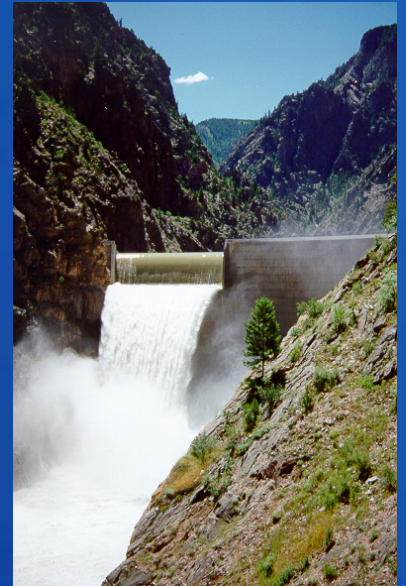


# Aspinall Operations Meeting

January 18, 2018

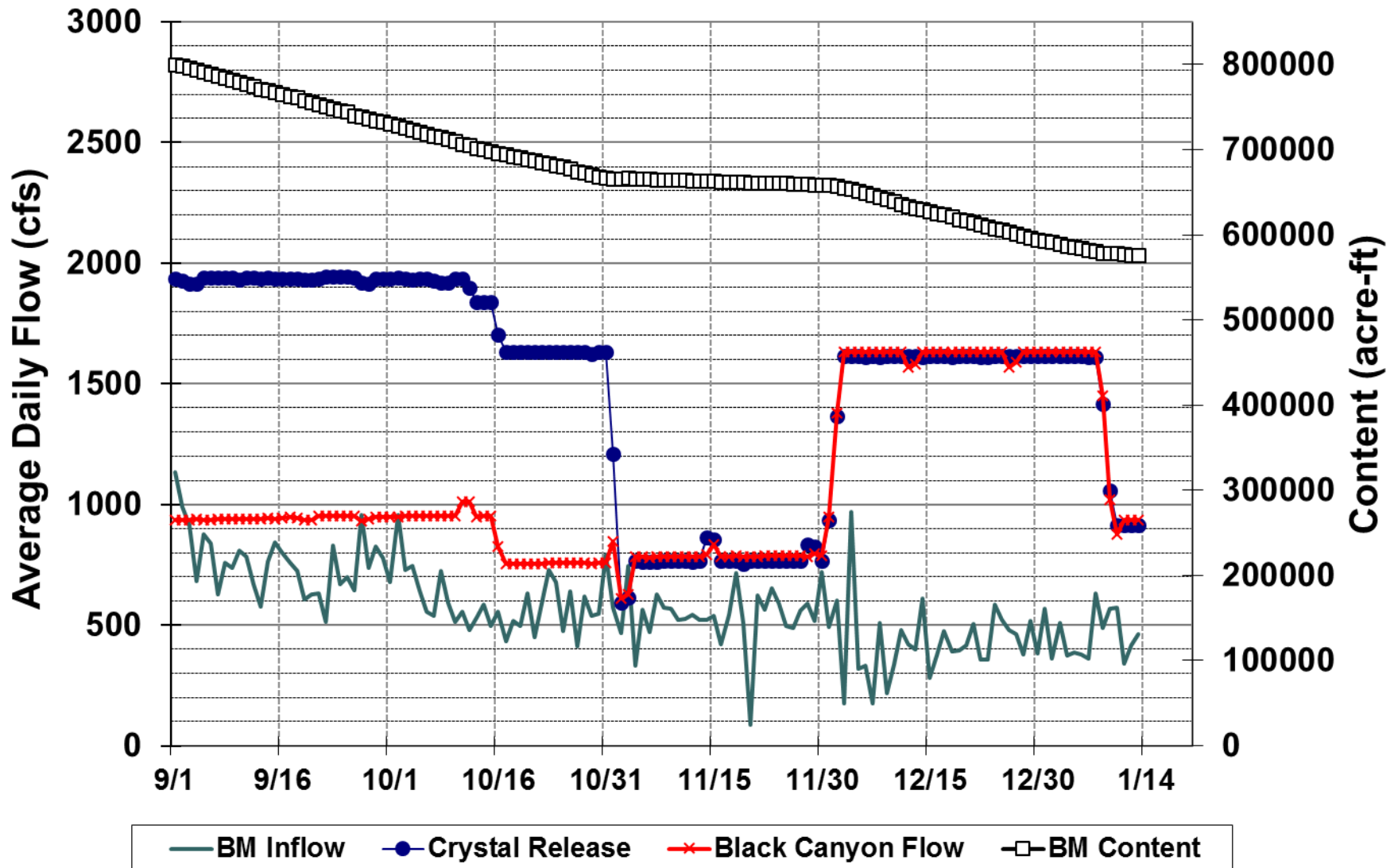


RECLAMATION

# OPERATIONS PAST AND PRESENT

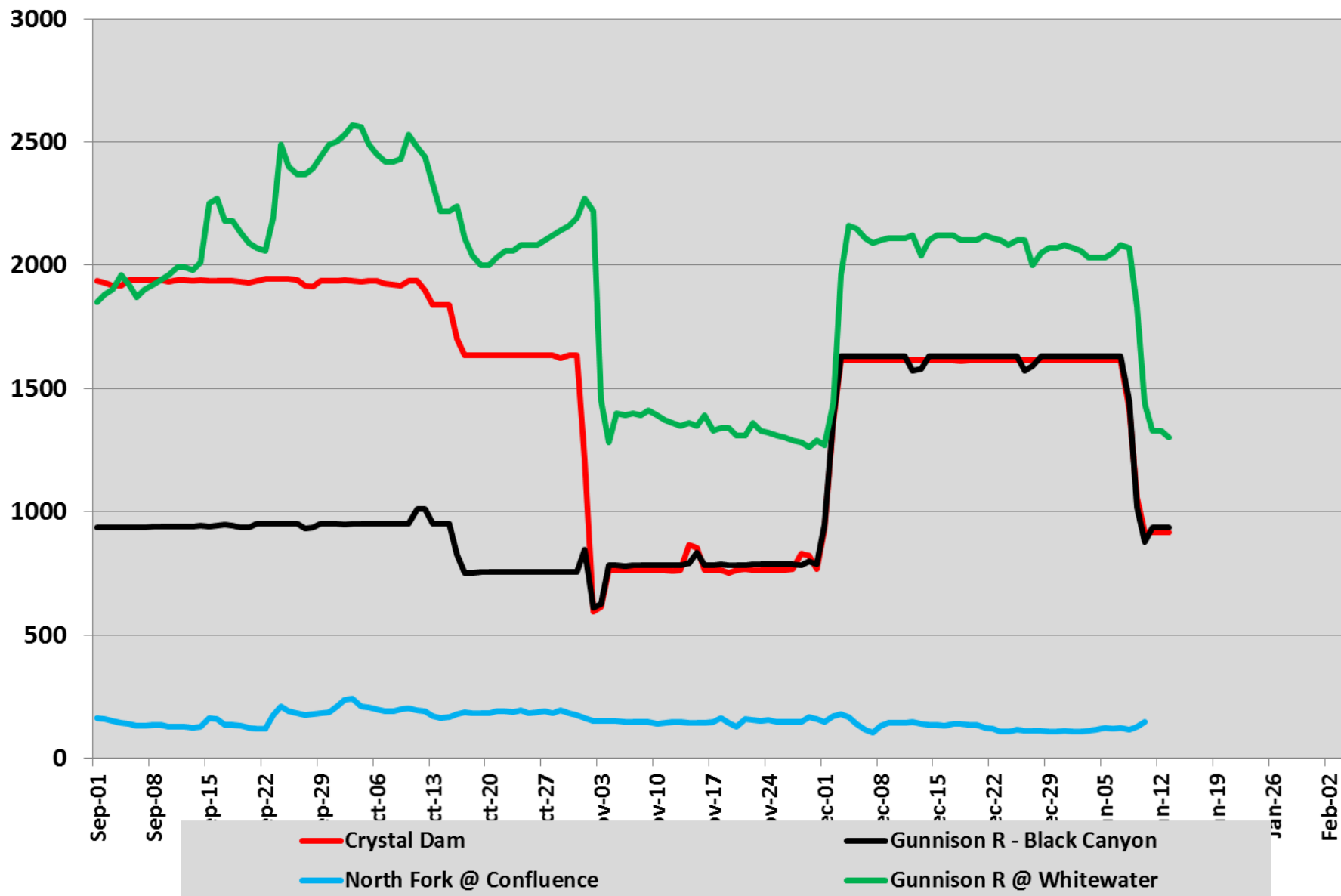
RECLAMATION

## September 2017 - January 2018



RECLAMATION

