Briefing on the South Platte Regional Opportunities Water Group (SPROWG) Feasibility Study

December 3rd, 2019
Communities in the South Platte River Basin continue to aggressively implement conservation measures, but more supply will be needed.

Basin population is expected to grow to around 6 million by the year 2050.

In addition to municipal and industrial use, water is also needed for agriculture and for environment and recreation.
South Platte Regional Opportunities Working Group (SPROWG) advanced the SPBIP concept and developed the initial regional water project.

SPROWG Task Force developed scope of study and grant application for feasibility study.

SPROWG Feasibility Study will conduct outreach, explore organizational alternatives, and refine the concept.

South Platte Storage Study (SPSS) identified potential South Platte River storage projects.

Colorado’s Water Plan voiced the need for storage and collaborative projects.

South Platte Basin Implementation Plan (SPBIP) described the original “Conceptual Future In-Basin Multipurpose Project” in Section 4.6.2.

South Platte BIP Phase 2 Date TBD

May 2013 – Nov 2015

Dec 2013 – April 2015

June 2015 – May 2018

Jan 2017 – Dec 2017

June 2018 – Oct 2018

Mar 2019 – Mar 2020
Nearly 300,000 AFY could have been diverted over the past 20 years

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Physical Water Leaving Colorado (Julesburg Gage)</th>
<th>Water Delivered to Nebraska in Excess of the Compact (1)(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Median (ac-ft/yr)</td>
<td>331,000</td>
<td>293,000</td>
</tr>
<tr>
<td>Annual Average (ac-ft/yr)</td>
<td>436,000</td>
<td>397,000</td>
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<tr>
<td>Minimum Year (ac-ft/yr)</td>
<td>29,000</td>
<td>10,000</td>
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<tr>
<td>Maximum Year (ac-ft/yr)</td>
<td>1,957,000</td>
<td>1,904,000</td>
</tr>
<tr>
<td>Total for 20-yr Period 1996-2015 (ac-ft)</td>
<td>8,728,000</td>
<td>7,939,000</td>
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</table>

(1) Storable flow Julesburg gage
(2) Future environmental flow obligations could reduce legally available water.
Guiding Principles
1. SPROWG will advance the goals of the South Platte/Metro Basin Implementation Plan (BIP) and Colorado’s Water Plan.

2. SPROWG intends to provide at least 50,000 acre-feet of yield to meet part of the projected municipal and industrial water supply project gap in the South Platte basin. A significant portion of this yield is targeted for smaller but rapidly growing communities between Denver and Greeley and also larger communities in the Denver Metro area and northern Colorado. The project will also explore providing supplies to smaller communities east of Greeley.

3. SPROWG intends to meet a portion of the agricultural gap.

4. SPROWG will identify and incorporate strategies to address environmental and recreational needs.
5. SPROWG intends to enhance the ability to conduct alternative water transfers, thus reducing the need for traditional buy-and-dry transfers.

6. SPROWG will utilize different sources of water available in the South Platte basin and manage them conjunctively to achieve an overall reliable yield beyond what an individual source could produce.

7. SPROWG is intended to help water supply organizations and water users maximize the use of in-basin supplies.

8. SPROWG intends to improve integration of water quality and quantity planning and management activities.
Principles describing what SPROWG *IS NOT*

9. SPROWG is *not* intended to be a substitute for existing or planned projects.

10. SPROWG is *not* intended to be used to deliver water developed from the permanent dry up of irrigated lands in the South Platte basin.

11. SPROWG is *not* intended to store supplies from an existing or new transmountain diversion project (though it will provide a means to utilize unused reusable return flows from transmountain diversions).
SPROWG Concept Components
SPROWG contemplates new storage, exchanges, and potential pipelines to meet a significant amount of future municipal water demand as well as agricultural demand while providing environmental/recreational benefits.
SPROWG will manage different sources of water conjunctively.

Infrastructure components provide the means to maximize use of water supplies:

- Utilize unappropriated supply
- Ability to utilize ATMs
- Enhance exchange capacity
- Coordinate reservoir operations

Concept Water Supplies

Free River

ATM & ERC

Reuse

Denver Basin
Status and Next Steps
## Organizational Frameworks - Case Studies

<table>
<thead>
<tr>
<th>Organizational Framework</th>
<th>Case Studies</th>
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</thead>
<tbody>
<tr>
<td>Nonprofit Corporation</td>
<td>Chatfield Reservoir Mitigation Company (CRMC)</td>
</tr>
<tr>
<td></td>
<td>South Platte Water Related Activities Program (SPWRAP) 501 (c)(3)</td>
</tr>
<tr>
<td>Existing Government</td>
<td>Northern Integrated Supply Project</td>
</tr>
<tr>
<td>Water Conservancy District</td>
<td>Northern Colorado Water Conservancy District</td>
</tr>
<tr>
<td>Regional Water Authority</td>
<td>South Metro Water Supply Authority</td>
</tr>
<tr>
<td>Memorandum of Understanding</td>
<td>Eagle River MOU</td>
</tr>
<tr>
<td></td>
<td>Chatfield Reservoir Reallocation Water Storage Participants MOU</td>
</tr>
<tr>
<td>Intergovernmental Agreement</td>
<td>Pending research on current IGAs</td>
</tr>
</tbody>
</table>

Brown and Caldwell
Feedback from Agriculture

- Strong support for not using SPROWG to facilitate buy-and-dry transfers
- Encouragement to build project(s) sooner than later
- Several statements that municipalities need to use water more efficiently and judiciously before seeking more supply from agriculture
- Anticipation that cities would need to bear much of the financial burden for the project
- Would like to some of agricultures’ needs met through joint project(s)
- Realized benefits of ATMs but also had several questions and concerns with ATMs
The SPROWG Feasibility Study will be complete in early 2020

- Results of research on organizational framework
- Results of outreach
- Concept refinements
- Water treatment strategies
- Cost estimates
- Outreach and education plan

Where is this heading?

- Incorporate into South Platte Basin Implementation Plan
- Continue to promote concept and seek participants
- Collaborate on organizational framework
- Collaborate on concept configuration and components based on participant needs

State support and funding are crucial for continuing momentum
Thank you.

Questions?