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EXECUTIVE DIRECTOR’S MESSAGE:

Dear Governor and Legislative Management Committee,

The Colorado River Basin is a vital source of both municipal and agricultural water for Utah, supplying over a quarter of all water used in the state. However, the prolonged drought in the basin and a changing climate has created an urgent need for the efficient use of Utah’s share of the Colorado River as supplies shrink and critical reservoir elevations decline.

In 2021, Brad Wilson, Speaker of the Utah House of Representatives, and Stuart Adams, President of the Utah Senate, co-sponsored the Colorado River Authority of Utah Act (HB 297) creating the Authority and establishing its broad mission to “protect, conserve, use and develop Utah’s waters of the Colorado River system.” 63M-14-102 et seq.

The Authority held its first Board meeting on July 30, 2021, with a fully constituted Board, shortly after selecting an Executive Director, Director of Administration, and Executive Assistant. The Authority staff began working temporarily in state office space in September 2021 until renovations at its permanent space were completed.

This Annual Report includes the major intrastate and interstate accomplishments of the Authority in its first year of operation, including: the development of a 5-year Management Plan and adoption of a Work Plan implementing the Plan in FY23, the creation and implementation of Advisory Councils, and securing both the necessary updates to the Authority Act and critical appropriations to achieving our mission.

Utah’s future depends upon a resilient water supply. The creation of the Colorado River Authority of Utah marks a major step toward promoting a sustainable Colorado River Basin for many future generations of Utahns.

Thank you,

Amy I. Haas
Executive Director
Colorado River Authority of Utah
Utahns have taken remarkable steps to address critical water issues facing our state. The drought in the Colorado River Basin, a major source of water for Utah, has highlighted the need for us to continue to be good stewards of this precious resource so that every drop counts.

— Governor Spencer Cox
Intrastate Colorado River Authority of Utah Activities

5 YEAR MANAGEMENT PLAN

On April 21, 2022 the Colorado River Authority of Utah approved a five-year Management Plan to accomplish its statutory mission to “protect, use, conserve and develop Utah’s waters of the Colorado River system.” The Management Plan promotes a shared and resilient water supply that supports a vibrant and prosperous Utah. The Management Plan will provide a suite of adaptable technical and legal strategies that protect and support the farms, homes, businesses, environment, and quality of life that all Utahns enjoy.

The initial term of the Management Plan is five years, beginning July 1, 2022 through June 30, 2027 (FY23- FY27). The Management Plan is meant to be dynamic to respond to changing hydrology and conditions in the Colorado River Basin. On June 23, 2022, the Authority Board approved the first work plan detailing the specific activities required to implement the Management Plan in FY23.

A Critical Investment

The Utah Legislature has made a significant investment to make the Management Plan possible. Funds will be allocated across the three priority areas to build a solid foundation of knowledge, technology, and data. Additionally, funding will be used to support the interstate and intrastate activities of the Authority, as well as the creation and implementation of its three Advisory Councils.
The Management Plan encompasses the following three priority areas:

1. **MEASUREMENT**
   We cannot effectively manage what we cannot measure. We must improve, expand, and maintain a water measurement network that delivers sound and transparent data.

2. **HYDROLOGY & OPERATIONS**
   It is essential that we continually improve our understanding of hydrologic conditions, enhance our ability to make informed planning and policy recommendations, and identify opportunities to improve water management.

3. **DROUGHT MITIGATION**
   Prudent water management requires measures that prepare us for and enable us to respond to water shortages. It is critical that Utah invest in researching and developing solutions that are adaptable and that enable a sustainable and resilient water supply for the Colorado River Basin.

The Management Plan also will support the various interstate Colorado River activities that require the involvement of the River Commissioner and Authority staff.
In accordance with the Management Plan, annual plans (Work Plans) will be developed and approved by the Authority board. The Work Plans will include activity details, estimated budgets, and time frames for each of the five years comprising the initial term of the Management Plan.

The Authority’s first annual Work Plan for fiscal year 2023 (July 1, 2022, to June 30, 2023) was approved by the Board on June 23, 2022. The total FY 2023 budget for this work plan is 4,361,000.

