West Slope Water Webinar

WELCOME

Thanks for joining us. We will begin momentarily.
THANK YOU FOR BEING HERE.

A Few Things Before We Begin...
Minding the source for more than 80 years

- Created by the General Assembly in 1937
- Represent Water Interests of 15 western Colorado counties
- Area Encompassing 28% of Colorado
- 80% of the Water but only 10% of the Population
- Board Representation from Each County
- Funded Exclusively Through Mill Levy & Water Activity Enterprise

Colorado River District
Protecting Western Colorado Water Since 1937
Protecting and Supporting West Slope Water Uses

Legal

Technical

Legislative

Colorado River District
Protecting Western Colorado Water Since 1937
Fighting to keep water for use on the Western Slope

- Watchdog of Colorado River diversions
- Holds and develops water rights for the benefit of western Colorado
- Controls water in various reservoirs to support West Slope uses – municipal and industrial, agricultural, recreational and environmental
- Intrastate and Interstate role (dual statutory charge).
Challenges from the East and the West
The Colorado River Compact: A Quick Refresher

- Compact divides the Colorado River, including all tributaries, into an Upper Basin and a Lower Basin.

- Boundary between the two basins is Lee Ferry, Arizona

- III (a). “There is hereby apportioned . . . in perpetuity to the Upper Basin and to the Lower Basin . . . the exclusive beneficial consumptive use of 7,500,000 acre feet per annum

- III (d). The states of the Upper Division will not cause the flow . . . at Lee Ferry to be depleted below an aggregate of 75,000,000 for any ten consecutive years . . . ”
Current Conditions: They’re not good
Forecasted Drought Conditions

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for August 16 - November 30, 2018
Released August 16, 2018

Author: Adam Aigleet
NOAA/NWS/NCEP/Climate Prediction Center

http://go.usa.gov/3eZ73
EOY 2000, Lake Powell was nearly 95% full and held more than 22 Million Acre Feet

EOY 2018, Powell is projected to be only 45% full with ~10 Million Acre Feet
Lake Powell: We have a long-term problem
<table>
<thead>
<tr>
<th>Category</th>
<th>MAF/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Basin uses (incl. reservoir evap.)</td>
<td>4.0 - 4.5</td>
</tr>
<tr>
<td>Lower Basin mainstream uses</td>
<td>7.5 - 7.5</td>
</tr>
<tr>
<td>Lower Basin reservoir evap.</td>
<td>1.0 - 1.5</td>
</tr>
<tr>
<td>Lower Basin tributaries</td>
<td>2.0 - 2.5</td>
</tr>
<tr>
<td>Total Lower Basin</td>
<td>10.5 - 11.5</td>
</tr>
<tr>
<td>Subtotal</td>
<td>14.5 - 16.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16.0 – 17.5</strong></td>
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</tbody>
</table>
Allocation of the River: Timing is Everything

Natural Colorado River Flows at Lee Ferry

ten year moving average
running average to date

compact
signed

year

ANNUAL FLOW IN MILLIONS OF ACRE-FEET PER YEAR

Colorado River District
Protecting Western Colorado Water Since 1937
Note:
This Does not Account for Reservoir Evaporation!
Add Another 1.3 MAF
Recently published estimates of Colorado River flow sensitivity to temperature indicate that continued business-as-usual warming will drive temperature-induced declines in river flow, conservatively −20% by midcentury and −35% by end-century.

-- Brad Udall, Jonathan Overpeck
“The twenty-first century Colorado River hot drought and implications for the future”
Depletions from the Colorado River Basin

- 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
What is Compact Curtailment and How Would it Impact Western Colorado Communities?
Risk Study: What We’ve Learned

• Demand management will be needed under multiple scenarios.

• Risk of Powell dropping below critical levels is real (10-20%).

• A 10% ↑ in Upper Basin depletions doubles the frequency that demand management is needed.

• During extended dry periods, CRSP reservoir re-ops will be insufficient to maintain Powell above 3,525’.

• As much as 1 to 2 MAF of additional water could be required.

• Demand management will have to be designed as a protected water bank or reserve account.
Upper Basin Drought Contingency Planning

Key Observations and Needs

- We Can't Afford to Wait for a Crisis
- Lower Basin States Must Address and Reduce Their Historic Overuse (Structural Deficit)
- Demand Management Will Require Careful Study and Negotiation
  - Must be Voluntary, Temporary and Compensated
  - West Slope Agriculture Cannot be the Sacrifice Zone
  - Conserved Water Must Remain in Upper Basin Control
Colorado’s population could increase to 8.5 million by 2050, an increase of more than 50 percent from 2015.
More suburban development requires more lawns and more water – broader infrastructure taking water farther from the source.

How we grow in the coming years will have tremendous impacts on water quantity and quality.
COLORADO RIVER DISTRICT ANNUAL SEMINAR
RISKY BUSINESS
ON THE COLORADO RIVER
FRIDAY
SEPT. 14TH
9:00 AM - 3:30 PM
Two Rivers Convention Center
Grand Junction, CO

To Learn More, Please Join us in Grand Junction on September 14th.
Questions?