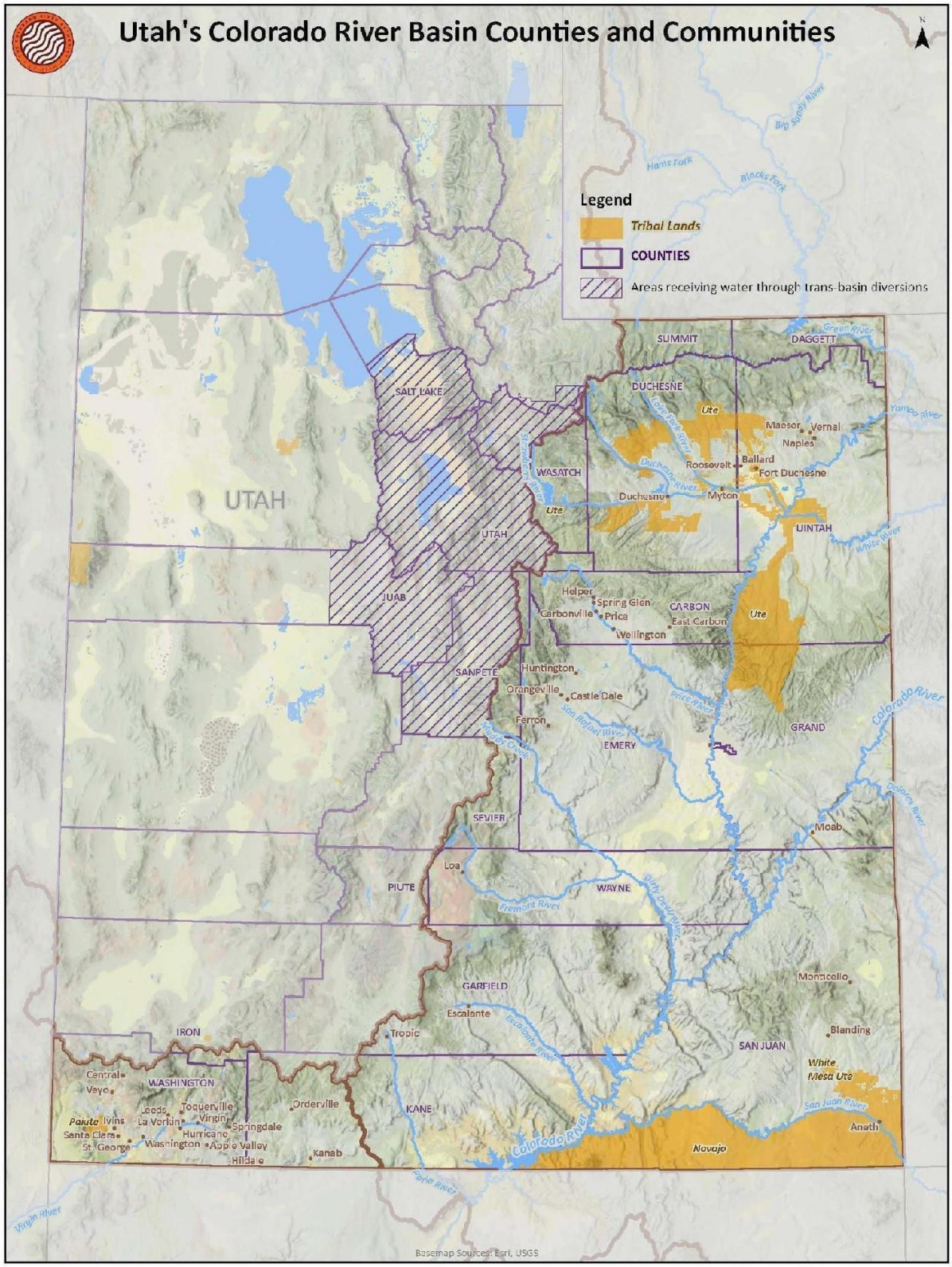
Fiscal Year 2027 Work Plan

July 1, 2026 – June 30, 2027

THE COLORADO RIVER AUTHORITY OF UTAH


Utah's Colorado River Basin Counties and Communities
Legend
Tribal Lands
COUNTIES
Areas receiving water through trans-basin diversions
SUMMIT
DAGGETT
DUCHESNE
SALT LAKE
UTAH
WASATCH
UINTAH
JUAB
CARBON
SANPETE
EMERY
GRAND
SEVIER
PIUTE
WAYNE
GARFIELD
IRON
KANE
SAN JUAN
Ute
White Mesa Ute
Navajo
Maeser
Vernal
Naples
Roosevelt
Ballard
Fort Duchesne
Duchesne
Myton
Helper
Spring Glen
Carbonville
Price
East Carbon
Wellington
Huntington
Orangeville
Castle Dale
Ferron
Moab
Loa
Monticello
Blanding
Aneth
Escalante
Tropic
Central
Veyo
WASHINGTON
Leeds
Toquerville
Virgin
Orderville
Pauite
Ivins
La Verkin
Springdale
Santa Clara
Hurricane
St. George
Washington
Apple Valley
Hildale
Kanab
Green River
Yampa River
White River
Colorado River
Dolores River
San Juan River
Big Sandy River
Hams Fork
Blacks Fork
Duchesne River
Price River
San Rafael River
Muddy Creek
Fremont River
Dirty Devil River
Escalante River
Virgin River
Paria River
Basemap Sources: Esri, USGS

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1. Executive Summary

In April 2022, the Colorado River Authority of Utah (Authority) approved a five-year Colorado River Management Plan (Management Plan) to accomplish its statutory mission to "protect, conserve, use, and develop Utah's waters of the Colorado River system." 63M-14-102, et seq. ("Authority Act"). The Management Plan began July 1, 2022, and continues through June 30, 2027 (fiscal years 2023 – 2027). In accordance with the Management Plan, annual plans (Work Plans) are developed and approved by the Authority Board. The Work Plans include activity details, estimated budgets, and time frames for projects related to the three priority areas of the Management Plan.

This year, Utah's legislature made various changes to the Authority Act effective July 1, 2026. Among them, the legislature refined the Authority's original mission to "protect Utah's right to use waters from the Colorado River system."[1] To accomplish this and to ensure that the Authority is well positioned to implement the next phase of activities under a successor Management Plan, the Authority will move from the Governor's Office as a program of the Governor, to the Department of Natural Resources.

This document is the Authority's Fiscal Year 2027 (FY27, July 1, 2026, to June 30, 2027) annual Work Plan, constituting the Management Plan's fifth annual Work Plan. The FY27 Work Plan also constitutes the fifth and final work plan under the current Management Plan. The FY27 Work Plan encompasses both ongoing Colorado River activities that began under the previous four Work Plans (FY23- FY26), as well as new Colorado River activities being initiated in FY27.

Because the Management Plan and individual Work Plans are dynamic and intended to respond to changing hydrology and conditions in the Colorado River Basin, FY27 Work Plan activities are informed by the following three developments:

1. Amendments to the Colorado River Authority of Utah Act effective July 1, 2026;
2. The lack of a consensus Colorado River Basin states agreement for the post-2026 operations for Lake Powell and Lake Mead and corresponding interstate commitments; and,
3. Significant drops in the elevations of Lake Mead and Lake Powell to critical elevations and record low hydrology in the Colorado River system.

This FY27 Work Plan includes information and corresponding work on the following items:

- Participation in intrastate and interstate Colorado River activities
- Investment in streamflow and diversion measurement
- Installation and maintenance of agricultural consumptive use measurement instrumentation

[1] H.B. 473 (2026): Colorado River Authority Amendments.

1. Executive Summary

- Acquisition of consumptive use data using satellite-based remote sensing technology
- Research supporting water supply forecasting improvements
- Research supporting water use optimization and demand reduction
- Participation in federal funding opportunities
- Drought mitigation pilot projects
- Provisional accounting of diversion and depletion
- Development of the Utah Colorado River Accounting and Forecasting planning model (UCRAF) in the Colorado River system in Utah
- Modeling to evaluate short-, mid-, and long-term Colorado River operating policy
- Oversight of Authority Advisory Council.

2. Fiscal Year 2027 Work Plan Overview

This Fiscal Year 2027 Work Plan (FY27 Work Plan) describes Management Plan activities programmed for FY27. The FY27 Work Plan also includes estimated costs, timeframes, and the relationship of each activity to the three Management Plan priority areas of Measurement (Section 5), Hydrology and Operations (Section 6), and Drought Mitigation (Section 7). Consistent with the Authority's refined mission to "*protect Utah's right to use waters from the Colorado River system,*"[2] the purpose of the Management Plan and associated annual Work Plans is to ensure that Utah can protect its right to use water from and live within its apportionment of waters of the Colorado River system. Certain activities to be performed during FY27 are reflected in the FY27 Work Plan as participation in work groups, teams, and committees, rather than being ascribed to a single focus area in the Work Plan. These activities are described in Section 3.

Activities and FY27 Work Plan elements described herein are supported by funding from several sources as illustrated in Table 1. These include annual ongoing appropriations and one-time appropriations to the Authority from the Utah Legislature, in-kind goods and services provided to the Authority by Utah Colorado River water users, and various federal funding sources. In particular, the FY27 Work Plan leverages a portion of the $50,000,000 Infrastructure Investment and Jobs Act (IIJA) funding that was made available to the Upper Division States (UDS) through the Upper Colorado River Commission (UCRC) to support the implementation of the 2019 Upper Basin Drought Contingency Plan (DCP).

[2] H.B. 473 (2026): Colorado River Authority Amendments.

2. Fiscal Year 2027 Work Plan Overview

Table 1. Anticipated FY27 Budget. TBD indicates budget is to be determined.