This Work Plan supports:

- Participation in intrastate and interstate Colorado River commitments
- Investigation and analysis of water supply and use measurement gaps
- Acquisition, installation, and maintenance of agricultural consumptive use measurement instrumentation to improve accuracy of remote sensing technology and other water use efficiency efforts.
- Acquisition of consumptive use data using remote sensing technology
- Research supporting forecasting improvements
- Research supporting water efficiency and demand reduction
- Drought mitigation pilot projects
- Development of a first-of-its-kind Colorado River in Utah forecasting and accounting model
- Modeling to evaluate effectiveness of proposed operations under the Drought Response Operating Agreement (DROA), other operations related to the 2019 Drought Contingency Plans (DCP), and/or emergency actions taken in response to river conditions in the short to mid-term
- Modeling to evaluate long-term operating policy
- Implementation and oversight of Authority Advisory Councils

The Management Plan was developed with the intention of being dynamic to respond to changing hydrology and conditions in the Colorado River Basin. To this end, the Authority committed to developing an annual Work Plan for adoption at a regular meeting of the Authority board. The Work Plan addresses on a yearly basis both the implementation of the Management Plan and the satisfaction of key benchmarks.

This Work Plan describes activities scheduled for fiscal year (FY) 2023, estimated costs and timeframes, and the relationship of each activity to the three Management Plan priority areas of Measurement (Section 3), Hydrology and Operations (Section 4), and Drought Mitigation (Section 5). Consistent with the mission of Authority, the purpose of the Management plan and associated annual work plans is to “ensure that Utah can protect and develop the Colorado River System and work to ensure that Utah can live within the state’s apportionment of the Colorado River System”.

2021–2022 ANNUAL REPORT
Activities and work plan elements described herein are supported by funding from several sources including annual appropriations and one-time appropriations to Authority, in-kind goods and services provided to Authority by users of the Colorado River System, and appropriations supporting activities performed by the Department of Natural Resources in coordination with the Authority.

Table 1: Summary of work plan elements, FY budgets and funding source

*Total FY 2023 budget for this work plan is $4,361,000*²

<table>
<thead>
<tr>
<th>Priority Area</th>
<th>Work Plan Element</th>
<th>FY23 Budget</th>
<th>FY23-FY27 Est. Budget</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colorado River Intrastate and Interstate Activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0</td>
<td>Intra/Interstate Engagement³</td>
<td>$600,000</td>
<td>$3,000,000</td>
<td>Annual Appropriations</td>
</tr>
<tr>
<td><strong>Measurement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Metering and Gaging</td>
<td>&gt;$200,000</td>
<td>&gt;$200,000+</td>
<td>One-time Appropriation</td>
</tr>
<tr>
<td>3.2</td>
<td>Instrumentation and Verification</td>
<td>$600,000</td>
<td>$2,000,000</td>
<td>One-Time Appropriation</td>
</tr>
<tr>
<td>3.3</td>
<td>Consumptive Use Quantification</td>
<td>$630,000</td>
<td>$2,600,000</td>
<td>One-Time Appropriation</td>
</tr>
<tr>
<td><strong>Hydrology and Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Short- and Mid-Term Operations modeling (CRMMS 24 Month Study/ESP)</td>
<td>$180,000</td>
<td>$750,000</td>
<td>In-kind Contributions</td>
</tr>
<tr>
<td>4.2</td>
<td>Long-Term Operations modeling (CRSS)</td>
<td>$600,000</td>
<td>$1,500,000</td>
<td>In-kind Contributions</td>
</tr>
<tr>
<td>4.3</td>
<td>Forecasting and Water Supply Research</td>
<td>$120,000</td>
<td>$600,000</td>
<td>One-Time Appropriation/In-kind Contributions</td>
</tr>
<tr>
<td><strong>Drought Mitigation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Agricultural Efficiency Investigations/Water Optimization Research</td>
<td>$600,000</td>
<td>$1,500,000</td>
<td>One-Time Appropriation (anticipated FY ’24-27)/In-kind Contributions (FY ’23)</td>
</tr>
<tr>
<td>5.2</td>
<td>Conserved Consumptive Use Pilot Projects</td>
<td>$250,000</td>
<td>$3,000,000</td>
<td>TBD</td>
</tr>
<tr>
<td>5.3</td>
<td>Pilot Utah Colorado River Accounting and Forecasting Model – Duchesne Drainage</td>
<td>$300,000</td>
<td>$943,000³</td>
<td>One-Time Appropriation</td>
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<tr>
<td><strong>Advisory Councils</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0</td>
<td>Advisory Councils</td>
<td>$281,000</td>
<td>$1,405,000⁶</td>
<td>Annual Appropriations</td>
</tr>
</tbody>
</table>

