Ouray State of the Rivers Meeting

Water Supply Recap & Update

Sponsored by the Colorado River District
Ouray County 4-H Event Center - May 16, 2018

Bob W. Hurford, P.E.
Division Engineer
Uncompahgre River Water Supply

Colorado Basin River Forecast Center
Ridgway Group

2017 Uncompahgre River
% Seasonal Peak = 118%

2002 Uncompahgre River
% Seasonal Peak = 60%

2018 Uncompahgre River
% Seasonal Peak = 54%

Percent Median To Date: 29% (2.0 / 6.8)
Percent Seasonal Median: 11% (2.0 / 18.1)
Melt rate -0.3 in/day averaged over last 3 days.
Blue Mesa Water Supply

Colorado Basin River Forecast Center
BlueMesa Group

Percent Median To Date: 35% (3.4 / 9.7)
Percent Seasonal Median: 19% (3.4 / 17.6)
Melt rate -0.1 in/day
averaged over last 3 days.

2017 Blue Mesa Reservoir
% Seasonal Peak = 143%

2002 Blue Mesa Reservoir
% Seasonal Peak = 68%

2018 Blue Mesa Reservoir
% Seasonal Peak = 76%

Blue Mesa Reservoir – 829,500 AF Active Storage
2017 v 2018 Blue Mesa Reservoir
April - July Unregulated Inflow

Time inflow is exceeded

Unregulated Inflow (1000 AF)

Based on 1937-2013
Blue Mesa Reservoir


2018 Forecasted Runoff Volume
360,000 acre-feet (Apr 15)

Runoff Volume (1,000 acre-feet)

Runoff Year

Dry
Moderately Dry
Average Dry
Moderately Wet
Average Wet
Wet

2017
2013
2017 Peak Flow and Duration Day Targets at Whitewater

<table>
<thead>
<tr>
<th>Apr-Jul Forecast (1000 AF)</th>
<th>Half bank Duration (days @ 8,070 cfs)</th>
<th>Peak Flow Duration (days @ up to 14,350 cfs)</th>
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</thead>
<tbody>
<tr>
<td>&lt;381</td>
<td>0</td>
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<tr>
<td>381-516</td>
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<tr>
<td>516-709</td>
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<tr>
<td>709-831</td>
<td>20</td>
<td>3</td>
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<td>831-1123</td>
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<tr>
<td>&gt;1123</td>
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</tbody>
</table>
2018 Peak Flow and Duration Day Targets at Whitewater

- **Peak Q (cfs)**
  - MOD DRY
  - AVG DRY
  - AVG WET
  - MOD WET
  - WET

- **Forecast BM Apr-Jul Inflow (thousand af)**
  - 900 cfs
  - DRY

- **Apr-July Forecast**
  - (1000 AF)
  - 381-516
  - 516-709
  - 709-831
  - 831-1123
  - >1123

- **Half bank Duration**
  - (days @ 8,070 cfs)
  - 0
  - 10
  - 20
  - 40
  - 60

- **Peak Flow Duration**
  - (days @ up to 14,350 cfs)
  - 0
  - 0
  - 2
  - 10
  - 15
Upper Colorado Endangered Fish Recovery Program
Critical Habitat Stream Reach on Lower Gunnison River
Colorado Statewide Time Series Snowpack Summary
Based on Provisional SNOTEL data as of Apr 01, 2018

Current as Pct of Normal: 69%
Current as Pct of Avg: 67%
Current as Pct of Last Year: 63%
Current as Pct of Peak: 68%
Normal as Pct of Peak: 98%
Pct of Normal Needed to Reach Peak: 1665%
Normal Peak Date: Apr 07
Colorado Statewide Reservoir Levels on October 1st for Years 1997-2017

Percent of Average

Colorado Reservoir Storage

Percent of Average Usable Storage

- Oct-17
- Nov-17
- Dec-17
- Jan-18
- Feb-18
- Mar-18
- Apr-18
- May-18
- Jun-18
- Jul-18
- Aug-18
- Sep-18

Reservoirs:
- Gunnison
- Colorado
- South Platte
- Yampa, White & North Platte
- Arkansas
- Upper Rio Grande
- San Miguel, Dolores, Animas & San Juan
- Statewide
Colorado Monthly Snowpack Summary
April 1, 2018

Statewide: 68% of Median
64% of Last Year
Statewide Average Temperature Ranks
November 2017–January 2018
Period: 1895–2018

National Centers for Environmental Information
Mon Feb 5 2018

Map showing temperature ranks across the United States for the period of November 2017 to January 2018, with color-coding for record cold (1), much below average, below average, near average, above average, much above average, and record warmest (123).
Current Colorado Statewide Drought Conditions

U.S. Drought Monitor
Colorado

May 8, 2018
(Released Thursday, May 10, 2018)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
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<tbody>
<tr>
<td>Current</td>
<td>18.04</td>
<td>81.98</td>
<td>57.98</td>
<td>51.57</td>
<td>30.89</td>
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<td>Last Week</td>
<td>18.47</td>
<td>81.53</td>
<td>67.98</td>
<td>53.65</td>
<td>30.89</td>
<td>5.02</td>
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<td>3 Months Ago</td>
<td>0.59</td>
<td>99.41</td>
<td>71.90</td>
<td>31.32</td>
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<tr>
<td>Start of</td>
<td>6.57</td>
<td>93.43</td>
<td>33.53</td>
<td>7.27</td>
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<td>Calendar Year</td>
<td>01-02-2018</td>
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<tr>
<td>Start of Water</td>
<td>67.63</td>
<td>32.37</td>
<td>3.72</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>Year</td>
<td>09-22-2017</td>
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<tr>
<td>One Year Ago</td>
<td>87.62</td>
<td>12.38</td>
<td>2.19</td>
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<td>05-09-2017</td>
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Intensity:
- D0 Abnormally Dry
- D3 Extreme Drought
- D1 Moderate Drought
- D2 Severe Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
David Simenar
Western Regional Climate Center
Spring 2002 Drought Conditions
Spring 2018 Drought Conditions

May 11, 2018
30-Day Weather Outlook

for May 2018