Section	Work Plan Element	FY27 Est. Budget	Funding Source[1]
Interstate & Intrastate Activities			
3	Personnel	$1,586,118 $609,214	Annual Appropriations In-Kind Contribution
3	Travel	$70,000	Annual Appropriations
4	Advisory Councils	$ 255,000	Annual Appropriations
Measurement			
5.1	Utah Measurement & Telemetry Program	$1,659,113	Federal Funding
5.2	Stream Flow Instrumentation & Maintenance	$500,000 $436,291	One Time Appropriation Federal Funding
5.3	Utah Flux Network	$134,000 $80,000	One Time Appropriation Federal Funding/In-Kind
5.4	OpenET/Google Earth Engine	$930,000	One Time Appropriation
5.5	Provisional Accounting	$182,000	One Time Appropriations
Hydrology & Operations			
6.1	Short- and Mid-Term Operations Modeling	$150,000	In-Kind Contribution
6.2	Long-term Operations Modeling	$300,000	In-Kind Contribution
6.3	Climate & Hydrology Research & Instrumentation	$30,000 $3,000	One Time Appropriation Federal Funding
6.4	Snowpack, Runoff, & Operations Pilot Project & Research	$33,000	One Time Appropriation
6.5	Snow Temperature Profile Sensors	$0	Project Discontinued
6.6	Radar Gap Filling Pilot Project	$100,000	One Time Appropriation
Drought Mitigation			
7.1	Emery County Irrigation Efficiency Study	$126,000	Federal Funding
7.2-7.4	UCRAF (Duchesne, San Rafael, Price River, Ashley & Brush, Colorado River System)	$617,000	One Time Appropriation
7.5	Demand Management Pilot Program	$2,151,113 $3,500,000 $1,450,000	One Time Appropriation (Future Programs) In-Kind Contributions
7.6	AG-DRIP Pilot Program	$500,000 $500,000	One Time Appropriation In-Kind Contribution
7.7	Pelican Lake Subsurface Drip Irrigation Pilot Project	NA	NA
Total[2]		**$15,901,849**	

[1] Federal funding sources include the Infrastructure Investment & Jobs Act and WaterSMART.

[2] The totals provided are estimates for FY27. Work Plan budgets are subject to adjustment depending on conditions in the Colorado River Basin that may be unknown when the Work Plan was developed.

3. Interstate Colorado River Engagement

Since June 2023, Utah's Colorado River Commissioner, with support from the Executive Director and other Authority staff, has been heavily engaged in negotiations with the other six Colorado River Basin States and the federal government over the criteria that will govern Colorado River operations beginning October 1, 2026 (Post-2026 Operations).[3] Thus far, the states have been unable to reach agreement on Post-2026 Operations which will result in the Department of Interior/Bureau of Reclamation selecting an operational scheme (Preferred Alternative) under the ongoing National Environmental Policy Act (NEPA) process. As a result, the Colorado River Authority undertakes activities included in the FY27 Work Plan with a renewed focus. This focus is informed by the lack of a consensus agreement, rapidly declining hydrology and changes to the Authority's enabling legislation made during the 2026 Utah legislative session (H.B. 473).

The FY27 Work Plan activities align with the three elements of the Management Plan - measurement, hydrology and operations and drought mitigation. Our primary goal is to protect Utah's right to use its Colorado River allocation while fulfilling downstream obligations under the 1922 Colorado River Compact, ultimately building statewide water resiliency through three key pillars:

1. Enhanced Water Measurement

Accurate reporting is vital to ensure Utah's water use is neither over- nor under-reported. Precise data allows for more effective resource management. The Authority is currently partnering with state agencies to modernize measurement infrastructure and data coordination.

2. Advanced Hydrologic Understanding

Interstate and intrastate modeling relies heavily on hydrologic projections. By improving our understanding of hydrologic shortages and runoff forecasting, we can provide Utah water users with the tools necessary to manage a diminishing supply.

3. Voluntary Water Reduction Programs

Utah leads the Upper Basin in developing voluntary, temporary, and compensated water reduction initiatives. The **Utah Demand Management Pilot Program** tests these concepts to inform future large-scale solutions. Our goal is to balance water conservation with the needs of:

- Agriculture**:** Keeping Utah farmers in business.
- Municipalities**:** Protecting critical drinking water supplies.
- Energy & Environment**:** Ensuring water for power production, wildlife, and the ecosystem.

[3] Prior to this, Utah through the Colorado River Authority, was directly involved in interstate negotiations over the development of the 2024 Supplemental Environmental Impact Statement (SEIS) and Record of Decision (ROD) for the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (a.k.a. SEIS for Near-Term Operations).

3. Interstate Colorado River Engagement

4. Advocacy

As a result of changes to the Authority Act (63M-14-102 et seq.) during the 2026 Utah legislative session, the Authority may coordinate with the Utah Office of the Attorney General to prepare the state for potential litigation involving the Colorado River. Given the lack of a seven Colorado River Basin States agreement, there is a possibility of interstate lawsuits to which Utah may be a party. Activities under the FY27 Work Plan are intended to put Utah in the best possible legal position in the event of litigation.

Engagement with Interstate Work Groups and Committees
In addition to the extensive involvement of Authority staff in interstate negotiations and related activities, Authority staff are engaged in numerous interstate Colorado River work groups, committees, technical teams, forums and activities. These include but are not limited to work with the Upper Colorado River Commission (UCRC), endangered fish recovery programs (Upper Colorado River Endangered Fish Recovery Program and San Juan Recovery Implementation Program), Glen Canyon Dam Adaptive Management Program, and the Salinity Control Forum. The Authority's engagement with these groups is critical in successfully representing Utah's interests and helping define what future obligations the State may face**.**

Additional information about select interstate activities is available below with a full list of interstate work groups, committees, and participating organization[s] in Table 2. Some of these are permanent groups, and others have been established to address temporary and topical issues.

Glen Canyon Dam Adaptive Management Program (GCDAMP): The GCDAMP operates under the Federal Advisory Committee Act and is a key compliance element of the 1996 Record of Decision (ROD) for the Operation of Glen Canyon Dam Final Environmental Impact Statement and subsequent 2016 ROD for the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP). Within the GCDAMP, the Adaptive Management Work Group (AMWG) makes recommendations to the Secretary of the Interior on Glen Canyon Dam operations and management actions to protect downstream resources, consistent with the 1992 Grand Canyon Protection Act. The GCDAMP is run through the Bureau of Reclamation with USGS acting as the Program science provider. In addition to the AMWG, the GCDAMP is composed of a Technical Work Group (TWG) and several Ad-Hoc committees. Authority staff are involved at all levels. Key activities in FY26 included the second year of implementing experimental Cool-Mix Flows under the LTEMP Supplemental Environmental Impact Statement (SEIS) to prevent the establishment of smallmouth bass within Grand Canyon; recommendation of federal FY26 Triennial Budget and Work Plan budget adjustments; completion of -12-Mile Slough modification; convening of several knowledge assessment workshops, consideration of a fall and spring High-Flow Experiment, and recommendation of experimental Cool-Mix Flows for 2026.

3. Interstate Colorado River Engagement

IIJA Funding, UCRC: The IIJA was signed in 2021 and allocates $8.3 billion through federal Fiscal Year 2026 for Reclamation to fund western water infrastructure projects. In 2023, $50 million was authorized (through December 2029) to the Upper Division States through the UCRC for limited duration data gathering and analysis activities that support and further operationalize drought response planning and implementation of the Upper Basin Drought Contingency Plan (DCP). Activities contemplated in the Notice of Award are consistent with the Authority's Five-Year Management Plan and include efforts such as additional ground-truthing and verification of remotely sensed consumptive water use estimation, estimation of water supply and shortages via streamflow and diversion measurements, and field-scale water balance studies. In addition to pursuing Utah-specific IIJA-funded projects (e.g., Sections 5.1, 6.3, 7.1), the Authority is involved in several four-state IIJA projects including an upstream initial unit evaporation study (Flaming Gorge Reservoir, Navajo Reservoir, Blue Mesa Reservoir), a mid-size reservoir evaporation study, an incidental water use study, and the development of an Upper Basin data integration portal.

Consumptive Use Work Group, UCRC: The UCRC Consumptive Use Work Group (CUWG) is comprised of technical representatives from the UD States, UCRC, and the Bureau of Reclamation. The purpose of the CUWG is to develop and/or consider methods and data pertaining to consumptive water uses in the Upper Basin. Following approval by the Commission in 2022 of eeMETRIC, a model that uses remotely sensed evapotranspiration data, as a uniform method for estimating agricultural consumptive use, the CUWG has focused on 1) reviewing Reclamation's consumptive use methods, and 2) evaluating and compiling the best available estimation methods for the remaining consumptive use sectors (non-agricultural) in the Upper Basin. In FY26, the UCRC and CUWG continued work on a draft Methods Manual for Estimating Consumptive Uses in the Upper Colorado River Basin and prepared a Memorandum of Understanding with Reclamation regarding consumptive use data sharing in the Upper Basin.

3. Interstate Colorado River Engagement

Table 2. List of Colorado River Interstate Activities. Acronyms include Colorado River Authority of Utah (Authority), Office of the Attorney General (OAG), Division of Water Rights (DWRi), Division of Water Resources (DWRe), Division of Wildlife Resources (DWR), Department of Natural Resources (DNR), Department of Agriculture and Food (UDAF), and Division of Water Quality (DWQ).

Committee, Work Group	Utah Participating Organization
Standing UCRC Committees	
UCRC Legal Committee	OAG
UCRC Engineering Committee	Authority/DWRi/DWRe/Water Users
Basinwide Work Groups	
Basin States Technical Work Group	Authority
Lake Powell to Lake Mead Release Curve Subgroup	Authority
Upper Division States Contributions Subgroup	Authority
Lower Basin States Intentionally Created Surplus Subgroup	Authority
Upstream Initial Unit Operations Subgroup	Authority
Lower Basin Reductions Subgroup	Authority
Colorado River Basin Climate and Hydrology Work Group	Authority/DWRe
Ad Hoc UCRC, Upper Division State Work Groups and Committees	
US-Mexico Minute 323 Binational Work Groups	Authority
UCRC Technical Team	Authority/DWRe
UCRC Demand Management/Conservation Work Group	Authority/DWRi/OAG
Upper Basin Drought Response Operations Agreement Work Groups	Authority/OAG/DWRi/DWRe
Upper Basin Consumptive Use Work Group	Authority/DWRe/DWRi
UCRC Depletion Demand Schedule Work Group	Authority/DWRe
Glen Canyon Dam Adaptive Management Program	
Adaptive Management Work Group (AMWG)	Authority
Technical Work Group (TWG)	Authority/DWRe
Planning and Implementation Team	Authority
Upper Colorado River Fish Recovery Program	
Implementation Committee	DWR
Management Committee	DNR
Biology Committee	DWR
Water Acquisition Committee	Authority/Water Users
San Juan Recovery Implementation Program	
Coordination Committee	DNR
Biology Committee	DWR
Water Quality	
Colorado River Salinity Control Forum	DWRe/DWQ/UDAF/Authority

4. Advisory Councils

Description

Under UCA 63M-14-209, the Authority established advisory councils to provide data, information, and input relevant to its mission. Five regional councils currently operate across the state: Northern, Central, Southeast, Southwest, and Agricultural. Each is composed of water users, regional experts, topical specialists, and engaged citizens who care about the Colorado River. These councils serve as a deliberative forum for diverse perspectives. While they hold no formal decision-making authority, their input meaningfully shapes the thinking of Utah's Colorado River Commissioner, the Authority Board, staff, and elected officials. A complete member list is available at cra.utah.gov. The councils have strengthened decision-making by highlighting regional challenges that might otherwise go unnoticed at the statewide level, providing real-time community feedback, and fostering transparent dialogue and grassroots collaboration. They also offer input on annual work plans.

