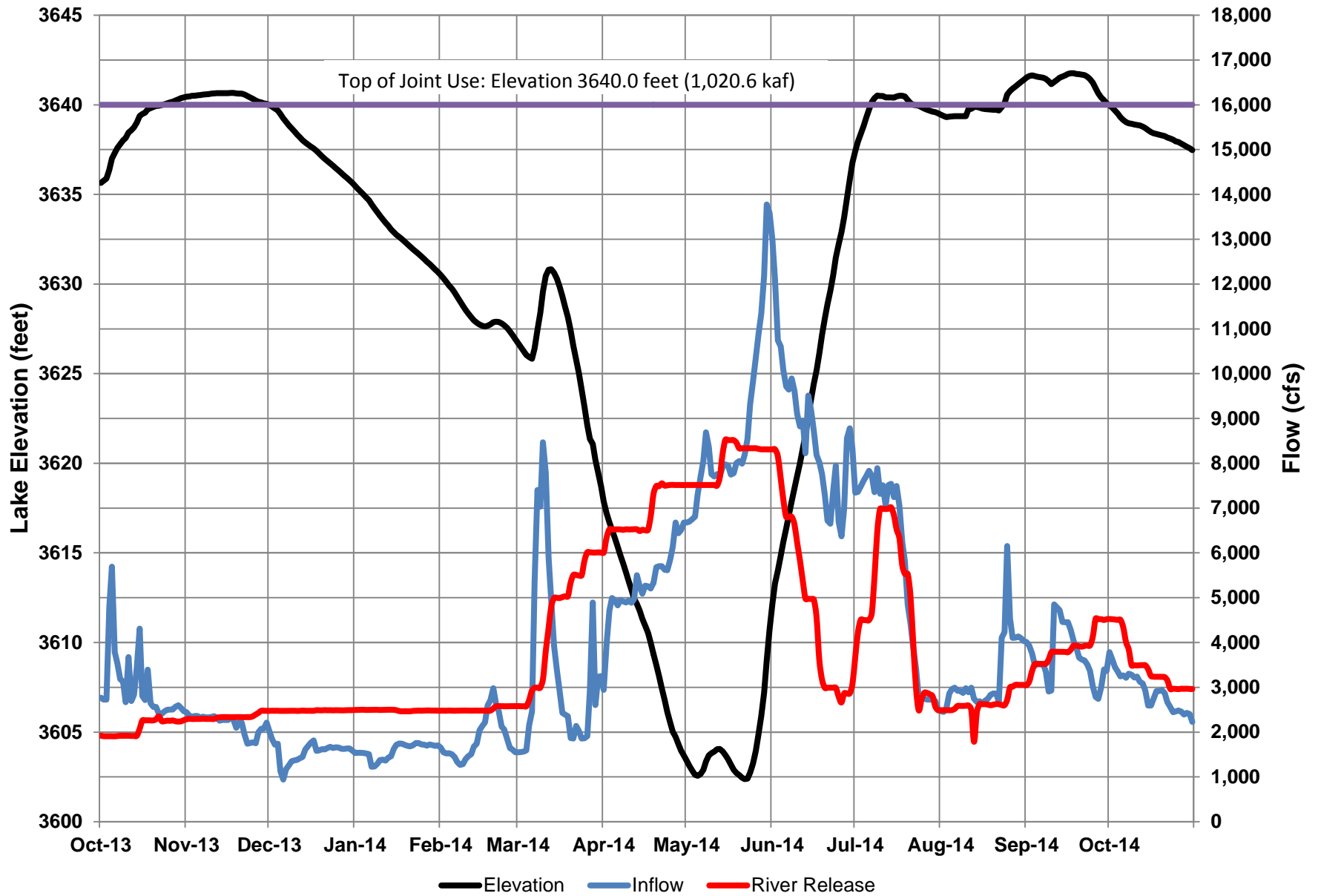


# Bighorn Lake Operations 2014



RECLAMATION

# Bighorn Lake Operations 2014



RECLAMATION

# **Water Year 2015**

## **Fall and Winter Outlook**

**RECLAMATION**

# Conditions on November 1, 2014

Elevation	3637.5 - 2.5 feet below full pool 2.9 feet lower than last year
Storage	989,700 acre-feet: 111% of average 97% full
Inflows	2,200 cfs
Outflow	3,000 cfs