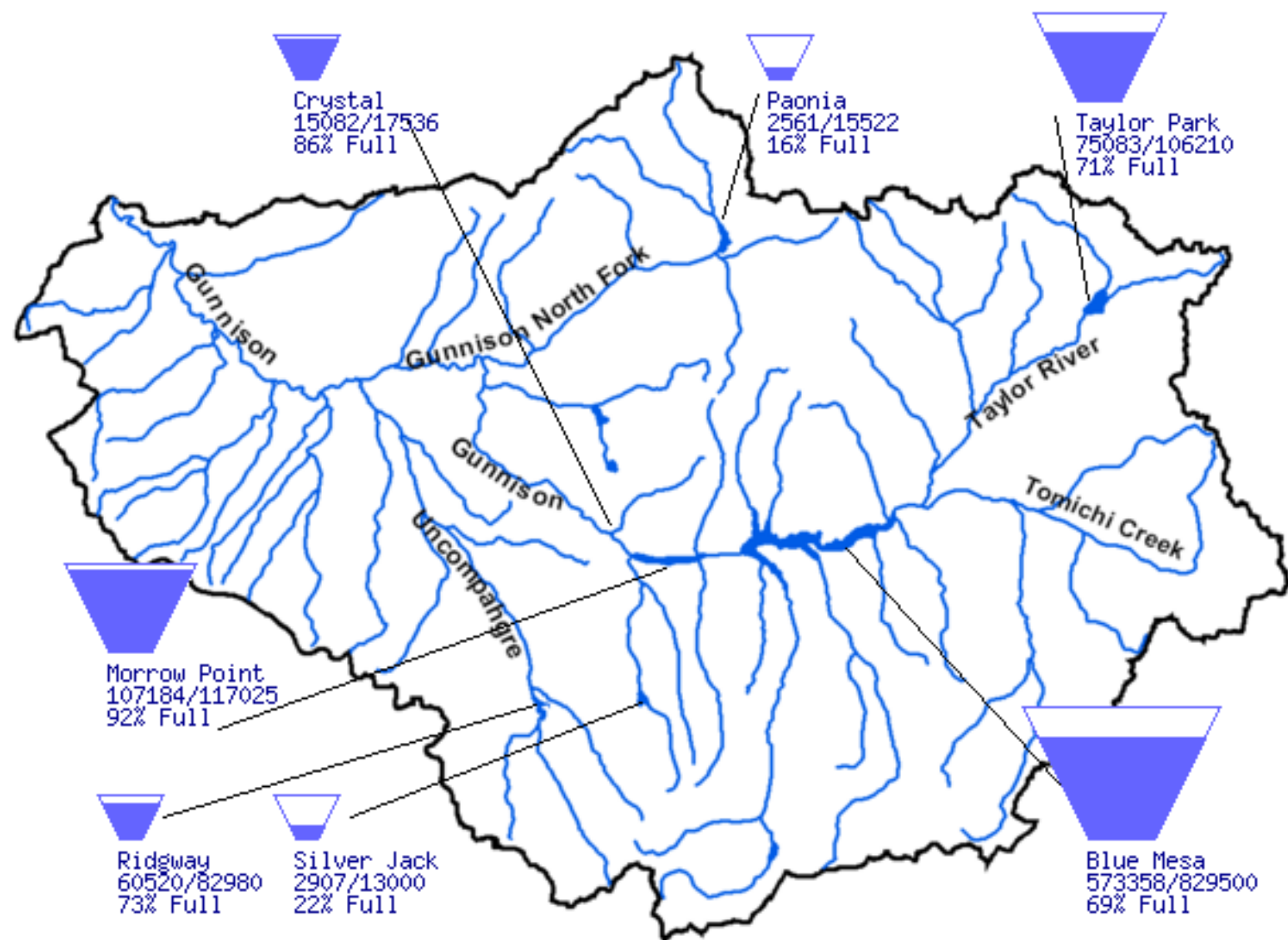
# Gunnison River Flows



RECLAMATION

Data Current as of:  
01/16/2018

## Gunnison River Basin, CO



# RECLAMATION

# SNOW CONDITIONS

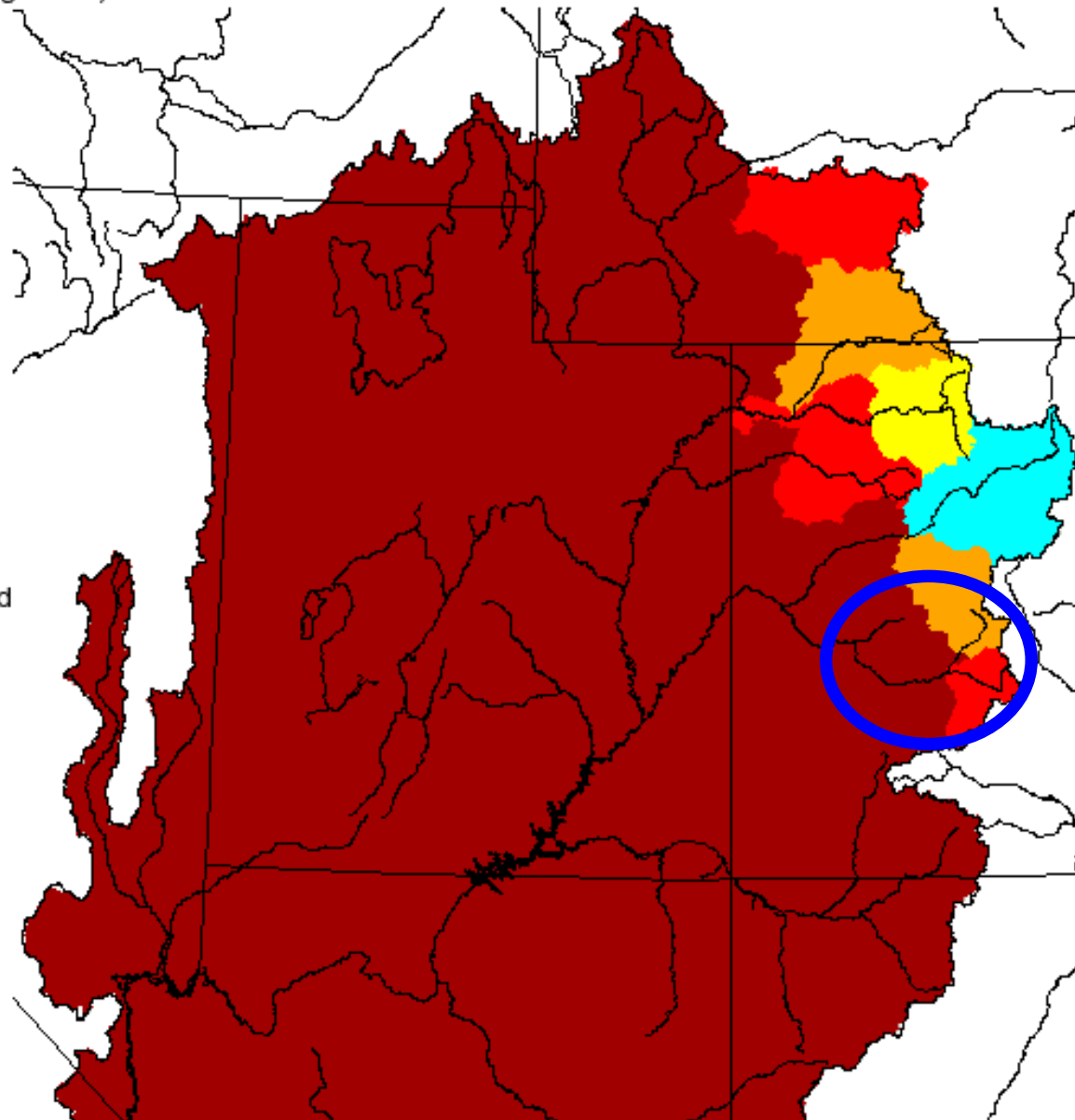
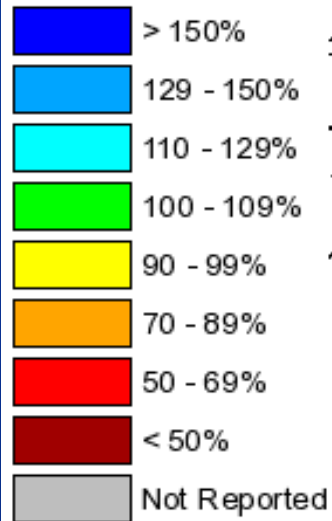
RECLAMATION



