Colorado Proposal for Multi-use Account in John Martin Reservoir – Background

Upper Arkansas Regional Advisory Committee / April 9, 2021
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4/9/2021
Conservancy Districts/Well Associations

- **Water Conservancy Districts**
  - Protect and manage water resource
    - Southeastern Colorado Water Conservancy District (SECWCD)
    - Lower Arkansas Water Conservancy District (LAVWCD)
    - Purgatoire River Water Conservancy District (PRWCD)

- **Large Well Associations**
  - Aids members in replacing depletions from groundwater pumping
    - Arkansas Groundwater Users Association (AGUA)
    - Colorado Water Protective and Development Association (CWPDA)
    - Lower Arkansas Water Management Association (LAWMA)
History of Request for Account

• 2013 - Initial request brought to December 2013 ARCA annual meeting by one of the well associations

• 2015 to 2017 – Lower Arkansas Valley Water Conservancy District (LAVWCD) sponsors a scoping study for a new account using Colorado Water Conservation Board (CWCB) grant. Phase I of that study was completed

• 2018 to current – Colorado and Kansas have been in discussions. LAVWCD completes additional work
# History of Request for Account

## Phase I Study proposal

<table>
<thead>
<tr>
<th>Sponsored by:</th>
<th>LAVWCD</th>
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<tbody>
<tr>
<td>Prepared by:</td>
<td>Deere &amp; Ault Consulting, Inc. (Longmont, CO)</td>
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<tr>
<td>Account Size:</td>
<td>40,000 AF</td>
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<tr>
<td></td>
<td>➢ 30,500 AF (sum of interested party estimates)</td>
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<tr>
<td></td>
<td>➢ 9,500 AF (allotment estimate if more interested parties later)</td>
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<tr>
<td>Storage Charge:</td>
<td>5% of account deliveries</td>
</tr>
<tr>
<td>Interested Participants:</td>
<td>9 Colorado Water User Groups</td>
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<tr>
<td></td>
<td>➢ 4 Augmentation Groups</td>
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<tr>
<td></td>
<td>➢ 2 Municipalities</td>
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<tr>
<td></td>
<td>➢ 2 Conservancy Districts</td>
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<td>➢ 1 Energy Company</td>
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### Phase I Study proposal continued

| Purpose of Account:          | ➢ Better management for replacement plans and operations  
                              | ➢ Capture fully consumable water  
                              | ➢ Provide source of supply for dry times  
                              | ➢ Alternative storage |
|------------------------------|---------------------------------------------------------|
| Use of Account:             | ➢ Releases out of JMR for uses downstream  
                              | ➢ Exchanged upstream (water is released out of JMR during exchange to keep river whole)  
                              | ➢ Booked over to other accounts within JMR |
| Approval:                   | ➢ Arkansas River Compact Administration (ARCA) approval  
                              | ➢ 1980 Operating Plan modification (Agreement between states on Accounts in JMR) |
Recent Discussion Between the States

- Pilot Project for a temporary account
- Water quality discussions
- Storage Charge
- Kansas Subaccount
- Reduced water sources
  - Water related to Surface Water Improvement Rules (Rule 10)
  - Pueblo Reservoir controlled evacuation
Surface Water Improvement Rules (Rule 10)

- **Surface Water Irrigation Improvement Rules**
  - Effective 2011
  - Applied to improvements on or after October 1, 1999
  - Rule 10 – Compact Compliance Plans
  - Plans submitted annually to CO State Engineer

- **Improvements to surface water irrigation systems**
  - Conversion of flood to pivot or drip systems
  - Lining of canals, laterals, ponds

- **Historical return flows must be maintained**
  - Current use of ponds for sprinklers provides return flow (RF) credits

- **Lining of ponds, canals, and laterals could mean improved water quality**
  - Storage needed to ensure RF obligations from lining could be met

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Pueblo Reservoir Controlled Evacuation

- Pueblo Reservoir was constructed in mid 1970’s as part of Fry-Ark Project
  - Managed by Bureau of Reclamation (BOR)
  - Flood Control operations managed by U.S. Army Corp of Engineers (USACE)
- Project and Non-Project water stored
- From November to April an additional 66,000 AF can be stored above active conservation
- By April 15th the Corps enforces flood control (can result in controlled evacuation)

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What is current practice for evacuated water?

- Purchase for permanent pools in reservoirs
- Downstream water sales
- Ran through ditch/canal or recharge ponds to recharge system
- Gravel pit storage
- Storage in off-channel reservoirs
Benefits to Kansas

- Assurance of wet water for replacement operations
- Storage Charge
- Potential for water quality improvements
- Increased transparency through decreased use of alternative solutions
- Commitment to work towards resolution of unresolved issues between the states
  - JMR Spill related issues
  - Pueblo Winter Water Storage Program (PWWSP)
Concerns to Kansas

- Storage of water that would have otherwise come to Kansas
- Exchanges upstream
- Increase in JMR spill potential

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Questions