Progress to Date

Over the past year, the advisory councils made meaningful strides in public engagement, regional representation, and policy development. Council members and Authority staff participated in outreach, education, and fact-finding initiatives that gave participants firsthand insight into the challenges and opportunities facing Utah's portion of the Colorado River system. This included the annual float trip in August 2025, which brings senior state, federal, and local officials together for a hands-on experience with the river. In January 2025, all five councils convened for a joint session at the Utah State Capitol, where members engaged directly with state legislators. The event created a valuable forum for learning and reinforced the importance of the Authority's mission to lawmakers.

Two structural developments strengthened the council system in FY26. First, the former Southern Advisory Council was divided into the Southeast and Southwest Advisory Councils, allowing for more focused, localized engagement. The newly formed Southwest Council enables more direct dialogue with the Shivwits Band of Paiutes in Washington County and more targeted discussion of issues facing communities in the Virgin River drainage basin. Second, the Agricultural Advisory Council was fully constituted, bringing the voice of Utah's farmers, ranchers, and irrigation stakeholders directly into the conversation.

A third key development was the Authority's ongoing collaboration with the newly formed legislative Colorado River Caucus, launched by Representative Scott Chew. Comprising House and Senate members with districts inside the Colorado River Basin, the Caucus held regular meetings at which the Authority provided updates on key developments, creating a more direct conduit and dialogue between the Authority and Utah's water policymakers.

FY27 Work Plan

At the January Board meeting, Vice Chairs from each council presented recommendations. The following priorities have been selected for consideration in FY27. The five councils will continue meeting and providing updates and recommendations to the Authority Board, staff, and Utah's Colorado River Commissioner as conditions evolve.

4. Advisory Councils

Key Advisory Council Recommendations to the Board

Protect Future Development Rights: Multiple councils insist that any new post-2026 Colorado River Basin States agreement must explicitly protect Utah's legal right to develop its remaining, unused Colorado River allocation. The Agricultural Council clearly notes that the state cannot lock itself into current usage levels when its full allocation remains undeveloped.

Lower Basin Accountability and Uniform Measurement: Councils are unanimous: Utah must not bear a disproportionate burden in any new Basin States agreement. The state must secure binding, enforceable, and proportional water reduction commitments from Lower Basin states. The Central, Agricultural, and Southeast Councils call for uniform measurement standards across all basin states for consumptive use and evaporation. As the Central Council put it, "you can't manage what you can't measure." The Northern and Southeast Councils further stress that negotiations must be grounded in transparent hydrologic modeling based on actual storage and realistic future flows, not speculative forecasts.

Protect Local Economies and Recreation: The Southeast Council urges the River Commissioner to advocate for a minimum operational elevation of 3,550 feet for Lake Powell in the post-2026 operating plan. Dropping below this level renders major marinas unusable, causing direct economic harm to gateway communities and putting hundreds of millions in tourism spending at risk. The Central Council similarly cautions that assets like Flaming Gorge and other Colorado River Storage Project units must not be sacrificed to meet Lower Basin demands.

Tribal Engagement: Several councils called for continued and enhanced tribal engagement in all key Colorado River water discussions.

Fish, Wildlife, Habitat and the Environment: The Northern and Southeast Councils warn that any agreement neglecting ecological resilience will ultimately prove unsustainable. They urge that ecological protections, flow reliability, and ecosystem services be explicitly incorporated into federal operating criteria alongside water and power needs.

Agricultural Water Conservation: The Agricultural Advisory Council is clear that conservation commitments must remain strictly voluntary, temporary, and adequately funded by state or federal governments. Unfunded mandates, they warn, would bankrupt family farms and ranches. The Southeast Council similarly supports cost-effective, farmer-driven optimization, crop switching, and targeted voluntary fallowing. The Northern Council recommends expanding practical conservation pilot programs across both municipal and agricultural sectors. The Utah Demand Management Pilot Program (DMPP), approved by the Authority Board and implemented for the first time in 2025, reflects these recommendations directly. It is the first program of its kind among Upper Division States, and Utah is leading the way.

4. Advisory Councils

Provisional Accounting and Storage Frameworks: The Northern Council strongly recommends establishing a viable Upper Basin storage and accounting framework so that conserved water can be credited to a Utah account and stored in Lake Powell. The Central and Southeast Councils agree, stressing that Utah's conservation efforts must be fully recognized rather than blended into regional accounting. The Authority added a new FY26 work item to implement this recommendation in coordination with the DMPP.

Innovation and Responsible Water Development: The Southwest and Southeast Councils emphasize the importance of continuing local water storage, reuse, desalination, and augmentation projects to meet regional growth and future needs. The Southwest Council prioritizes collaboration with Utah State University for academic research and Utah Tech for testing practical applications of emerging water technologies. The Southeast Council urges the Board to champion water-related opportunities tied to clean energy, including small modular nuclear projects, new hydropower, pump-storage facilities, and geothermal development.

Project Information

- Funding*:* one-time appropriations
    - FY27: $255,000

5.1 Utah Diversion Measurement & Telemetry Program

Description

The Utah Diversion Measurement and Telemetry (UDMT) Program is a federally funded, collaborative initiative between the Upper Colorado River Commission (UCRC) and the Colorado River Authority of Utah (Authority) with support from Jones and DeMille Engineering (JDE) and Intermountain Environmental, Inc (IEI). Projects eligible to receive funding under the UDMT Program include source diversions, reservoir inflows and outflows, and return flows. The intent of this Program is to enhance water monitoring infrastructure across the Upper Colorado River Basin within the State of Utah to support implementation of the Upper Basin Drought Contingency Plan (DCP). By installing measurement and telemetry devices, the UDMT Program will support implementation of the DCP by 1) facilitating conservation and drought mitigation measures, 2) improving the understanding of existing water use in Utah, 3) enhancing water supply and runoff forecasting capabilities, 4) optimizing water distribution systems, and 5) enabling data driven water management. The UDMT is funded through the IIJA and is administered by the UCRC, with the Authority supporting Program implementation.

Progress to Date

On April 4th, 2025, a request for proposals (RFP) was issued by UCRC for technical and administrative consultant support to implement IIJA-funded diversion measurement and telemetry projects in Utah. JDE, with support from, was selected as the most qualified offeror by a selection committee that included representatives from the UCRC, Authority, DWRi, DWRe, and UDAF. After a kick-off meeting in late July, the Project Team focused on developing key Program components such as outreach and application materials, a Program Implementation Plan, standard design and cost estimates, websites, and participant implementation agreements.

Program implementation occurred in two batches in FY26. In October 2025, the UCRC first solicited applications for pre-selected pilot UDMT projects associated with the Authority's Demand Management Pilot Program (DMPP). The UCRC and Authority pursued a small Pilot Batch to help test and improve the application/ implementation process for future cycles and to kickstart the implementation of DMPP-related projects, recognizing the importance of installing measurement prior to the 2026 irrigation season. The UCRC received six Pilot UDMT applications, all of which were selected for funding and implementation. After NEPA approvals (categorical exclusions) were received from the Bureau of Reclamation, project designs were finalized and implementation agreements between the UCRC and participants were executed. Installation of measurement and telemetry occurred during the spring months and consisted mostly of updating existing, non-functional measurement and telemetry.

The first formal Program cycle, or Batch One, occurred concurrently with the Pilot Batch and was open to any water user in the Upper Colorado River system in Utah. The Batch One application was released on November 10th, 2025, and closed on January 15th, 2026. During the application window, the Project Team held two virtual webinars and five in person informational meetings and

offered application support at local JDE offices. The UCRC received 45 applications during Batch One. Each application was reviewed using a standard review form and scored with ranking criteria established by the UCRC and Authority. Due to the number of applications received, the UCRC and Authority elected to include cost as part of the ranking process and limit the total available budget under Batch 1 to ~$900,000, which split funding evenly between Batch One and a future Batch Two. After considering project scores, cost, and eligibility, 27 projects were selected to proceed under Batch One. The remainder of FY26 was spent obtaining NEPA and permitting approvals, preparing and signing implementation agreements, and refining designs.

FY27 Work Plan

The first half of FY27 will primarily consist of JDE/IEI installing measurement and telemetry devices associated with Batch One projects. Installations will be grouped according to geographic and/or timeline constraints to maximize efficiency. The Project Team will coordinate with DWRi to ensure that UDMT data is integrated appropriately into DWRi's existing system. The UCRC and Authority also anticipate conducting a second application cycle in summer 2026 using the remaining UDMT Program funds. Projects that were not selected under Batch One will be encouraged to reapply during Batch Two and will receive additional points in the ranking process. Batch Two is anticipated to mirror Batch One in terms of Program implementation but may be adapted based on lessons learned during Batch One.