# Monthly Precipitation for October 2017

(Averaged by Hydrologic Unit)

## % Average

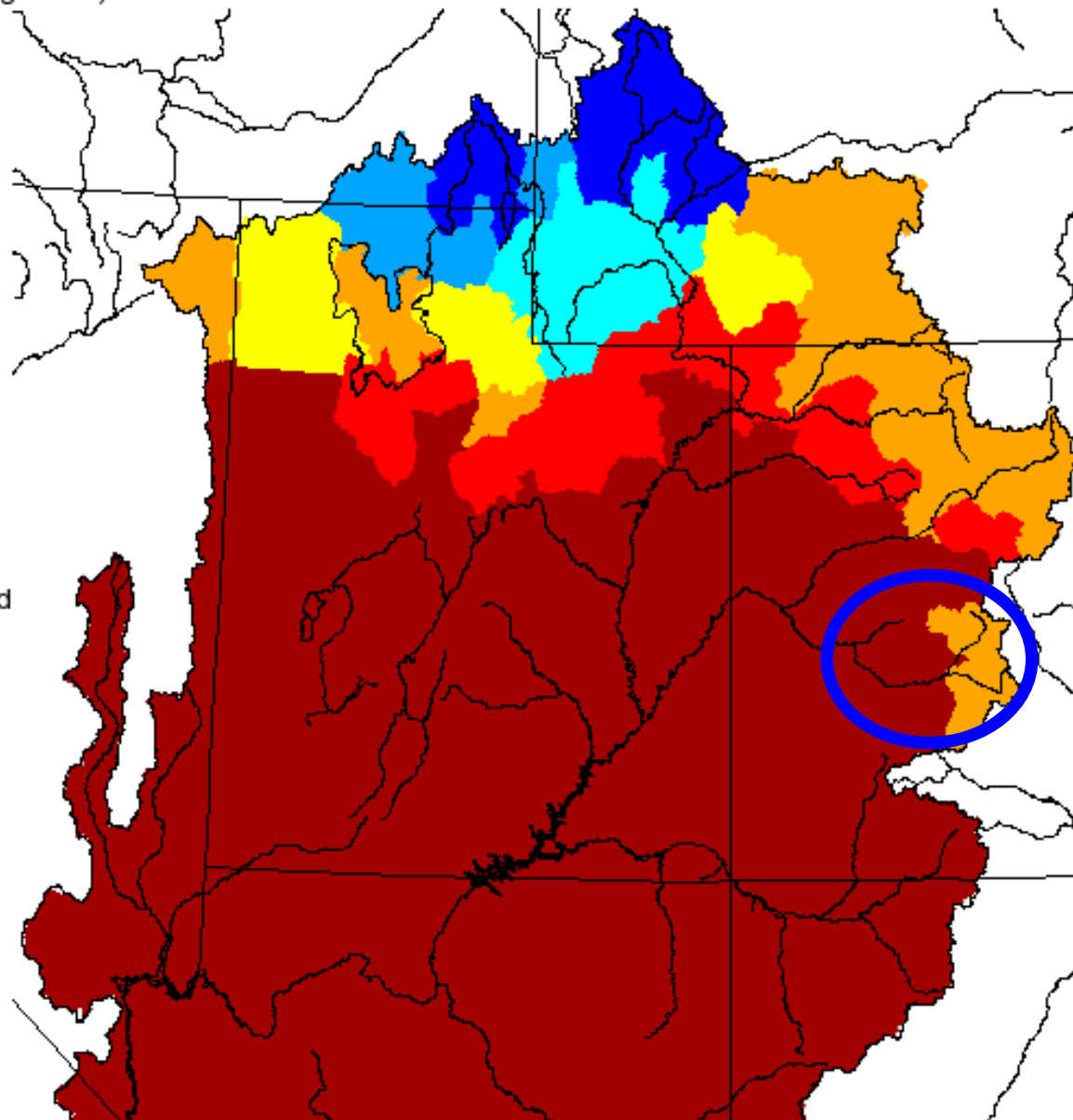
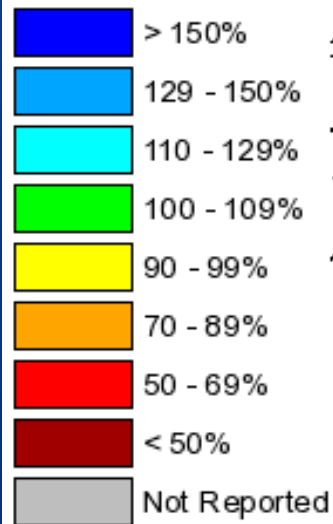


# RECLAMATION

# Monthly Precipitation for November 2017

(Averaged by Hydrologic Unit)

## % Average



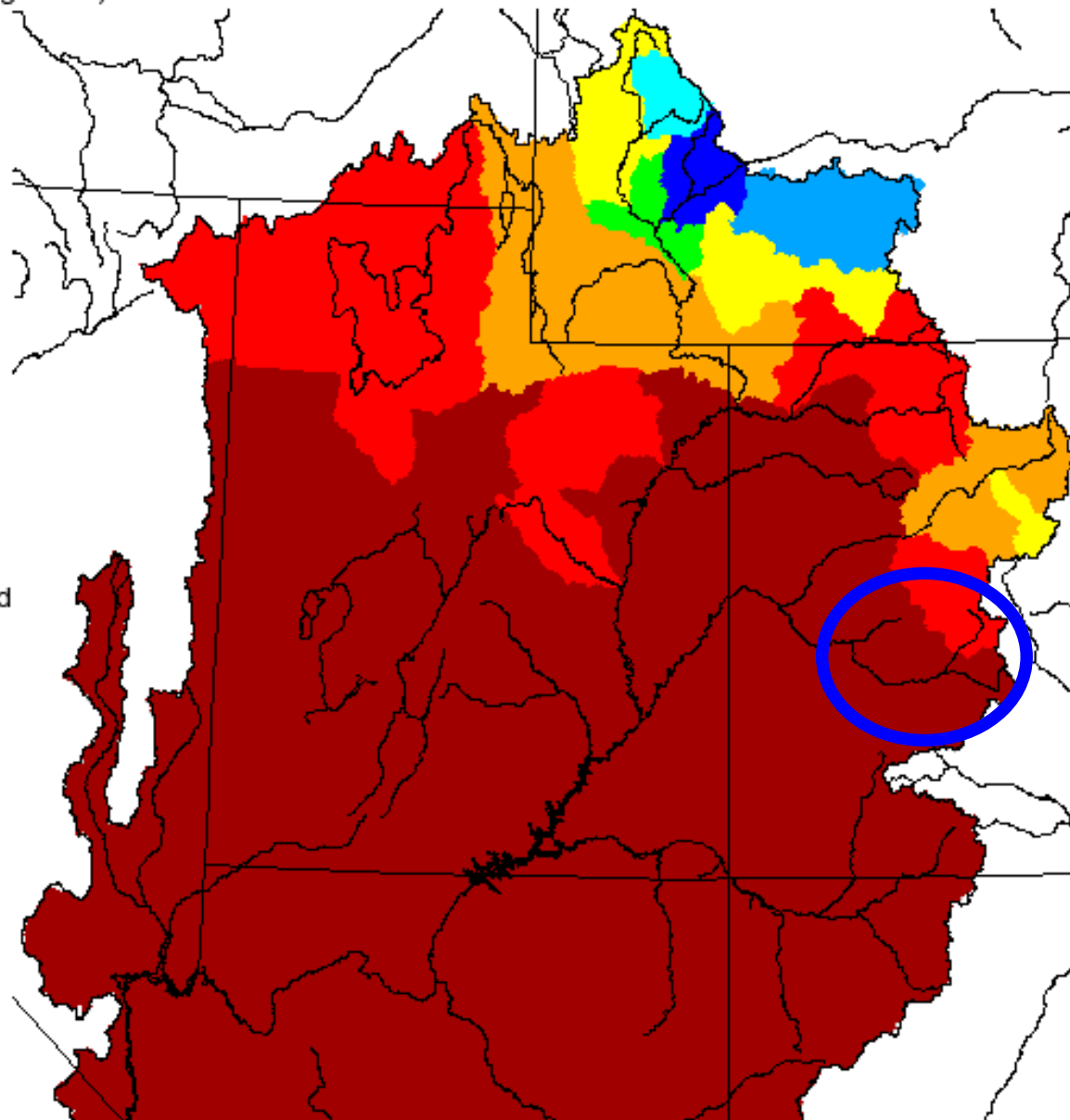
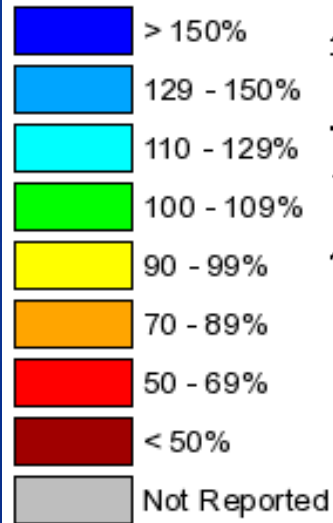
# RECLAMATION