**Total** $4,361,000 | **$17,498,000⁷**

². Total provided for under this work plan. Work plan budgets are subject to adjustment depending on conditions and activities in the Colorado River Basin that may be unknown at the time the plan was developed.
³. Estimated costs are for Authority staff and in-kind contributions only and do not include costs of other state agencies participating.
⁴. Total estimated costs for metering and gaging are dependent on the results of the gap analysis being performed in FY23 and is not included here.
⁵. Total cost reflects 3 fiscal years from FY23 to FY25.
⁶. This is an estimate of the FY 23-FY 27 budget.
The Colorado River Authority of Utah Advisory Councils present Utahns with a unique opportunity to engage and participate in critical discussions related to the Colorado River. Three Councils were formed in June 2022 based on geographic designations and serve as sources of advice and information for Authority leadership. The Councils are composed of engaged citizens, stakeholders, area and topical experts, and other Utahns who care deeply about the Colorado River. They gather information, provide study and analysis, and serve as a deliberative forum for diverse points of view. While they do not officially speak for the Authority, Council perspectives help the Authority advise the River Commissioner and inform policymakers.

**Chief Objectives**

1) Provide a venue for a broad range of interested citizens to share opinions and recommend possible solutions to Colorado River challenges,
2) Build trust and understanding between the Authority, stakeholders, and the public,
3) Ensure the River Commissioner and the Authority Board have up-to-date information and consider a full suite of policy options as they address the critical issues facing the Colorado River.

**Council Protocols**

Each council is composed of 9 members. Councils meet at least four times each year, occasionally joining with other councils to ensure a cross pollination of ideas and viewpoints. Council members are tasked with seeking practical outcomes and recommendations, while participating in good faith.

**Geographic-Based Councils**

The Councils are organized as follows:

- **NORTH**
  - Salt Lake County
  - Summit County
  - Utah County
  - Wasatch County
  - Juab County
  - Sanpete County

- **CENTRAL**
  - Daggett County
  - Duchesne County
  - Uintah County
  - Carbon County
  - Emery County
  - Grand County

- **SOUTHERN**
  - Washington County
  - Garfield County
  - Kane County
  - Wayne County
  - San Juan County
**LEGISLATION**

**HB 297**
In 2021, Brad Wilson, Speaker of the Utah House of Representatives, and Stuart Adams, President of the Utah Senate, co-sponsored the Colorado River Authority of Utah Act (HB 297) creating the Authority and establishing its broad mission to “protect, conserve, use and develop Utah’s waters of the Colorado River system.”

**SB160**
Senate Bill 160 was signed by the Governor in March 2022 adding a tribal seat to the Colorado River Authority of Utah Board. It also amends the Authority Act by allowing for appropriate government-to-government consultation and coordination with Utah’s Colorado River Tribes on matters related to the Authority’s mission. SB160 also provides authority to the Board to adopt policies by resolution rather than by rule, which allows the Authority the flexibility to respond to rapidly changing conditions on the Colorado River while doing so in a public, transparent manner.

**APPROPRIATIONS**

An FY 2023 Ongoing Budget Request ($900,000) and One-Time Request ($8M to support, in large part, the Management Plan) were approved by the Legislature in February 2022.

**STANDING-UP THE AUTHORITY**

**Staffing**
Amy I. Haas, Executive Director—hired July 2021
Betsy Coleman, Executive Assistant—hired July 2021
Danny Schoenfeld, Director of Administration and Finance—hired July 2021
Cody Stewart, Director of Strategic Engagement—contracted November 2022
Holly McCall, Support Services Coordinator—hired February 2022
Marty Carpenter, Communications Director—contracted February 2022

**Building**
The Authority staff began working temporarily in the Governor’s Office of Economic Development and Office of Energy Development office space at the World Trade Center in July 2021. The Authority office is located at 60 E. South Temple in downtown Salt Lake City on the 8th floor of the World Trade Center at City Creek.
A. DROUGHT RESPONSE OPERATIONS AGREEMENT: 2022 PLAN

On April 21, 2022, the Upper Division States of Utah, Colorado, New Mexico and Wyoming, through the Upper Colorado River Commission, approved a 2022 Drought Response Operations Plan ("DROA Plan"). The Department of Interior subsequently approved the Plan.