# November through March Gains and Release

April-October Gain = 320,800 acre-feet

Calculated November-March Gain = 268,900 acre-feet

Upstream Reservoir Fall & Winter Releases =

Boysen = 940 cfs

Buffalo Bill = 365 cfs

End-of-October Storage = 989,700 acre-feet

Projected End-of-March Target Elevation = 3617

Calculated Fall & Winter Release for Yellowtail:

River = 2,880 cfs

RECLAMATION

# November through March Gains and Release

April-October Gain = 320,800 acre-feet

Calculated November-March Gain = 268,900 acre-feet

Upstream Reservoir Fall & Winter Releases =

Boysen = 940 cfs

Buffalo Bill = 365 cfs

End-of-October Storage = 989,700 acre-feet

Projected End-of-March Target Elevation = 3619

Calculated Fall & Winter Release for Yellowtail:

River = 2,830 cfs

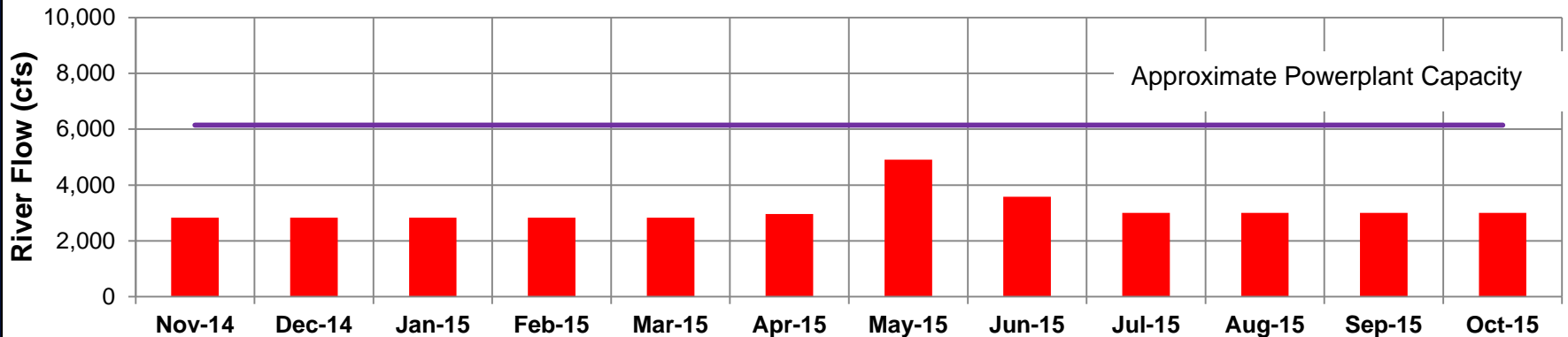
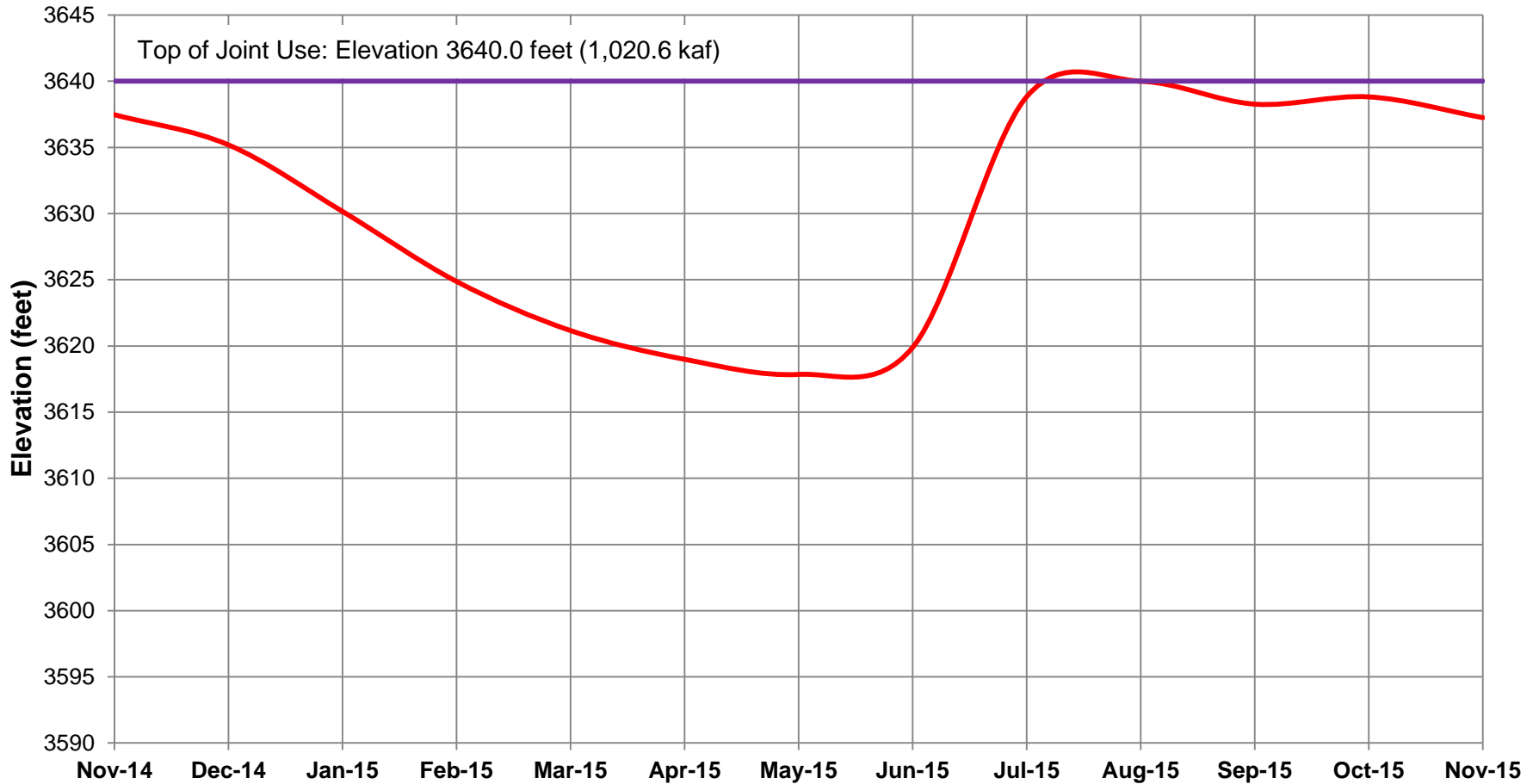
RECLAMATION