# Monthly Precipitation for December 2017

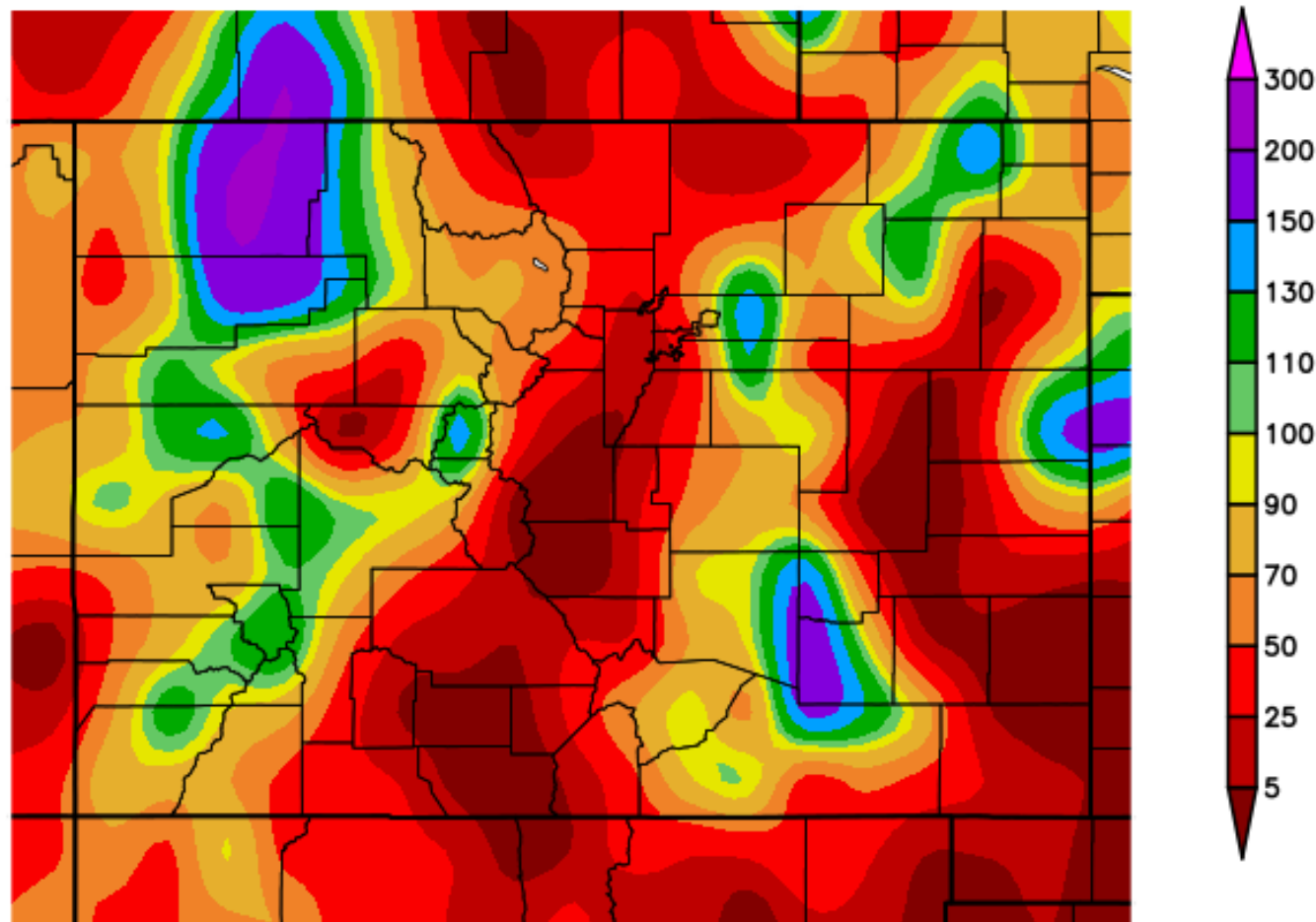
(Averaged by Hydrologic Unit)