Project Information

- Funding: federal IIJA funds
  - Total: $2,900,000
  - FY27: $1,659,113 (Project Participants)
- Agreements: contract between UCRC and Jones and DeMille Engineering
- Timeline: FY25 – FY30

Key Partners

- Jones and DeMille Engineering, Intermountain Environmental, Inc., DWRi, UCRC, Local Water Entities

5.2 Stream Flow Instrumentation & Maintenance

Description

In 2024, the Authority, working through the UCRC, leveraged over $1.4 million in federal IIJA funding for the installation and operation of 12 USGS stream gages within the Colorado River System in Utah. In April 2025, UCRC's initial contract with USGS was amended to leverage an additional $1.07 million of IIJA funding for the installation of nine additional USGS stream gages, over half of which support DMPP activities on the Price River. The final amendment, signed in December 2025 for $80,770, included cost-share for the operation and maintenance of two existing gages.

Progress to Date

To date, all IIJA-funded USGS stream gages have been installed and are collecting data. A summary of IIJA-funded gages and installations is included in Table 3.

Table 3. Summary of IIJA-Funded USGS Stream Gages. All data is publicly available at Water Data for the Nation (U.S. Geological Survey, n.d.).

Stream Name	Station/ Gage Description	Installation Date
Price River	Price River below Golf Course near Helper, UT (09313520)	6/14/2024
Lake Fork River	Lake Fork River near Myton, UT (09294500)	7/11/2024
Lower Ashley Creek	Ashley Creek below Union Canal Diversion near Jensen, UT (09271550)	7/11/2024
Muddy Creek	Muddy Creek below I-70 near Emery, UT (09332100)	7/11/2024
Price River	Price River near Scofield, UT (09311500)	7/24/2024
San Rafael River	San Rafael River near Castle Dale, UT (09328000)	9/11/2024
Ashley Creek	Ashley Creek near Remember the Maine Park near Vernal, UT (09271000)	10/2/2024
Castle Creek	Castle Creek below Castle Valley near Moab, UT (09182400)	10/16/2024
North Fork Mill Creek	North Fork Mill Creek above Confluence with Mill Creek near Moab, Utah (09183800)	2/21/2025
Fremont River	Fremont River at Hwy 24 above Sandy Creek near Caineville, UT (09330250)	3/21/2025
Green River	Green River at Mineral Bottom near Canyonlands National Park (09328920)	NA, Existing
Colorado River	Colorado River at Potash, UT (09185600)	NA, Existing
Washboard Wash[1]	Washboard Wash BL Sacco West Diversion near Wellington, UT (09314260)	4/21/2025
Brush Creek	Brush Creek Near Jensen, Utah (09263500)	4/30/2025
San Juan River	San Juan R below Piute Farms Wash near Monument Valley, UT (09379700)	5/21/2025

5. Measurement — Streamflow & Diversions

Price River[1]	Price River at Wellington, Utah (09313600)	6/2/2025
Price River[1]	Price River at Ridge Road near Wellington, UT (09313980)	6/3/2025
Price River[1]	Price River BL Miller Creek NR Wellington, UT (09314250)	6/3/2025
Duchesne River	Duchesne River Near Hanna, UT (09276700)	7/2/2025
Price River*	Price River at Silvagni Ranch near Woodside UT (09314300)	8/12/2025
Green River	Green River below Swasey's Rapid near Green River, UT (09314700)	9/17/2025
Uinta River[2]	Uinta River near Randlett, UT (09301500)	NA, Existing
Price River[2]	Price River near Woodside, UT (09314500)	NA, Existing

[1]Funded through April 2027
[2]Funded at a 50% cost share

FY27 Work Plan

USGS will continue to operate and maintain the gages in Table 3 according to the contract between the UCRC and USGS. Based on operational challenges experienced at the Price River near Scofield gage due to algal growth, USGS will conduct additional field measurements at the gage to improve rating curve development. In addition, USGS may install a permanent cableway at the Ashley Creek at Remember the Maine gage, which was included in the first contract amendment, if there is local support to fund operations and maintenance of the gage after IIJA funding ends (September 2029). The Authority and UCRC will continue to monitor data quality at all IIJA funded gages and determine if additional actions are needed. Additional stream flow measurement instrumentation may be needed if water conservation programs such as the Utah Demand Management Pilot Program are scaled up. The Authority has reserved one time funding in anticipation of potential additional instrumentation installations in FY27.

Project Information

- Funding: federal IIJA funds, one time appropriations
  - Total: $2,621,455
  - FY27: $436,291
  - FY27: $500,000 (Future Instrumentation Installations)
- Agreements: Contract and amendments between UCRC and USGS
- Timeline: FY25 – FY30

Key Partners

- USGS, UCRC, Local Water Entities

5.3 Utah Flux Network

Description
The Authority is partnering with the Utah Geological Survey (UGS) to fund the Utah Flux Network (UFN), a critical initiative for measuring consumptive water use across the Colorado River system. By deploying Eddy Covariance (EC) stations, the UFN captures the highest-quality field-scale evapotranspiration data available. UFN EC station data is being used to ground-truth the larger scale, remotely sensed evapotranspiration data from OpenET.

Progress to Date
To date, nine full-scale EC stations have been installed by UGS in the Colorado River system in Utah, along with the "alternative" EC station in Green River, completing the planned network. UGS has developed code and protocol to streamline management of raw data, data quality assurance and quality control, and post-processing needed to generate reliable flux information. The results of this data pipeline have been shared with OpenET, Desert Research Institute, UCRC and AmeriFlux. For more information visit: UGS's website (geology.utah.gov) or the Authority's Utah Flux webpage (cra.utah.gov/utah-flux-network).

FY27 Work Plan
In FY27, the UFN will continue to maintain EC stations and collect data to be analyzed. Intercomparison of EC station data with OpenET and other available datasets will proceed in collaboration with the OpenET team and discipline experts.

Project Information
- Funding: one-time appropriations and federal IIJA funds
  - Total: $1,030,000 (Authority), $581,000 (IIJA funds - UCRC)
  - Authority Funds Spend to Date: $861,171
  - FY27: $134,000 (Authority), $80,000 (UGS and IIJA funds)
- Agreements: Interagency Funding Agreement with the Authority and UGS, beginning July 2022 (Authority Agreement). Interagency Funding Agreement with the UCRC and UGS, beginning July 2024 (UCRC Agreement).
- Timeline:
  - FY25-FY27 (Authority Agreement)
  - FY25-FY30 (UCRC Agreement)

Key Partners
- UGS, OpenET, TU, TNC, Landowners, DWRi, UCRC

5.4 OpenET

Description

OpenET is advancing consumptive use water measurement in the Colorado River system by providing a transparent, satellite-based platform for measuring evapotranspiration from field to basin scales. By utilizing remote sensing, the system offers a consistent analysis of the entire landscape, aligning the Authority's data with broader interstate measurement efforts.

Progress to Date

Since FY23, OpenET has advanced three core deliverables: training, data improvement, and data comparison. Key administrative milestones include delivering data licensing recommendations, hosting the inaugural OpenET Applications Conference, and providing technical training for Authority staff. On the technical front, OpenET produced a comprehensive 1991–2023 historical dataset for Utah's Colorado River system and is currently developing a new effective precipitation dataset. The partnership also finalized several critical assessments, including recommendations for expanding the Utah Flux Network (UFN) and comparing OpenET data against legacy crop coefficient estimates. To streamline these efforts, the Authority initiated an Enterprise Agreement for Google Cloud Platform in FY24, granting unlimited access to Google Earth Engine and enabling more efficient processing of large-scale datasets. The Authority hosted a day-long OpenET training on August 27, 2025, for contractors and State partners—together, the Authority hosted 49 attendees and 12 OpenET user organizations. This past year, OpenET also released an Intercomparison Report of OpenET to various Legacy Crop Coefficient Methods that are commonly used in Utah. For more information visit: OpenET's website (etdata.org) or the Authority's OpenET webpage (cra.utah.gov/openet).

FY27 Work Plan

In FY27, OpenET will continue contracted efforts for the Authority. Tasks will focus on completing the second of two Accuracy Assessments based on available EC station data, development of effective precipitation and consumptive use datasets, data and platform updates, and training.

Project Information

- Funding: one-time appropriations
  - Total: $2,541,000 (OpenET)
  - Authority Funds Spent to Date: $1,438,400
  - FY27: $850,000 (OpenET)
  - FY27: $80,000 (Google Cloud Platform)
- Agreements: Sole source contract with OpenET. MOU funding agreement with Great Salt Lake Commissioners Office (Google Cloud Platform)
- Timeline: FY24-FY27 (OpenET)

Key Partners

- OpenET, UGS, DWRi, DWRe

5.5 Provisional Accounting

Description

The Bureau of Reclamation and the Upper Division States acting through the UCRC signed a Memorandum of Understanding (MOU) in December 2024 allowing for the accounting of water conserved as a result of conservation and other qualifying activities in the Upper Basin. The MOU focuses on "Qualifying Activities" that the Upper Division States may implement in 2025 and 2026 under existing federal and State authorities. The MOU establishes a framework for the Parties to implement provisional accounting for water volumes associated with these Qualifying Activities. A key understanding within the MOU is that the Upper Division States will seek credit for any water generated by these Qualifying Activities that flows into Upper Colorado River Basin reservoirs. Provisional accounting measures water delivered to an Upper Colorado River Basin reservoir (Lake Powell) generated through the Utah Demand Management Pilot Program (DMPP) projects. Projects include various types of water conservation activities such as resting farm ground for a full or partial season, deferral of trans-basin diversions and intentional releases of storage water from upstream reservoirs. Projects are located on both tributaries and main stem reaches of the Green and Colorado rivers.

Progress to Date

Four DMPP projects were approved in 2025, and an additional four projects were approved in 2026 for a total of eight projects in the program. Table 4 shows a summary of the provisional accounting completed for Water Year 2025 and the anticipated conserved consumptive use delivered to Lake Powell. Fixed-Time Change Applications were filed with the Division of Water Rights for each project under Utah Code, Section 73-3-30(4). Flow gages coupled with a RiverWare©, model provided an estimate of transit losses as the water moved downstream to Lake Powell. The 2025 cycle provisional accounting data shows definitively that water can be leased in Utah under an approved water conservation program and moved downstream to Lake Powell.