# November Monthly Operating Plans

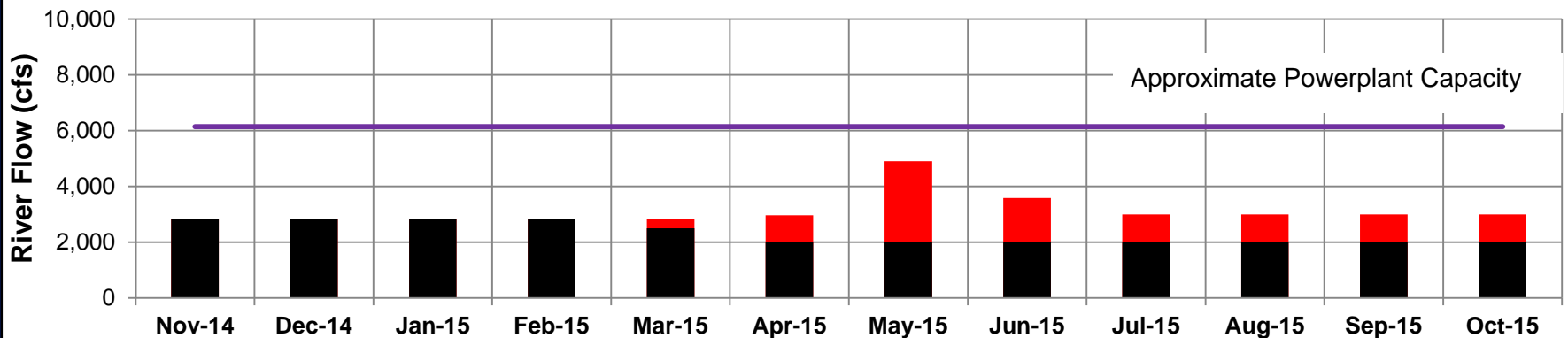
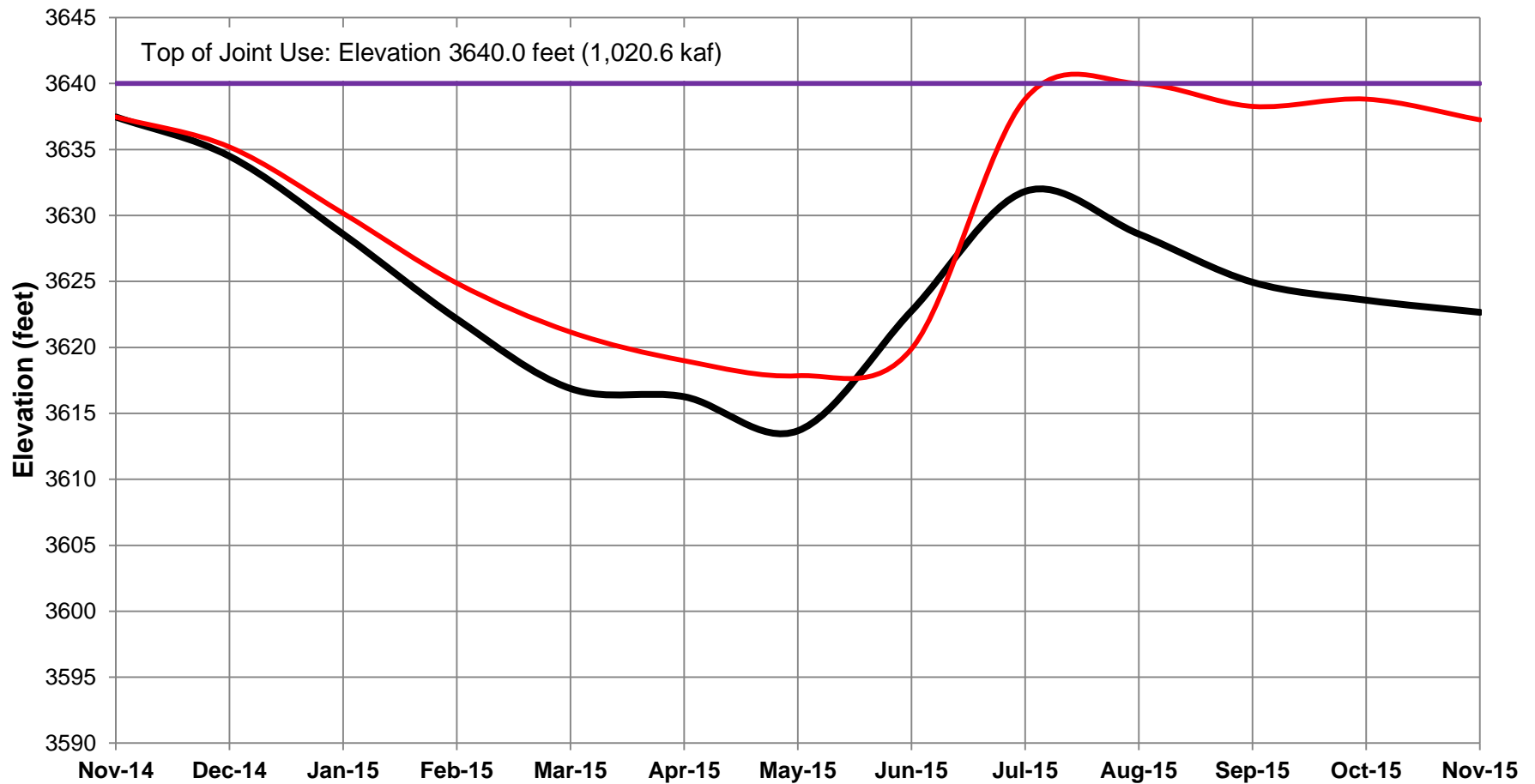
RECLAMATION



