ANDY MUELLER, GENERAL MANAGER
Colorado River District
Protecting Western Colorado Water Since 1937
Minding the Source for Over 80 Years

1937 state statute
15 northwestern counties
28% of Colorado
director from each county
mill levy & water activity enterprise

Colorado River District.org
Protecting Western Colorado Water Since 1937
Upper Colorado River Snowpack = 81%

Colorado Basin River Forecast Center
KRMC2 Colorado River abv Kremmling Group

Percent Median To Date: 81% (11.0 / 13.5)
Percent Seasonal Median: 72% (11.0 / 15.4)

Melt rate -0.4 in/day
averaged over last 3 days.

Created 05/02 16:57 G MT
NOAA/CBRFC, 2018
Upper Colorado River Runoff Forecast = 78%
2018 Wolford Mountain Reservoir Maintenance Items

- Butterfly valve seal replacement
- Reservoir draw down & top crest restoration
- Main gate replacement
2018 Wolford Mountain Reservoir
Snowpack: It starts here

Snowpack: It ends up here

Colorado River District
Protecting Western Colorado Water Since 1937
Lake Powell

1999 vs. 2013
Ag-the largest user between snowpack & into Lake Powell: It’s where the water is
Colorado River Basin Depletions

- East Slope M&I, 360,313 AF
- East Slope Ag, 180,486 AF
- West Slope M&I, 77,445 AF
- West Slope Ag, 1,355,763 AF
Values enhanced by ag water rights
Back to Powell: 2018 not looking good
Colorado River above Lake Powell
snowpack = 59%
May - July Lake Powell Inflow

Average Streamflow Contribution
- Green: 33.6%
- San Juan: 12.5%
- Colorado: 26.8%
- Cameo: 26.8%
- Other: 10.3%
- Gunnison: 16.8%

May Final Forecast
- Green: 42.2%
- San Juan: 6.6%
- Colorado: 14.3%
- Cameo: 34.5%
- Other: 2.5%

May 1, 2018 Forecast: 42% of average

Current Forecast: 3100 KAF
- Min. Probable: 1900 KAF
- Max. Probable: 4900 KAF

Historical Min (year): 964 KAF (2002)
Historical Avg: 7160 KAF
Historical Max (year): 15316 KAF (1984)
Colorado River Water Supply Report
System Contents: 28.91 MAF
3/26/18

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Current</th>
<th>Change</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Mead</td>
<td>10.70</td>
<td>+ 0.01</td>
<td>25.90</td>
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<tr>
<td>Lake Powell</td>
<td>13.02</td>
<td>- 0.42</td>
<td>24.30</td>
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<tr>
<td>Flaming Gorge Reservoir</td>
<td>3.19</td>
<td>- 0.03</td>
<td>3.75</td>
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<tr>
<td>Navajo Reservoir</td>
<td>1.24</td>
<td>- 0.01</td>
<td>1.70</td>
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<tr>
<td>Blue Mesa Reservoir</td>
<td>0.54</td>
<td>- 0.01</td>
<td>0.83</td>
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<tr>
<td>Fontenelle Reservoir</td>
<td>0.12</td>
<td>- 0.03</td>
<td>0.34</td>
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<tr>
<td>Morrow Point Reservoir</td>
<td>0.10</td>
<td>- 0.01</td>
<td>0.12</td>
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We have a long-term problem

Colorado River District
Protecting Western Colorado Water Since 1937
Who stole the Colorado River? Scientists say rising temperatures

Estimates of Colorado River flow sensitivity to temperature indicate that continued business-as-usual warming will drive temperature-induced declines in river flow

-20% by midcentury
-35% by end-century

- Brad Udall, Jonathan Overpeck
“The twenty-first century Colorado River hot drought and implications for the future”
One result: Buy and Dry
West Slope Ag Should Not Be a Sacrifice Zone
Drought Contingency Plan

Upper Basin is working on one

Lower Basin is working on one
What are we doing about it: Risk Study
What if extreme droughts continue?

Recent Droughts - Powell Drawdowns

- Current conditions at Powell: about half full summer 2016
- Three recent droughts superimposed on current conditions (drawdowns based on historical record)
- No contingency planning actions in place; no water banking in place

Elevation 3525: threshold for Lower Operating Tier; hydropower concerns
Elevation 3490: ability to make releases jeopardized (hence, Compact Compliance)
Grand Valley Pilot Project: Testing fallowing

- Reduce water use
- Involve a range of partners
- Scale-up
- Test the nuts and bolts
- Help finance infrastructure improvements for ongoing benefits
- Address community concerns
Questions and Discussion