Table 4. Provisional Accounting WY2025 Utah DMPP Conserved Consumptive Use Water and Transit Loss Reductions at Gages through System Traveling to and Stored in Lake Powell

Metric	UT DMPP CCU at Point A	Total Volume at Green River	Total Volume at Green River at Mineral Bottom	Total Volume at Colorado River at Gypsum Creek	Total Volume Lake Powell (Point B)
September 30, 2025	2,909 AF	2,783 AF	2,772 AF	2,744 AF	2,743 AF
Volume difference	0	126 AF	137 AF	165 AF	183 AF
Transit loss		4.33%	4.72%	5.69%	5.71%
Total loss, transit and storage at Lake Powell		4.33%	4.72%	5.69%	6.30%

Note: Evaporative loss is also incurred once the water reaches Lake Powell and is shown.

5. Measurement | Provisional Accounting

FY27 Work Plan

Estimates of the total volume of water delivered to an Upper Colorado River Basin reservoir will be determined through actual flow measurements of the water, documentation of water left in-stream on large main stem rivers such as the Green and Colorado, and measurement of water released from upstream storage reservoirs. Verification activities will take place beginning at the authorized points of diversion, rediversion and points of return (if applicable), as defined on the change applications filed with the Utah Division of Water Rights for each project. Additional measurement points (as needed) will be established downstream along the natural stream channels to measure and track flows to an Upper Colorado River Basin reservoir. Distribution records from the Utah Division of Water Rights will be used to determine if flows were intercepted by intervening diversions.

Calculation of incidental conveyance and evaporation losses between the location of the Qualifying Activities and the Upper Colorado River Basin reservoir designated as the point of delivery will include analysis of both direct measurements and modeling along larger stream and river stretches where direct measurement is ineffective.

Project Information

- Funding: one-time appropriations
    - Total: $207,701 (Jacobs Team)
    - Authority Funds Spent to Date: $127,834
    - FY27: $82,145 (Jacobs Team)
    - FY27: $100,000 (Uncontracted/Future DMPP Cycle)
- Agreements: Jacobs Engineering
- Timeline:
    - FY25-FY27

Key Partners

- UCRC, UDS, OpenET, UGS, DWRe, DWRi

6.1 Short- & Mid-Term Operations Modeling

Description

Short- and mid-term operations modeling proposed actions at Lake Powell and Lake Mead are key elements to ensure that management of these reservoirs is in accordance with the Law of the River[4]. The modeling uses computer simulations using a range of potential hydrologic conditions.

The Bureau of Reclamation (Reclamation) uses the Colorado River Mid-term Modeling System (CRMMS), which is implemented in a modeling software called RiverWare©, to model the likelihood of different system conditions occurring in the short and mid-term (up to five years). CRMMS provides the ability to evaluate probabilistic system conditions, informing operators and stakeholders of the risk of certain conditions occurring given projected forecasts and initial conditions. The Authority has used CRMMS to evaluate operating proposals under the 2007 Interim Guidelines (which govern the coordinated operations of Lake Powell and Lake Mead), the effectiveness of proposed operations under the Drought Response Operations Agreement (DROA), and other operations related to the 2019 Drought Contingency Plans (DCPs) and/or emergency actions taken in response to river conditions in the short to mid-term.

Progress to Date

Work was conducted to review monthly CRMMS model outputs and Colorado Basin River Forecast Center (CBRFC) forecasts to determine the possibility of different actions for the coming years. Monthly DROA reports were compiled regarding the current forecast and the likelihood of additional actions that may be taken by Reclamation in the future. Work was also completed to review the forecasted annual releases from Lake Powell and understand associated impacts to operations, tier determinations, and other factors of interest to the Authority.

FY26 Work Plan

Short and mid-term modeling activities are driven by real-time response to developing hydrologic and system storage conditions.

Project Information

- Funding: in-kind contributions from CUWCD
  - FY27: $150,000
- Agreements: Pre-existing, multi-year contract with Precision Water Resources Engineering (PWRE) and CUWCD.

Key Partners

- PWRE, UCRC, DWRi, DWRe, Reclamation, CUWCD

[4] The Law of the River is a compendium of laws, regulations, agreements, and policy affecting the use, management and allocation of water in the Colorado River system.

6.2 Long-Term Operations Modeling

Description

The 2007 Interim Guidelines, which governs the coordinated operations of Lake Powell and Lake Mead, will expire December 31, 2026. This operating policy has significant bearing on system conditions, second only to hydrology. Similar to short- and mid-term operational evaluation, long-term planning and operating policy performance is evaluated using RiverWare© modeling. Reclamation has developed, and made public, its Colorado River Simulation System (CRSS) model to evaluate long-term operating policy. This work includes evaluating system performance under a variety of hydrologic conditions and water use demands when using 2007 Interim Guidelines, variations of the 2007 Interim Guidelines, and other alternative operations of Lake Powell and Lake Mead.

Progress to Date

Modeling and technical analysis occurred throughout FY26 to support each element of the Post-2026 process. Key tasks included an analysis of hydrologic shortage, refinement of the UDS alternative, simulation of initial alternatives released by Reclamation, analysis of the Draft Environmental Impact Statement (EIS) for Post-2026 operations and independent modeling of Utah-specific concepts.

FY27 Work Plan

Modeling work will continue in FY27 in parallel with the ongoing NEPA process for Post-2026 efforts. Anticipated work could include refinement of policy alternatives, analysis of alternatives in the Final EIS, and continued technical support to the Upper Basin technical team.

Project Information

- Funding: in-kind contributions from CUWCD
    - FY27: $300,000
- Agreements: Pre-existing, multi-year contract with Precision Water Resources Engineering and CUWCD.

Key Partners

- PWRE, UCRC, DWRi, DWRe, BOR, CUWCD

6.3 Climate & Hydrology Research & Instrumentation

Description

The Authority has a small and flexible budget item to support emerging research when opportunities arise that directly support the Management Plan. Through the UCRC, IIJA funding has also been identified to support limited duration data gathering and studies that facilitate implementation of the Upper Basin DCP. Three projects are currently supported under this priority:

1. The Authority is financially supporting the operation and maintenance of 15 weather stations across the Colorado River Basin by USU's Utah Climate Center (UCC). Research conducted by the UCC using the 15 weather stations will improve knowledge of variability and predictability of precipitation for forecasting, which supports improved hydrology and operations planning and drought mitigation implementation.
2. Through the UCRC and in coordination with the USU Extension Service and UCC, the Authority is facilitating IIJA funding for the installation and operation of one weather station within the Navajo Nation in Utah. To maintain continuity, the weather station will be installed and operated by the UCC. In addition to supporting climate resiliency planning for the Navajo Nation, the additional weather station will contribute to a growing network of instrumentation in the Upper Colorado River Basin that supports improved forecasting, trend analysis, validation of modeled metrics, and real time observation of weather phenomena.
3. The Authority is supporting Phase II of an Upper Colorado River Basin consumptive use modeling study by Research Triangle Institute International (RTI). The project was initiated by the Colorado River Climate and Hydrology Work Group, with the Authority and several other entities as funding partners. The first phase of the consumptive use modeling effort began in 2021 and compared the State of Colorado's StateCU and StateMod models with CBRFC models (RTI International, 2023). The second phase began in 2023, runs through 2025, and is expanding this comparison and development of models to New Mexico, Utah, and Wyoming and incorporating remotely-sensed evapotranspiration data.

Progress to Date

For the three existing Climate and Hydrology Research projects, progress was made as follows:

1. The funding support continued, and research was synthesized with UFN and OpenET data comparison efforts and other relevant Work Plan projects.
2. The USU Extension Service, UCC, the Authority, and UCRC continued discussions on developing a scope of work, addressing permitting needs, and estimating project costs for the Navajo Nation weather station.
3. Monthly update meetings were held, and modeling efforts progressed according to the scope of work. The RTI team produced a final report documenting work completed to incorporate remotely sensed ET datasets into the CBRFC forecasting process.

6. Hydrology & Operations | Research & Implementation

FY27 Work Plan

The Authority remains committed to tracking and pursuing novel, developing, and best-available science, considering financial support for new research initiatives that support the Management Plan, and pursuing the three existing projects in FY27 as follows:

1. Funding support will continue, and weather station data will be synthesized with UFN and OpenET comparison efforts and other relevant Work Plan projects.
2. A scope of work and contract will be finalized, and permitting requirements will be met. Study outcomes will be synthesized with relevant Work Plan and UCRC IIJA projects.
3. Awareness and understanding of existing and emerging research needs will be maintained to support Management Plan priorities and explore project and funding needs with collaborators.

Project Information

- Funding: UCC: one-time appropriations, federal IIJA funds ($150,000 Authority; TBD IIJA), RTI: one-time appropriations, $50,000 one-time funds allocated to Climate and Hydrology Work Group upfront for two-year project ($300,000 Total; $25,000 Authority, $25,000 CUWCD in-kind contributions, $75,000 Reclamation, $60,000 Colorado Water Conservation Board, $50,000 SNWA, $25,000 Six Agency Committee of California, $20,000 Central Arizona Water Conservation District, $20,000 Denver Water)
    - Total: $215,000
    - Authority Funds Spent to Date: $76,545
    - FY27: UCC ongoing (Authority): $30,000
    - FY27: UCC (IIJA): Less than $15,000 (estimated, to be determined early FY27)
    - FY27: RTI: no additional costs
- Agreements: UCC, Authority: Funding agreement with USU executed July 2022, amended November 2024; UCC, IIJA: Funding agreement anticipated between UCRC and UCC; RTI: Funding agreement with Southern Nevada Water Authority (SNWA) as the project manager executed June 2023
- Timeline:
    - UCC (Authority) and RTI: FY23 – FY27
    - UCC (IIJA): FY26 – FY30