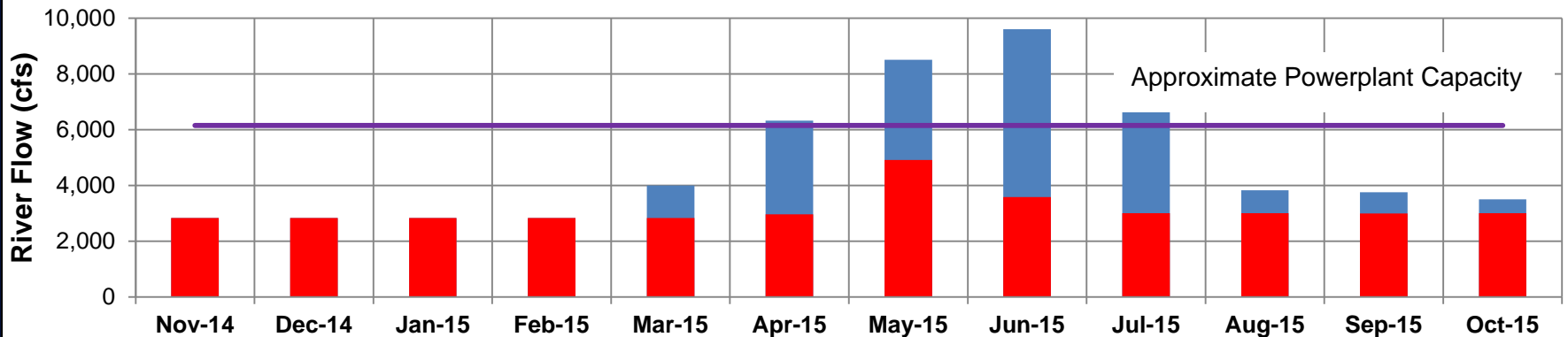
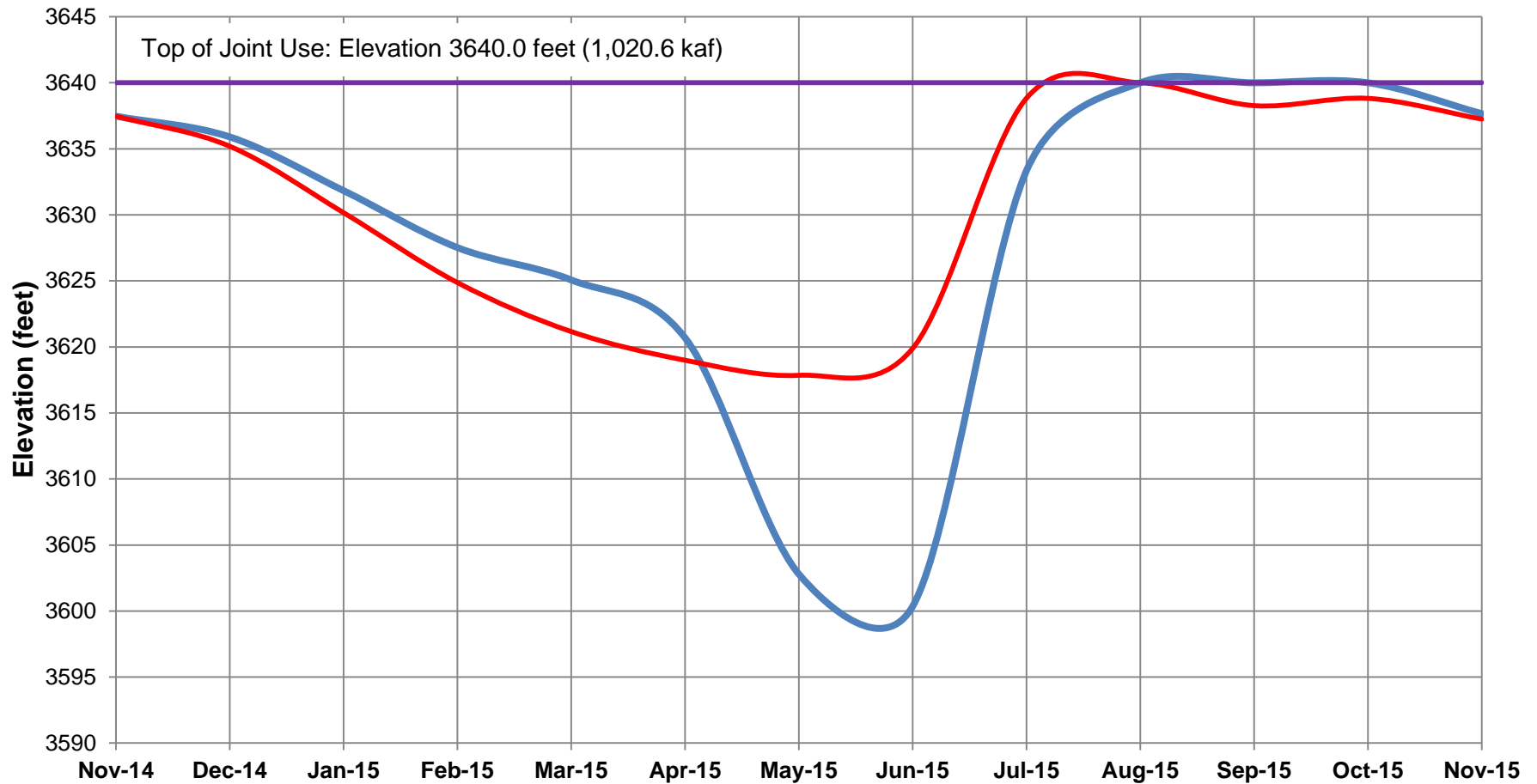
# Most Probable Inflow Operations