## % Average



RECLAMATION

Percent of Normal Precipitation (%)  
1/1/2018 – 1/16/2018



Generated 1/17/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

RECLAMATION

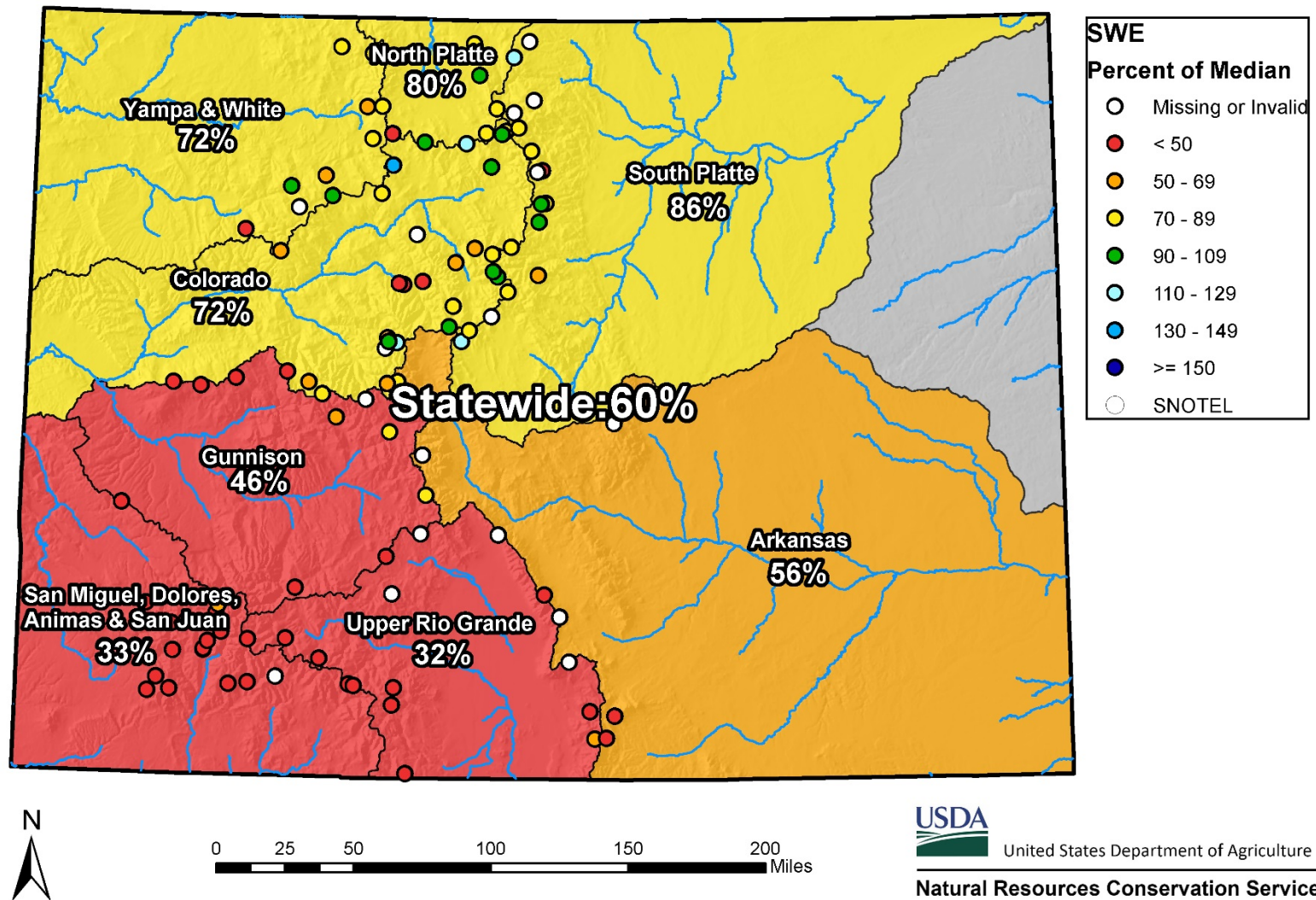
# January Snowpack Conditions

|              | Jan SWE<br>To date | Avg Jan SWE<br>To Date | Avg Total<br>Jan SWE |
|--------------|--------------------|------------------------|----------------------|
| Butte        | 1.2"               | 1.8"                   | 2.9"                 |
| Schofield    | 2.4"               | 3.8"                   | 6.7"                 |
| Porphyry     | 1.4"               | 1.8"                   | 3.4"                 |
| Slumgullion  | .7"                | 1.2"                   | 2.4"                 |
| Park Cone    | .6"                | 1.3"                   | 2.1"                 |
| Independence | 1.3"               | 1.7"                   | 3.0"                 |

RECLAMATION

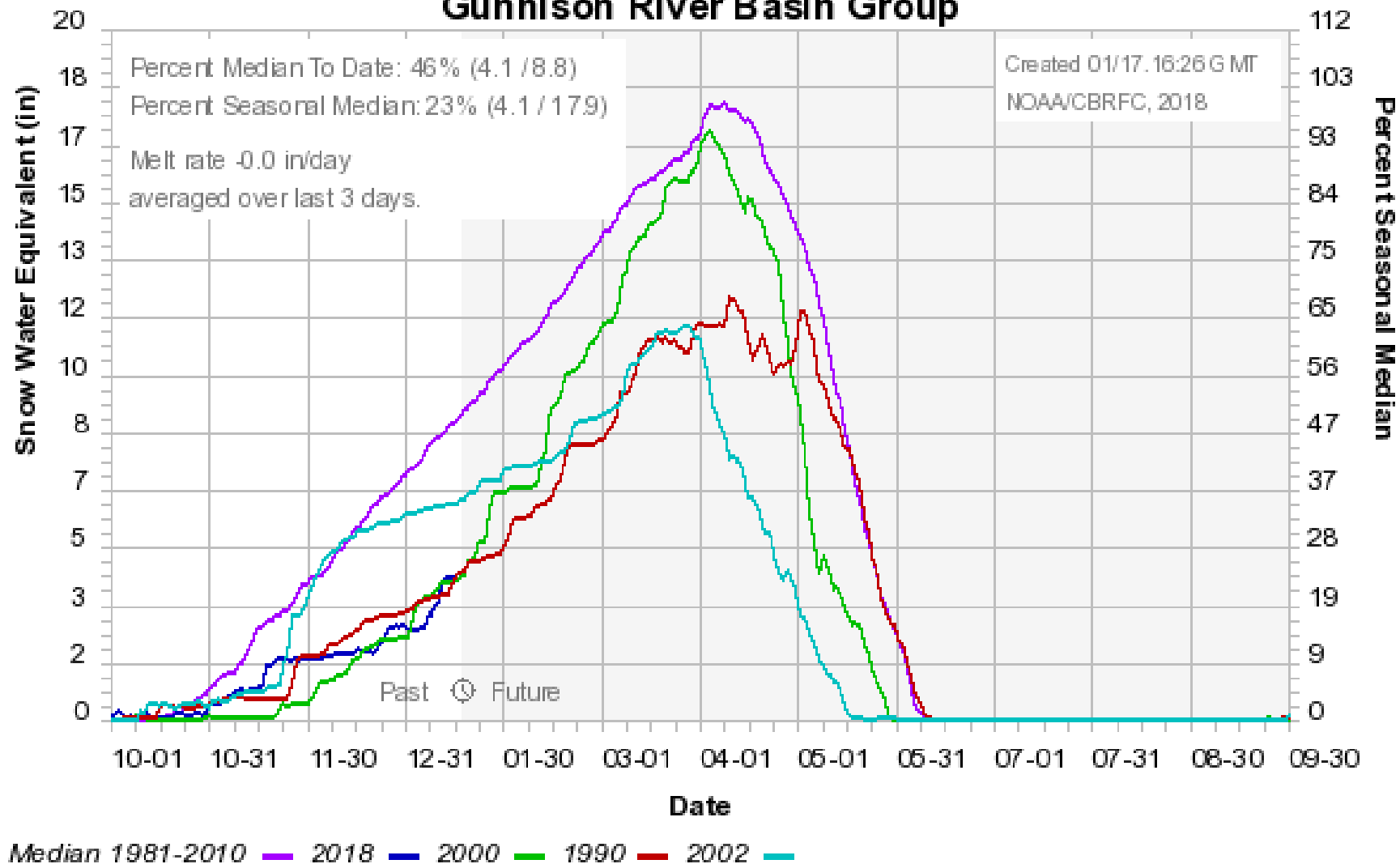
# Colorado SNOTEL Snow Water Equivalent (SWE) Update Map with Site Data

Current as of Jan 17, 2018



# RECLAMATION

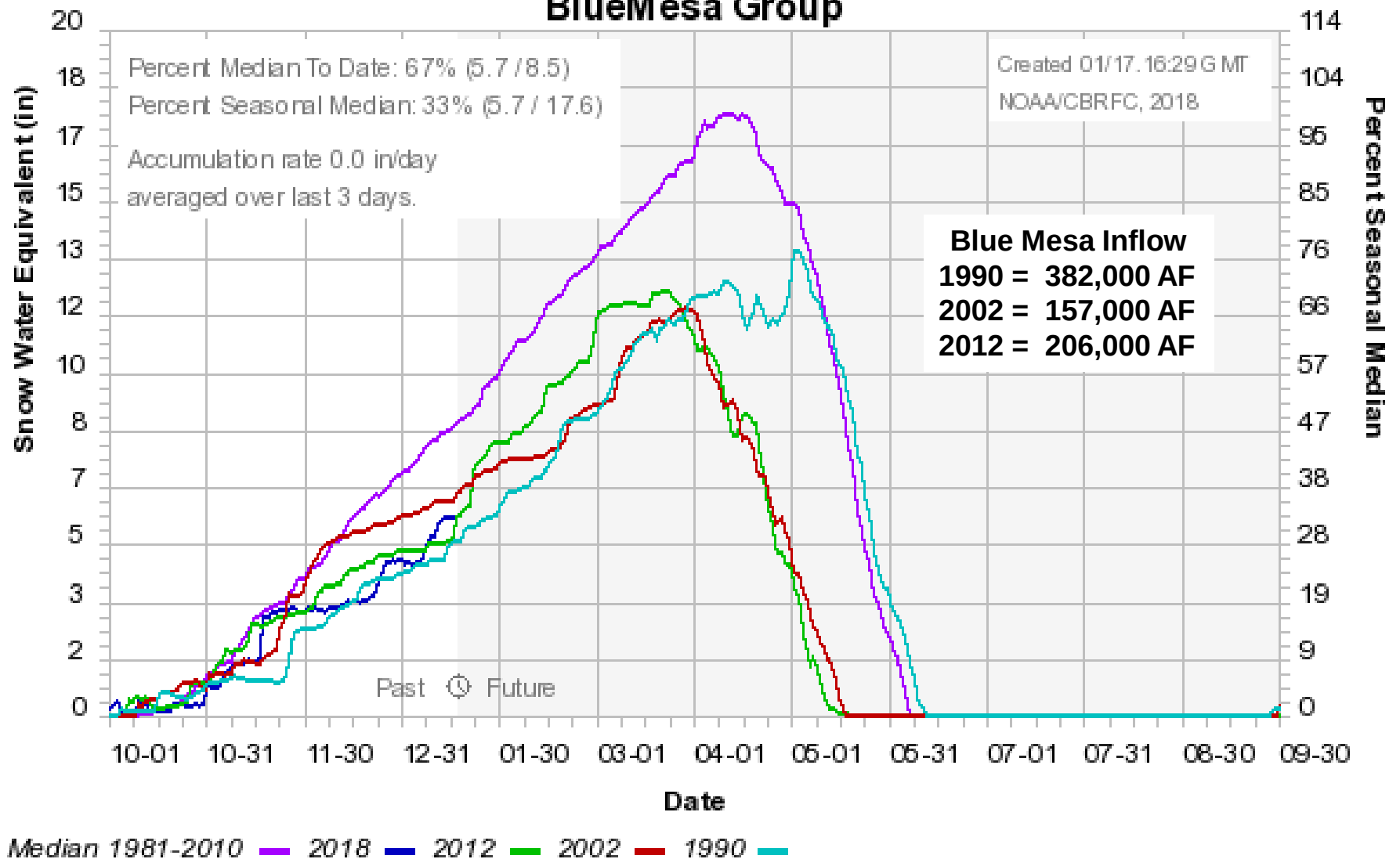
# Colorado Basin River Forecast Center Gunnison River Basin Group