Key Partners

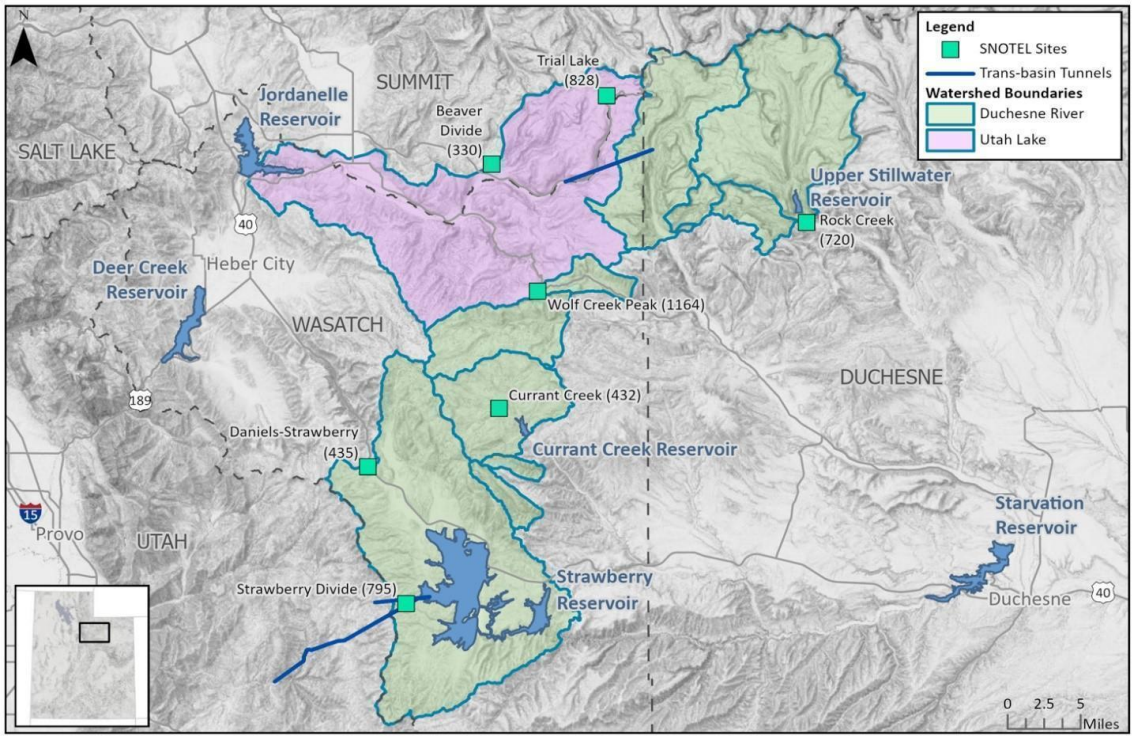
- Utah Climate Center, USU, UGS, OpenET, UCRC, Colorado River Climate and Hydrology Work Group, Colorado Basin River Forecast Center, DWRi, DWRe, CUWCD, Southern Nevada Water Authority, Research Triangle Institute International

6.4 Snowpack, Runoff, & Operations Pilot Project & Research

Description

The Authority is conducting "Flakes, Flights, and Forecasts: Snow Measurement Enhancements in the Uinta Mountain Headwaters" as the first-ever Airborne Snow Observatories, Inc. (ASO) Pilot Project in Utah. The Pilot Project will collect remotely sensed snowpack data and snowpack-informed streamflow forecasts over a three-year (2024-2026) period. ASO uses airborne lidar technology to collect snow depth, snow water equivalent (SWE) and snow albedo measurements across entire watersheds. These measurements are paired with ground observations to validate snow depth and density. These data are then used to model and produce runoff forecasts using the WRF-Hydro integrated streamflow modeling system. WRF-Hydro forecasts delivered by ASO are used by a variety of water management entities across the western United States to inform water resources system operations. As part of this effort, these forecasts will be integrated into the Strawberry Aqueduct Collection System model (SACS model) and UCRAF planning model and will be compared against forecasts produced by the CBRFC.

Figure 1. ASO Uinta Mountain Headwaters Pilot Project study area and key infrastructure



6. Hydrology & Operations | Research & Implementation

Progress to Date

In FY26, following the completion of the second year of flights in the spring of 2025, the Project Team focused on enhancing the performance of the WRF-Hydro forecasting model through ongoing internal calibration efforts, which were aimed at refining model accuracy and reliability. These continuous improvements help ensure that forecast outputs are increasingly aligned with observed hydrologic conditions. ASO also expanded the Utah WRF-Hydro forecast domain to include the full spatial extent of the SACS and UCRAF models as well as the Weber River Basin, where DWRe is leading a new ASO project. Work was also done to compare the WRF-Hydro streamflow forecasts against CBRFC forecasts and experimental "ASO-informed" CBRFC forecasts, as well as observed data. ASO-informed forecast products were also integrated into the SACS model, alongside traditional CBRFC forecasts, to understand the impact that different forecast products have on hypothetical operations of the SACS system. Results of the forecast comparison and model integration efforts were compiled in a memo, which was shared with the Bureau of Reclamation as part of the semi-annual administrative performance report. The third and final year of ASO flights kicked off with a flight on March 11th. The second and third flights of the 2026 season occurred on April 18th and May 11, respectively, which concluded contracted flights for the Uinta Mountain Headwater ASO Pilot Project.

Data and reports can be found at the Authority's Flakes, Flights, and Forecasts webpage (cra.utah.gov/airborne-snow-survey-pilot-project).

FY27 Work Plan

Work in FY27 will focus on performing forecast comparisons and integration with the SACS and UCRAF models for WY26, as well as synthesizing efforts across all years of the Pilot Program (WY24-WY26). This synthesis will culminate in a final report delivered to Reclamation in January 2027, which will detail the value and tradeoffs of ASO in the context of achieving the initial objectives of the Pilot Project. Results will be communicated to key collaborators, including the Natural Resource Conservation Service (NRCS), CBRFC, and other stakeholders who are running similar ASO projects.

Project Information

- Funding: one-time appropriations, CUWCD, DWRe, federal WaterSMART funds
    - Total: $2,000,000 ($650,000 Authority, $250,000 CUWCD, $100,000 DWRe, $1,000,000 WaterSMART)
    - Project Funds Spent to Date: $1,840,642
    - Authority Funds Spent to Date: $584, 986
    - FY27: $33,000 for LRE Water
    - Agreements: Grant Award from Reclamation to the Authority. Sole source contract with ASO, Inc. Agreement with LRE Water.

Key Partners

- ASO, LRE, Reclamation, CUWCD, DWRe, NRCS

6.5 Snow Temperature Profile (Cold Content) Sensors

Description

Collaboration between the ASO team and the NRCS Utah Snow Survey has identified in situ measurement of snowpack cold content, which is not currently part of standard SNOTEL or ASO ground measurement protocols, as a dataset that could substantially improve both ASO and SNOTEL datasets and forecasting. Cold content is related to the energy required to obtain snowmelt and is a function of snowpack depth and temperature. The Authority is supporting the installation of snow temperature profile sensors for snowpack analysis in the Uinta Mountain Headwaters. Snow temperature profile sensors will be installed and maintained by NRCS staff at existing SNOTEL stations within Utah's Uinta Basin ASO pilot project study area, and data will be shared with the Authority, ASO and other interested parties, and explored in conjunction with ASO forecasting and modeling products.

Progress to Date

Due to the nexus with improved snow monitoring and runoff forecasting, the Authority initially intended to pursue this project as an IIJA-funded instrumentation grant through the UCRC. At the end of FY25, the Authority identified that several additional steps in the IIJA/UCRC process (e.g., review/revision of an agreement by UCRC, review/revision of the agreement by the IIJA workgroup, NEPA permitting, etc.) were likely to delay the project and cause NRCS to miss the installation window (late fall, 2025) ahead of the Authority's final year of ASO data collection. In early FY26, the Authority attempted to expedite the project by funding the sensors using one-time appropriations. In early July, the Authority shared a draft agreement with the NRCS Grants and Administration team for review but did not receive edits back until early September due to NRCS resource and staffing limitations. The Authority responded to NRCS edits and re-shared a draft agreement but did not receive a response from the NRCS Grants and Administration team before the federal government shutdown began on October 1st. The Authority notified the NRCS in late October that without an executed Agreement in place and with the sensors still needing to be purchased and installed, it was not possible for the project to proceed in FY26.

FY27 Work Plan

The installation of cold content sensors was initially pursued to add value to the Authority's Uinta Basin ASO pilot project. Given that the final year of ASO flights occurred in FY26, the Authority has decided to suspend work on this effort and prioritize resources for other projects.

Project Information

- Funding: NA
- Agreements: NA
- Timeline: NA

6.6 Radar Gap Filling Project

Description

An understanding of climate, weather, and hydrologic parameters is critical for informing water resources management. Many tools and datasets are available to characterize these processes at the point-scale (e.g., weather stations, rain gages, SNOTEL stations, etc.) and over larger scales (e.g., Airborne Snow Observatories and other remotely sensed products). One technology commonly used to characterize weather events over large spatial scales is radar. Using radio waves, radar can detect the type, particle shape, location, and other properties of precipitation events. Currently, Utah relies on only three radars for coverage across the state—two in Utah (Promontory Point/northern Utah, Cedar City/southern Utah) and one in Colorado (Grand Junction, western Colorado). Each radar only has an effective range of 60 km and is susceptible to terrain blocking and cloud overshooting, leaving an outstanding gap in coverage over most of the Colorado River Basin in Utah. Gap filling weather radars provide additional insight into precipitation in areas these existing radars cannot observe. This allows for better targeting practices and more evaluations of Utah's cloud seeding program. Furthermore, gap filling weather radars can bridge the gap between our spatially challenged SNOTEL network and our temporally challenged ASO work by using novel methods to create radar-based Snow Water Equivalent metrics.

Progress to Date

In FY25, the UCRC granted preliminary consideration for funding the Radar Gap Filling Project, contingent upon approval of the scope of work and a successfully executed contract. In FY26 the UCRC reviewed the IIJA spend plan and determined that an IIJA cost share was no longer possible for the project due to cost increases on other priority Upper Basin IIJA projects. The UCRC conveyed this development to DWRe and removed the project from the IIJA spend plan.

FY27 Work Plan

Previously, the Authority's role in this project was limited to helping DWRe secure IIJA funding through the UCRC. With IIJA funding no longer available, the Authority is working with DWRe to advance the project through one-time appropriations to be spent specifically for gap radar installation in the Colorado River basin in Utah to support DWRe's cloud seeding program.