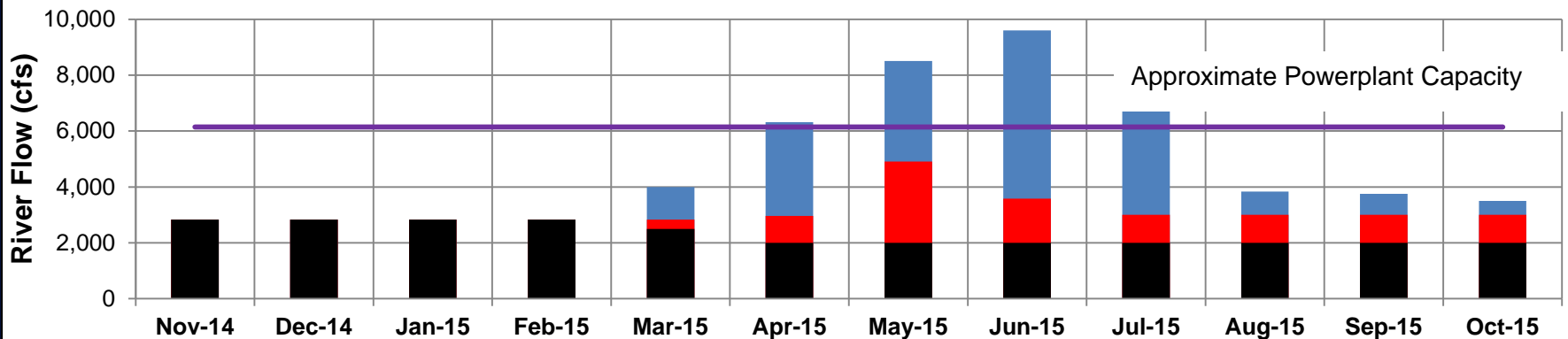
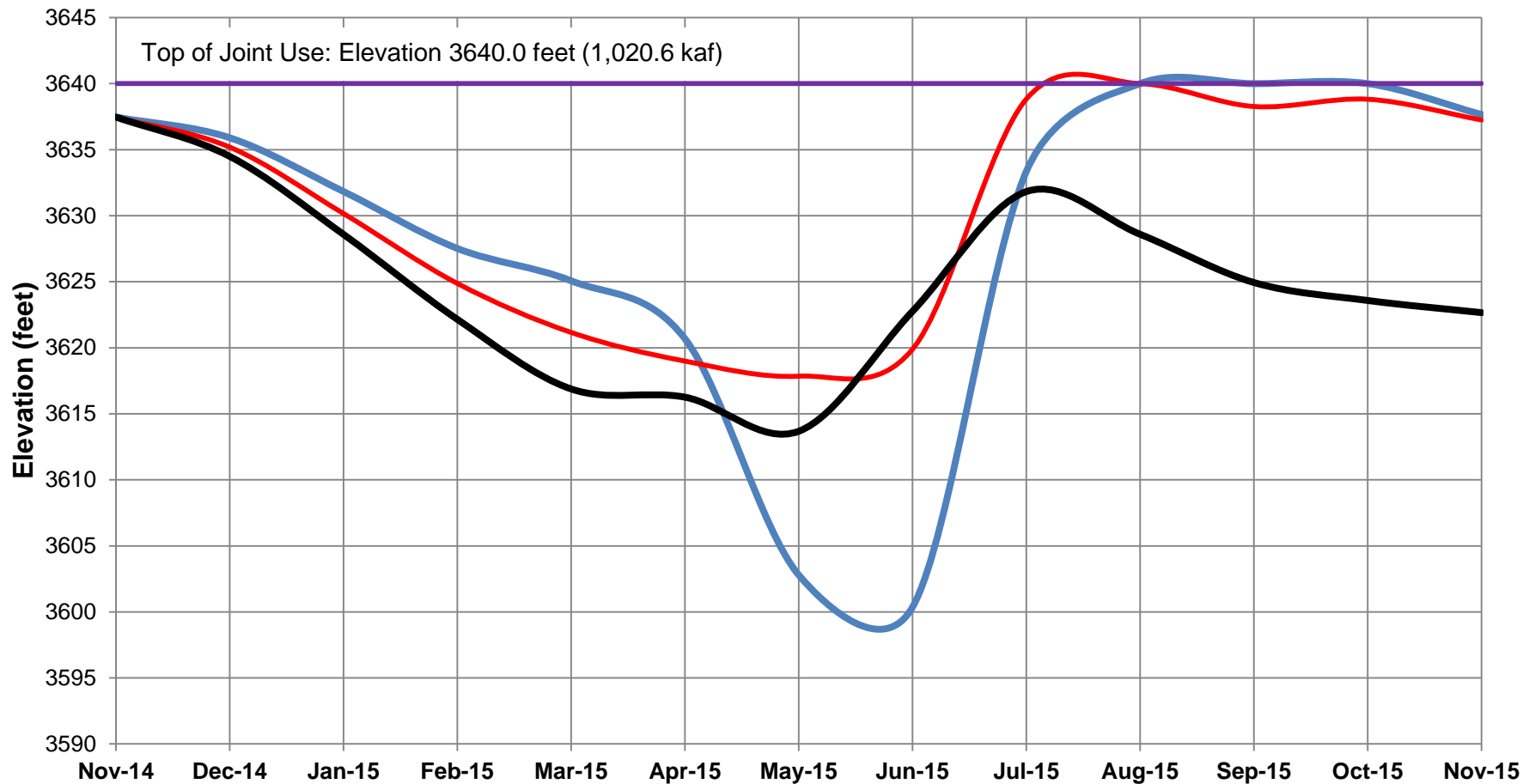
# Most and Minimum Probable Inflow Operations



# Most and Maximum Probable Inflow Operations



# Most, Minimum, and Maximum Probable Inflow Operations



# Reclamation's Internet Website

[www.usbr.gov/gp/lakes\\_reservoirs/wareprts/main\\_menu.html](http://www.usbr.gov/gp/lakes_reservoirs/wareprts/main_menu.html)

- near real-time data available through the HYDROMET data system
- summaries and plots of historical data
- annual reservoir operating plan publication
- monthly water supply reports
- project data
- snow plots
- links to related internet sites

RECLAMATION

# Questions and Comments

RECLAMATION