RECLAMATION

# Colorado Basin River Forecast Center

## BlueMesa Group

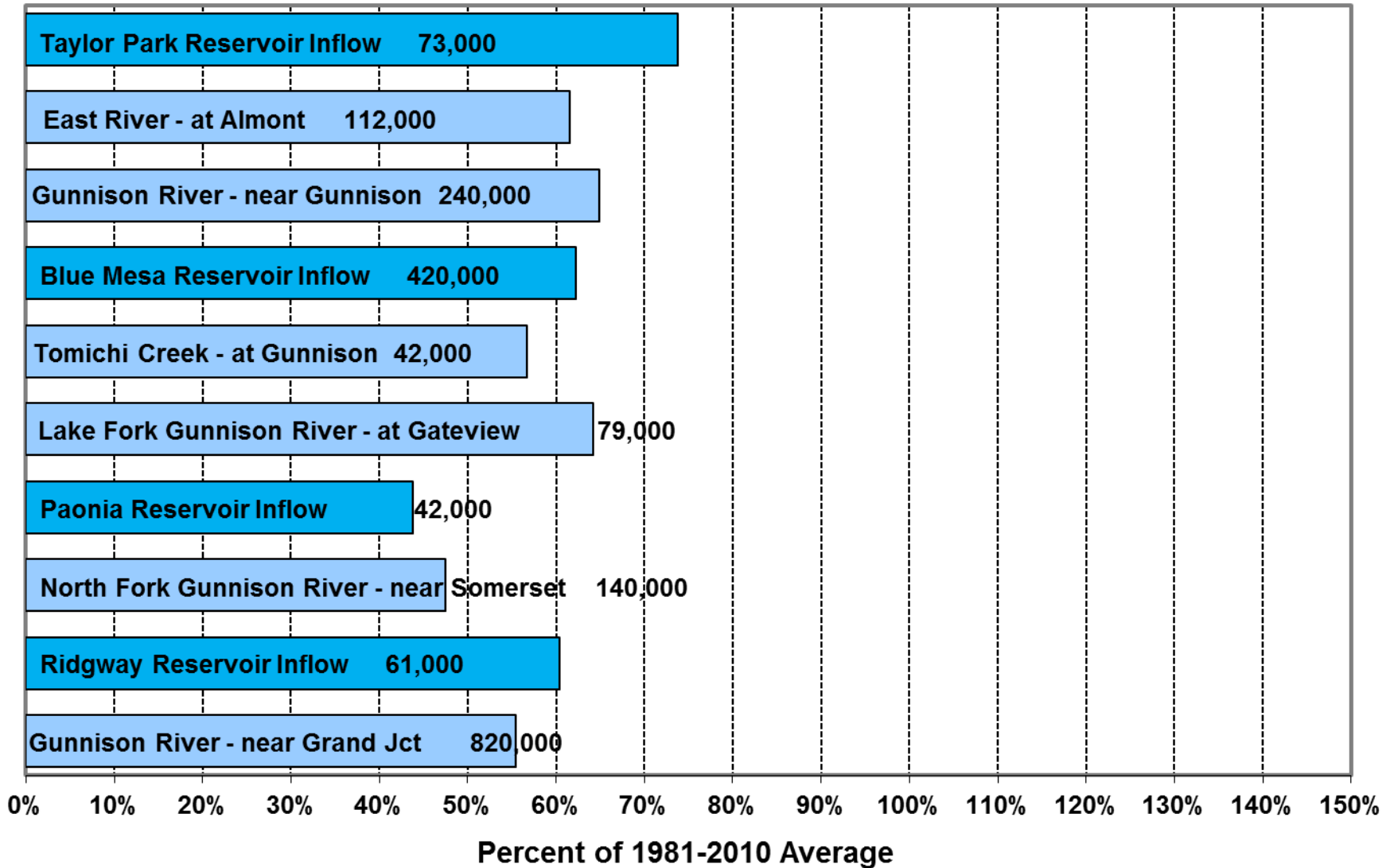




# RUNOFF FORECASTS AND SPRING TARGETS

RECLAMATION

## Forecasted April-July Runoff As of January 1st



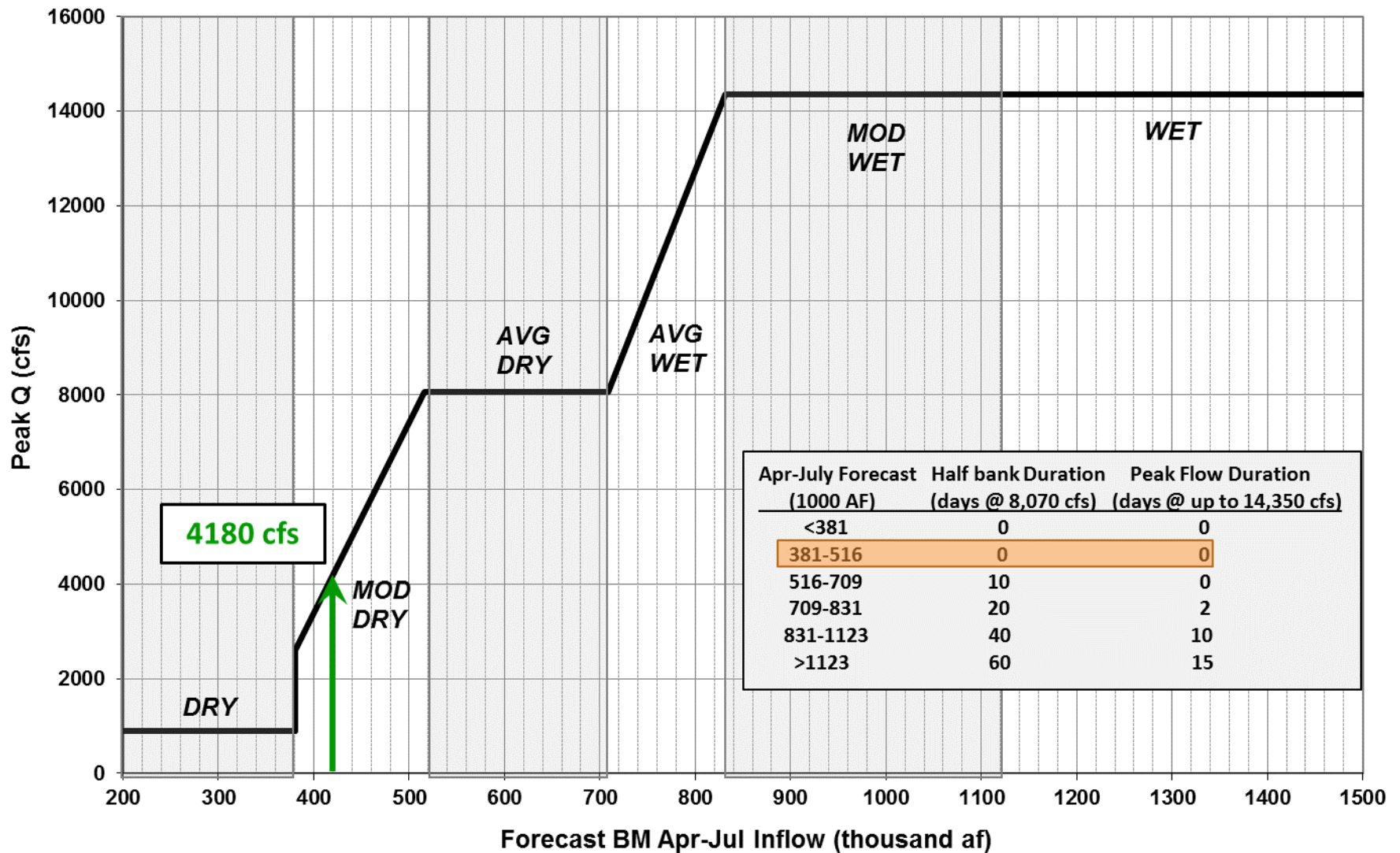
RECLAMATION

# Spring Peak & Duration Targets Based on Hydrologic Year Type

|                                                                                                                | Year Type | Blue Mesa<br>Forecasted | Desired Peak at<br>Whitewater | Duration of Half Bank<br>(8,070 cfs) | Duration of Peak Flow<br>(up to 14,350 cfs) |
|----------------------------------------------------------------------------------------------------------------|-----------|-------------------------|-------------------------------|--------------------------------------|---------------------------------------------|
|                                                                                                                |           | April-July Inflow       |                               |                                      |                                             |
|                                                                                                                |           | Af                      | cfs                           | Days                                 | Days                                        |
| <b>Mid-Jan<br/>420,000</b><br> | DRY       | < 381,000               | 900                           | 0                                    | 0                                           |
|                                                                                                                | MOD DRY   | 381,000 to 516,000      | 2,600 to 8,070                | 0                                    | 0                                           |
|                                                                                                                | AVG DRY   | 516,001 to 709,000      | 8,070                         | 10                                   | 0                                           |
|                                                                                                                | AVG WET   | 709,001 to 831,000      | 8,070 to 14,350               | 20                                   | 2                                           |
|                                                                                                                | MOD WET   | 831,001 to 1,123,000    | 14,350                        | 40                                   | 10                                          |
|                                                                                                                | WET       | >1,123,000              | 14,350                        | 60                                   | 15                                          |