Project Information

- Funding: $100,000
- Agreements: TBD
- Timeline: TBD

7. Drought Mitigation | Agricultural Water Resilience Research

7.1 Emery County Irrigation Efficiency Study

Description

As Utah and other Upper Division states evaluate agricultural water conservation projects, understanding the long-term trade-offs of irrigation efficiency enhancements across various temporal and spatial scales is critical. This study analyzes thirty years of historical data from Emery County, Utah, to evaluate the impacts of transitioning from unlined canals to pressurized pipes and from flood irrigation to sprinklers. Using a combination of in-situ and remotely sensed data, the project assesses how these conversions influence field-level consumptive use via OpenET, how these changes impact the extent of riparian and incidental use areas, and impacts to broader water balance components such as streamflow, diversions, and reservoir storage.

Progress to Date

In FY27, the project team focused on aggregating and refining critical datasets for agricultural field boundaries, riparian extents, and satellite-based vegetation productivity. A key collaboration with DWRe centered on the Water Related Land Use dataset, which is fundamental to several aspects of the study. To ensure technical alignment, the UCRC, the Authority, and the OpenET/University of Nebraska-Lincoln (UNL) team maintained monthly coordination meetings to synchronize objectives and methodologies. By the end of the fiscal year, the OpenET/UNL team successfully delivered modified shapefiles and advanced the calibration techniques necessary for upcoming analysis tasks.

FY27 Work Plan

Work on the Emery County Irrigation Efficiency study will continue in FY27, focusing on completing historical analyses of agricultural, riparian, and incidental use areas. The team will evaluate OpenET's effectiveness in non-agricultural settings and coordinate with the UCRC Incidental Use Work Group to refine regional water use estimates. Final deliverables include a summary report, a peer-reviewed journal article, all project data and code, and a conference presentation.

Project Information

- Funding: federal IIJA funds
    - Total: $349,970
    - FY27: $125,574
- Agreements: Competitive procurement process to engage technical services conducted through the UCRC; Agreement between UCRC and OpenET
- Timeline: FY25 – FY27

Key Partners

- UCRC, UDS, Emery Water Conservancy District, UCRAF Project Team, DWRi, DWRe, OpenET, UNL, Evapotranspiration Plus, LLC

7.2 Duchesne, Price, and San Rafael River Basins

Description

The Utah Colorado River Accounting and Forecasting–Decision Support Tool (UCRAF-DST, or UCRAF) is a drought mitigation planning tool that is being developed to help the Authority understand the impacts and effectiveness of different drought mitigation actions (e.g., changes in crop types, irrigation methods, water reduction methods, water right transfers, etc.). Development of UCRAF first began in FY23 with the Duchesne River Basin UCRAF model and later expanded to the Price and San Rafael River Basins in FY24. Initial development of the Duchesne, Price, and San Rafael River Basin UCRAF models concluded at the end of FY25. Updates, maintenance, and ongoing support for these three models have continued under a new two-year contract approved by the Authority Board in June 2025.

Progress to Date

In early FY26, updates were made to the Duchesne model to address reconcile issues and prepare for a presentation given by the Authority and PWRE staff in September at the AWWA conference in Vernal, Utah. The Project Team also supported application of ASO pilot project output to the Duchesne Basin UCRAF model per requirements of the ASO Reclamation grant. The majority of model updates and maintenance occurred to the Diversion Runoff Calculator (DRC), including refining the DRC code to reduce model runtime, reworking the "Run DRC" tool interface in ArcGIS Pro, and updating model documentation. Minor updates occurred to the Price model, and no updates were made to the San Rafael model. In addition, Authority staff gave presentations on the status and development of UCRAF to OpenET, the State of Colorado, and the Colorado River Climate and Hydrology Work Group. Authority staff were also able to run the Duchesne and Price UCRAF models successfully on Authority machines and make independent drought mitigation scenario runs. Finally, the Project Team was thrilled to be awarded the Journal of Irrigation and Drainage Engineering- Best Paper Award by the American Society of Civil Engineers, Environmental and Water Resources Institute for their 2025 journal article, which detailed assumptions, input data, and application of the DRC component of the UCRAF model.

FY27 Work Plan

In FY27, a water rights aggregation scheme will be implemented in the Duchesne Basin RiverWare© model that will make the model more robust to future changes in DWRi's Water Right Network dataset, thereby reducing the need for future model maintenance. Additional simulations and analyses may also be conducted with the Duchesne Basin model in support of the third and final year of the ASO pilot project. Work will also occur in FY27 to extend the San Rafael RiverWare© model run time and simulation capabilities, which were previously limited based on availability and accuracy of historical data. As DMPP and PA efforts develop, adjustments may also be made to components of the UCRAF models to ensure alignment on programmatic and administrative elements of on-the-ground drought mitigation efforts. If resources allow, the run period of all RiverWare© models may be extended to 2025 to incorporate additional years of OpenET data.

7. Drought Mitigation | Utah Colorado River Accounting & Forecasting

Project Information

- Funding: one-time appropriations
    - FY27: See Section 7.3
- Agreements: Pre-existing multi-year contract established through a competitive procurement process. A sole source contract was issued to build on and maintain the continuity of previously completed work; New sole source contract executed July 2025.
- Timeline: New contract: FY26 – FY27 (see Section 7.3)

Key Partners

- Precision Water Resources Engineering, Follum Hydrologic Solutions, DWRi, DWRe, OpenET, Desert Research Institute

7.3 Ashley Creek, Brush Creek, and Colorado River System

Description

In June 2025, the Authority board approved a new two-year contract to continue developing UCRAF in three areas. First is the development of a full UCRAF-DST for the Brush Creek and Ashley Creek (BCAC) systems, which includes a DRC and a RiverWare© rule-based simulation and accounting-enabled model to characterize the existing system and the impact that drought mitigation measures have on water rights and water availability within the modeled area. The new contract also includes the development of the DRC for the remaining areas in the Upper Colorado River Basin in Utah that aren't already covered by a UCRAF-DST, which provides the ability to explore changes in consumptive use, diversion, and return flows resulting from drought mitigation actions. The final area of continued development is for a RiverWare© model that includes the mainstem of the Green and Colorado Rivers and major tributaries, with an accounting framework to simulate conveyance of drought mitigation water alongside natural flow. Ongoing maintenance and updates to existing UCRAF models (Duchesne, Price, and San Rafael) is also included in the new contract and is described in Section 7.2.

Progress to Date

Extensive progress was made in all areas of the new UCRAF contract in FY26. Early work for the BCAC model focused on gathering and processing available data and developing a conceptual understanding of the system. These efforts were aided by a tour of the BCAC system in October with the DWRi regional engineer, river commissioners, and Uintah Water Conservancy District staff, which helped inform the development of a RiverWare© workspace and characterization of system operations. The DRC was updated with aggregation schemes for fields and canals and integrated with RiverWare©, which enabled the model to solve for natural flow terms using observed and DRC data. Efforts later in FY26 focused on fully developing the baseline BCAC model and drought mitigation simulation capabilities.

To extend the DRC to the entire Upper Colorado River System in Utah, the Project Team processed Water Right Network data, OpenET data, field boundary data, and other data for the remaining areas not already covered by the DRC. Work on the DRC buildout benefited from the code modifications described in Section 7.2, which enabled the model to run at much faster speeds than previous versions. Similar to the BCAC model, work to develop the Colorado River System RiverWare© model included processing available data and developing a RiverWare© workspace that could ingest output from the DRC or full UCRAF models. An accounting framework was also defined to distinguish between natural and drought mitigation flow, and several scripts were developed to simulate travel time and incremental transit loss for downstream conveyance of drought mitigation water. Efforts for the Colorado River System RiverWare© model were closely coordinated with Provisional Accounting activities, which also included development of a similar mainstem RiverWare© model. The Project Team continued holding quarterly workshops and had regular check-ins with DWRi.

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FY27 Work Plan

The main activities planned in FY27 for the BCAC model, DRC buildout, and Mainstem model are focused on simulation testing, model integration, and documentation. For the BCAC model, efforts will focus on running hypothetical drought mitigation simulations to stress test the model and ensure it solves as expected. Results from two drought mitigation simulations will be summarized in memo format and detailed RiverWare© model documentation will be prepared. Similar documentation will also be prepared for the Colorado River System RiverWare© model, and updates may occur as a result of PA or DMPP activities. Previously developed PowerBI data visualization tools will be updated to accommodate output from the BCAC and Colorado River System models. For the DRC buildout, a major task will include expanding the UCRAF ArcGIS toolbox to support automated execution of the entire modeling framework, which will allow users to run multiple basin models in sequence and pass results to the Mainstem model. Ongoing DRC development will also include incorporating recent years of OpenET data, supporting integration with the BCAC and Colorado River System RiverWare© models, and continuing code improvement and model documentation efforts.

Project Information

- Funding: one-time appropriations
    - Total: $1,257,116 (New Contract, FY26-FY27)
    - Authority Funds Spent to Date: $499,780
    - FY27: $616,918 (includes activities described in Section 7.2)
- Agreements: Existing multi-year contract with PWRE; New sole source contract executed in July 2025 with PWRE.
- Timeline: New contract: FY26 – FY27

Key Partners

- PWRE, Follum Hydrologic Solutions, DWRi, DWRe, OpenET, Desert Research Institute, Uintah Water Conservancy District

7.4 Utah Demand Management Pilot Program

Description

The Utah Demand Management Pilot Program (DMPP) investigates the feasibility of temporary, voluntary, and compensated water conservation to continue to meet downstream Colorado River Compact obligations. Funded by a $5M legislative appropriation in 2023, the program aims to reduce depletions while protecting Utah's water rights. DMPP currently has five Objectives: 1) Reduce water depletion, 2) Quantify reduced depletion using a combination of methods, 3) Understand conditions under which water users will reduce depletion and participate in a demand management program, 4) Identify the state and federal regulatory processes that ensure reduced depletion can be distributed and stored in a pre-authorized reservoir, and 5) Determine the feasibility and risks of storing conserved water over multiple years.

Progress to Date

Cycle 1

Following a competitive procurement process in FY24, the Authority engaged the Jacobs Engineering Group (Jacobs) to develop the DMPP framework. From contract execution through FY26, the Authority and the Jacobs Team worked with collaborators and subcontractors to develop a pilot program that would accept the following project types: partial or full season temporary fallowing, irrigation system conversion, and storage forbearance or lease changing. Compensation rates and application systems were developed, and targeted outreach was conducted leading to 27 applications being received. The Authority received 19 applications for partial or full season temporary fallowing, zero applications for irrigation system conversions, and eight applications for storage forbearance or lease changing. Applications were scored based on the criteria developed and reviewed by an evaluation committee with representatives from the Authority, the Jacobs Team, the Great Salt Lake Commissioner's Office, DWRe, and UDAF. This evaluation committee informed a recommendation for application selection to the Authority Board which selected 15 applications grouped into four pilot projects.