The 2022 DROA Plan entails the release of 500,000 acre-feet from Flaming Gorge Reservoir. In addition to helping to stabilize the Lake Powell elevation, DROA releases will enhance three fish experiments in accordance with the 2006 Flaming Gorge Record of Decision. DROA releases began on May 5, 2022 and are anticipated to occur through April 2023.

The River Commissioner and Authority staff were directly involved in developing the 2022 DROA Plan.

B. LAKE POWELL COOPERATIVE ACTION PLAN

On May 3, 2022, the Assistant Secretary of Water and Science finalized a proposed action, based on feedback from the seven Basin States, to retain 480,000 acre-feet of water in Lake Powell in order to maintain elevation 3,490’, at which point hydropower generation ceases and critical infrastructure at Glen Canyon Dam could be damaged. Consequently, 7 million acre-feet of water will be released from Lake Powell in water year 2022 (through September 30, 2022) rather than the 7.48 million acre-feet originally required under the existing operational criteria for the river. This action, combined with the 2022 DROA Plan, will result in the storage of approximately 1 million acre-feet of additional volumes of water at Lake Powell and an elevation increase of approximately 20’ at the reservoir.

The River Commissioner and Authority staff were directly involved in modeling the proposed action and responding to the proposal.†
Drought Response Operations Agreement (DROA)

Flaming Gorge 2022 Plan

DROA Volumes Released*

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>2021 DROA Volume (kaf)</th>
<th>2022 DROA Volume (kaf)</th>
<th>Total DROA Volume (kaf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaming Gorge</td>
<td>125</td>
<td>500</td>
<td>625</td>
</tr>
<tr>
<td>Blue Mesa</td>
<td>36</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>Navajo</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Powell</td>
<td>161</td>
<td>500</td>
<td>661</td>
</tr>
</tbody>
</table>

* DROA operational year is from May through April
On June 14, 2022, Camille Touton, the Commissioner of the U.S. Bureau of Reclamation, announced the need for reductions of use in the Colorado River Basin of between 2 and 4 million acre-feet (MAF) during 2023 based on current forecasts. She directed the seven Colorado River Basin states to develop a plan for the reductions within 60 days (mid-August) so that the plan can be incorporated into river operations in 2023.

In July 2022, the Upper Division states of Utah, Colorado, New Mexico and Wyoming released a 5-Point Plan in response to Commissioner Camille Touton’s request.*

Importantly, the Upper Division States recognize that absent action to reduce Lower Basin use, the effectiveness of the 5 Point Plan will be limited.

The essential elements of the Upper Basin 5 Point Plan are as follows:

1. **Development of a 2023 DROA Plan**  
The Upper Division States, together with the Bureau of Reclamation, will begin the development of a 2023 Drought Response Operations Plan in August 2022. The DROA will include on/off ramps based on, among other things, hydrology and an analysis of the effectiveness of the plan in maintaining critical elevations at Lake Powell. A DROA Plan will not be effective if the water does not benefit Lake Powell, e.g., if any portion of it is allowed to flow downstream to the Lower Basin.

2. **System Conservation Reauthorization**  
The Upper Division States will seek reauthorization of federal legislation allowing Reclamation to fund or participate in pilot projects for temporary, voluntary and compensated conservation of the consumptive use of water in the Upper Basin, also known as “system conservation” projects.

3. **Consideration of a Demand Management Program**  
The Upper Division States will consider a Demand Management Program pursuant to the Demand Management Storage Agreement as authorized by the 2019 Drought Contingency Plan once all interstate and intrastate feasibility investigations are completed.

4. **Implementation of Bipartisan Infrastructure Law (BIL) funding**  
The Upper Division States, through the UCRC, will work with Reclamation to immediately secure the BIL funding requested by the UCRC.

5. **Aggressive Water Management**  
The Upper Division States will implement and expand intrastate water conservation programs in the Upper Division States. The States will also continue to regulate and enforce water rights within the available annual supply.

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**POST-2026 OPERATIONAL CRITERIA**

The current operational criteria for the Colorado River are scheduled to expire in 2026. These criteria are essential because, among other things, they establish the coordinated operations of Lake Powell and Lake Mead, conditions for Lower Basin shortage and a mechanism for storage of conserved Colorado River water in Lake Mead.

These criteria are subject to the National Environmental Policy Act (“NEPA”). While the U.S. Bureau of Reclamation will be charged with leading the environmental review for the post-2026 criteria, the seven Basin States, including Utah, will be directly involved in the negotiation and development of the new criteria.