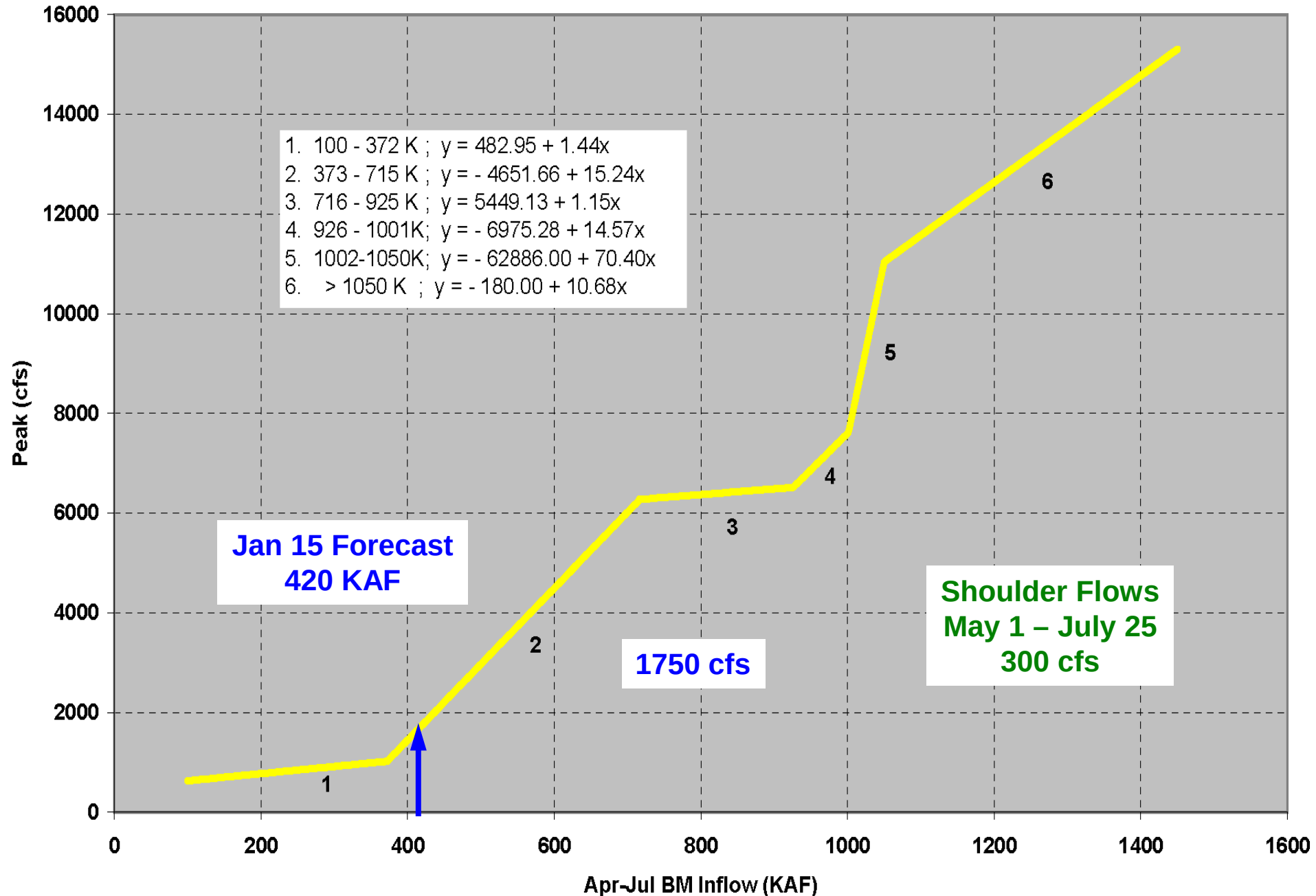
RECLAMATION

# Peak Flow and Duration Day Targets at Whitewater



# Black Canyon Peak Flow Determination

based on Blue Mesa May 1 forecast



# Baseflow Targets

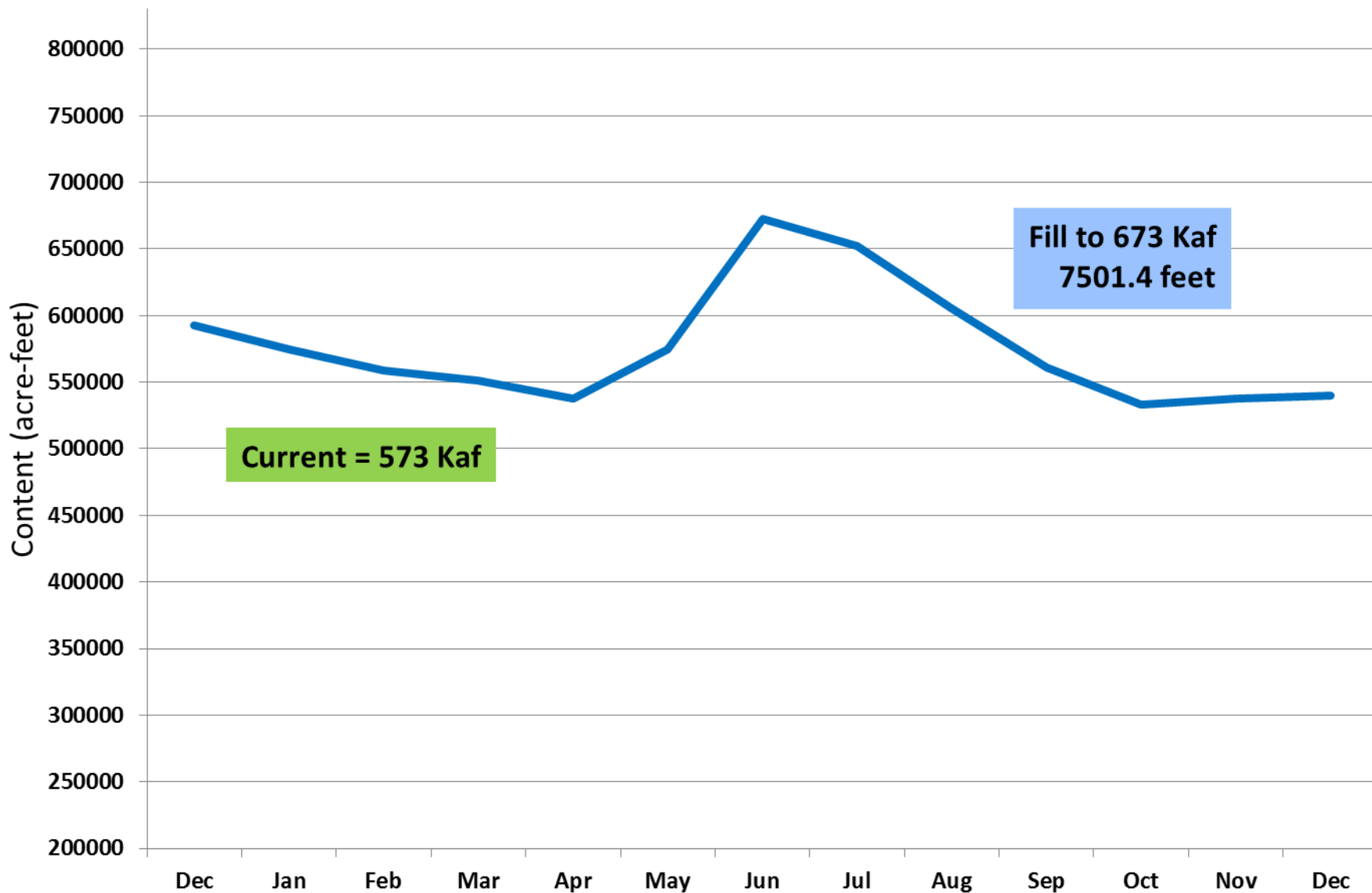
|                 | Jan         | Feb         | Mar            | Apr            | May            | Jun         | Jul         | Aug            | Sep            | Oct            | Nov            | Dec         |
|-----------------|-------------|-------------|----------------|----------------|----------------|-------------|-------------|----------------|----------------|----------------|----------------|-------------|
| <b>Wet</b>      | <b>1050</b> | <b>1050</b> | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1500</b> | <b>1500</b> | <b>1500</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b> |
| <b>Mod Wet</b>  | <b>1050</b> | <b>1050</b> | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1500</b> | <b>1500</b> | <b>1500</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b> |
| <b>Avg Wet</b>  | <b>1050</b> | <b>1050</b> | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1500</b> | <b>1500</b> | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b> |
| <b>Avg Dry</b>  | <b>1050</b> | <b>1050</b> | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1500</b> | <b>1500</b> | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b>    | <b>1050</b> |
| <b>Mod Dry*</b> | <b>750</b>  | <b>750</b>  | <b>750/790</b> | <b>750/890</b> | <b>750/890</b> | <b>1050</b> | <b>1050</b> | <b>1050</b>    | <b>750/890</b> | <b>750/790</b> | <b>750/790</b> | <b>750</b>  |
| <b>Dry*</b>     | <b>750</b>  | <b>750</b>  | <b>750/790</b> | <b>750/890</b> | <b>750/890</b> | <b>1050</b> | <b>1050</b> | <b>750/890</b> | <b>750/890</b> | <b>750/790</b> | <b>750/790</b> | <b>750</b>  |

\*During March through November in Moderately Dry and Dry type years, additional releases will be made as necessary to provide flows above the 750 cfs anticipated to be diverted by the Redlands Water and Power Company, for the fish ladder and fish screen as shown.



# BLUE MESA RESERVOIR

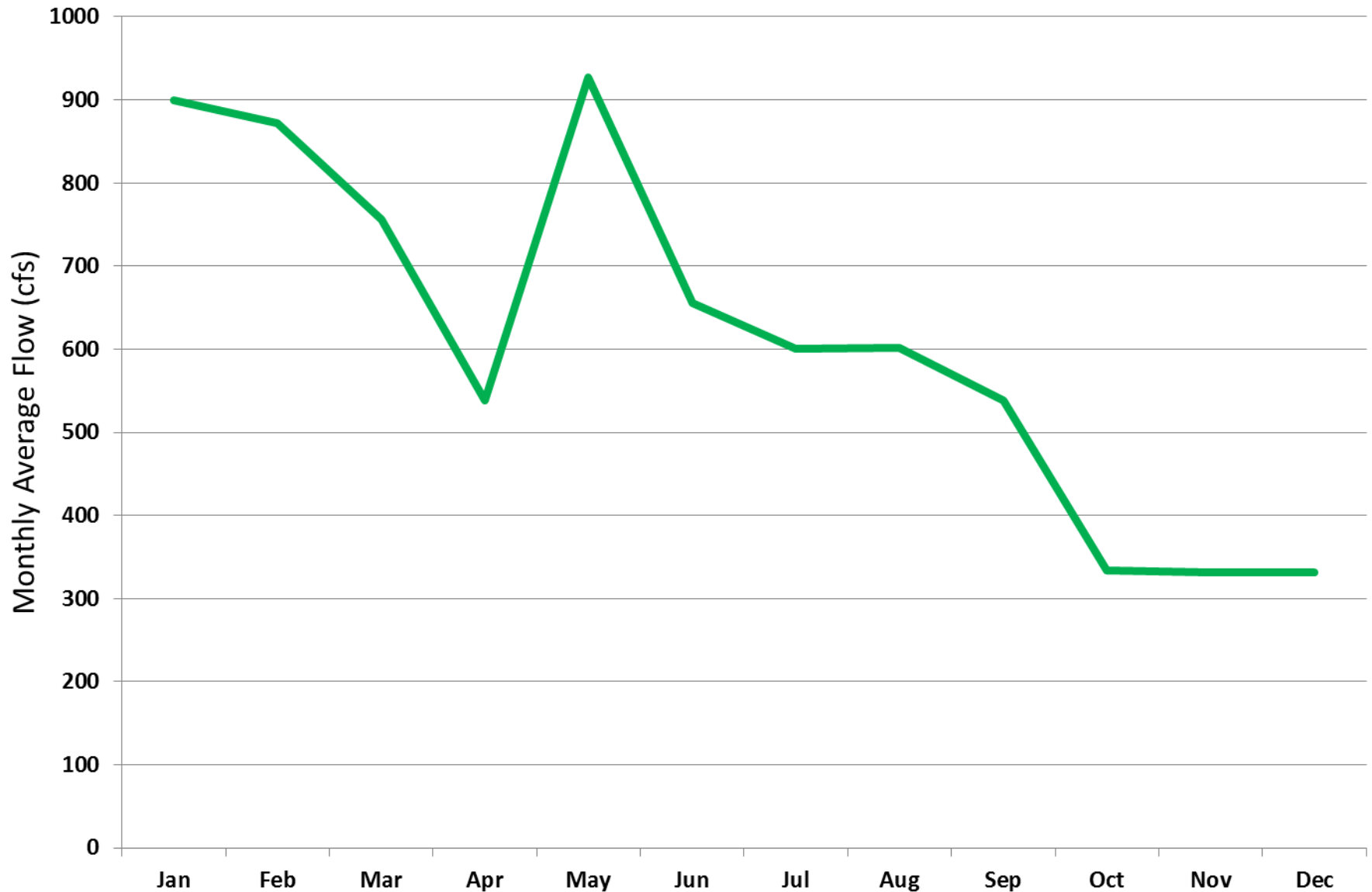
## End of Month Content



RECLAMATION

# Gunnison River Flows - Black Canyon

## Monthly Average



RECLAMATION



RECLAMATION