Cycle 1 Pilot Project participants submitted water right change applications to the Utah Division of Water Rights. Implementation agreements and verification plans were executed, and the Jacobs Team developed Pilot Project Plans to support project depletion savings calculations and Provisional Accounting activities. Throughout FY25 and FY26, the projects were verified through field visits and satellite imagery tracking. As projects were verified, program participants were compensated according to their executed contracts.

At the end of the fallowing season, actual depletion savings were calculated, and results were reported in accordance with the agreed upon methods established in the Provisional Accounting MOU.

Table 5. Summary of Cycle 1 Projects

SUMMARY OF DMPP CYCLE 1: APRIL 1, 2025 TO MARCH 14, 2026 (PROVISIONAL DATA)										
Project Name		Crop Fallowing Season	Enrolled Acres	Enrolled Diversion (acre-feet)	2025 Water Delivered Total (acre-feet)	%	Est. 2025 Pre-Season DRP[t] (acre-feet)	Est. 2025 Post Season CCU* (OpenET) (acre-feet)	2025 Delivered CCU* (Gaged Flow) (acre-feet)	%
SE Tributary Group (Price River – South)		Full/Partial	1,841	6,413	6,609	103	2,781	2,280	2,205	79
E Main Stem & Tributary	Green River**	Partial	633	1,246	1,246	100	809	437	393	49
	Brush Creek**		797	1,594	477	30	1,238	796	477	39
Storage Forbearance - Transbasin Diversion (Duchesne River Tributary)		N/A	N/A	4,500	1,097	24	4,500	1,106	1,106	25
Storage Forbearance (Scofield Reservoir)		N/A	N/A	2,152	2,152	100	1,377	1,377	1,377	100
UT DMPP Totals			***2,638***	***15,905***	***11,581***	***73***	***10,705***	***5,996***	***5,558***	***52***

Cycle 2

The competitive application process established during Cycle 1 was followed for Cycle 2 in late 2025 utilizing funding remaining from the initial 2023 appropriation. This process resulted in the selection of an additional ten projects, which were grouped into six projects, four temporary fallowing projects, and two storage forbearance projects (Table 5). These projects include some 2025 projects that were enrolled in 2025 for two years.

Table 6. Summary of Cycle 2 Projects

DMPP CYCLE 2 PROJECTS / UPDATED 05.05.26							
Project ID	Project Name	Crop Fallowing Season	Enrolled Acres	Enrolled Diversion (acre-feet)	Est. 2026 Pre-Season DRP[t] (acre-feet)	Projected CCU Yield (acre-feet)	Notes
F1	SE Tributary Group (Price River – North)	Full	122	510	320	320	New Project 2026 - EXPECTED HYDROLOGIC SHORTAGE
F2	SE Tributary Group (Price River – South)	Full/Partial	1,755	3,947	2,633	2,000	EXPECTED HYDROLOGIC SHORTAGE
F3	SE Main Stem (Green River)	Full	202	1,214	633	633	New Project 2026
F4	SE Main Stem (Colorado River)	Full	192	1,150	256	256	New Project 2026
F5	E Main Stem & Trib. (Green River/Brush Creek)	Partial	1,520	2,135	2,112	1,042	EXPECTED HYDROLOGIC SHORTAGE
F6	E Tributary (Strawberry River)	Full	28	210	73	60	New Project 2026
S1	Storage Forbearance (Transbasin Diversion)	N/A	N/A	4,500	4,500	1,000	EXPECTED HYDROLOGIC SHORTAGE
S2	Storage Forbearance (Scofield Reservoir)	N/A	N/A	2,254	1,443	1,443	Delivery set at 100%
UT DMPP Totals			***3,819***	***15,920***	***11,970***	***6,754***	

Pilot Project contracting is ongoing, with implementation agreements, verification plans, and pilot Project plans being developed and executed. Water right change applications are being processed, with several having approval orders already issued.

FY27 Work Plan

While the Upper Division States navigate an uncertain future without a Basin States agreement for operations of Lake Powell and Lake Mead beyond 2026, Utah is taking decisive action to protect its future. Proactive conservation initiatives, modeled after

the successful Utah DMPP will be essential lifelines for our agricultural, energy, and municipal sectors. To ensure Utah remains resilient, the Authority has budgeted $3.0 million for FY27 to scale DMPP-style solutions:

- **$3,000,000 in dedicated one-time Authority funding.**

This funding allocation also leverages Utah's share of approximately $100 Million in federal funds for Upper Division States demand management activities.

By budgeting these funds now, Utah positions itself to lead—rather than merely react—to potential future water conservation commitments. These resources provide the necessary flexibility to deploy these water management tools, to ensure Utah water users have the support they need to thrive in an evolving climate. Board authorization will be sought on any specific future proposal for a DMPP that may arise during FY27.

In FY27, the Authority and the Jacobs Team will work with participants to implement and verify pilot project activities. Verification for the 2026 irrigation season will include site visits, measurement and record keeping by participants, and remote verification using OpenET. The Jacobs Team will implement Pilot Project Plan activities, including comparison of projected versus actual depletion reductions, and analysis of the distribution and accounting of Pilot Program water in accordance with Implementation Agreements and approved change applications. Implementation of pilot projects for 2026 will be coordinated closely with key partners listed in this section, and with other projects in this Work Plan.

Project Information

- Funding: one-time appropriations
    - Total: $1,429,812 (Jacobs Team – Task Orders 1 & 2)
    - Authority Funds Spent to Date: $1,003,649 (Jacobs Team)
    - FY27: $334,000 Jacobs Team (completion of Task Order #2)
    - Authority Funds Spent to Date: $2,122,064 (Program Participants)
    - FY27: $2,151,113 (Program Participants)
    - FY27: $3,500,000 (Future Programs)
- Agreements: Competitively procured agreement with Jacobs Engineering Group executed March 2024; Implementation Agreements with participants; Jacobs Team Contract (Task Orders #1 and #2)
- Timeline: FY24 – FY27

Key Partners

- Jacobs Team, Agricultural water managers and water users, DWRi, DWRe, Trout Unlimited, OpenET, UGS, USGS, UCRC

7.6 AG-DRIP: Agricultural Water Demonstration, Research, & Implementation Pilot Program

Description
The Agricultural Water Demonstration, Research, and Implementation Program (Ag-DRIP) is a 5-year irrigation research outreach pilot program, funded by the Authority and the Central Utah Water Conservancy District to promote sustainable water management practices in agriculture in the Colorado River Basin of Utah.

Progress to Date
The program was launched in 2023 and enrolls 25 to 32 participants annually; to date 77 participants have joined (21 in 2023, 25 in 2024, 31 in 2025, and 12 so far in 2026). The participants are provided with soil moisture sensors, a smart flow meter or monitoring device, and weather stations with telemetry for real-time data monitoring to enable them to make informed decisions on irrigation scheduling/management plans. Ag-DRIP's progress and achievements for the year 2025 include enrolling 31 participants, having increased interaction with soil sensor data, successfully installing flow meters and telemetry systems for enrolled participants, having participants utilize more of their seed and irrigation credits, and interacting with participants through winter workshops and field days to continue in education outreach about the program and other agricultural topics. For more information, visit USU Extension's AG-DRIP webpage (extension.usu.edu/ag-drip/). To review the 2025 Annual Report, visit the Authority's AG-DRIP webpage (cra.utah.gov/ag-drip).

FY27 Work Plan
USU Extension will work to enroll an additional 25-32 farms in AG-DRIP and assist each farm with development and reporting of Irrigation Management Plans. Program outcomes will be tracked, evaluated, and reported as relationships are built, instrumentation is installed, and engagement and conservation data are collected.

Project Information
- Funding: one-time appropriations and in-kind contributions from CUWCD
  - Total: $5,000,000 ($2,500,000 Authority, $2,500,000 CUWCD in kind contributions)
  - Authority Funds Spent to Date: $1,027,865
  - FY27: $1,000,000 ($500,000 Authority, $500,000 CUWCD in kind contributions)
- Agreements: Funding agreement between USU and the Authority executed May 2023, amended August 2024. Funding agreement between USU and CUWCD for in-kind contributions to the Authority executed May 2023, amended August 2024.
- Timeline: FY23 – FY27

Key Partners
- USU, CUWCD, Jacobs Engineering, UDAF, Utah Farm Bureau

7.7 Pelican Lake Subsurface Drip Irrigation Pilot Project

Description

The Pelican Lake Subsurface Drip Irrigation Pilot Project (PLSDI) evaluates the efficacy and tradeoffs of transitioning from center pivot to subsurface drip irrigation by comparing water consumption and crop yields between a converted study field and a traditional control field over three seasons. Additionally, the study will offer insights into the specific management requirements and long-term productivity of SDI systems.

Progress to Date

Following the execution of FY24 agreements, the SDI Pilot Project transitioned to implementation in FY25/26. Major milestones included the installation of the SDI system and the successful establishment of alfalfa in both study and control fields. To ensure robust data collection, partners deployed a suite of monitoring tools—including EC stations, piezometers, and soil sensors—while Jacobs Engineering was brought on to formalize project coordination through a comprehensive Pilot Project Plan. Both the study and control fields were irrigated with their respective systems in 2025 and crops were harvested. USU collected the data and is in the process of analyzing the results. The landowner is currently in the middle of the 2026 irrigation season and has both systems in operation.

FY27 Work Plan

Throughout the 2025–2027 seasons, the study field will utilize subsurface drip irrigation. The Landowner will oversee agricultural operations. USU will assist with record-keeping for both the study and control fields. USU will also analyze early data, monitor crop yields, and evaluate the water balance and economic impacts of the SDI conversion. Technical support remains a collaborative effort, with the UGS managing the EC station, culminating in initial progress reports led by USU.

Project Information

- Funding: one-time appropriations and matching funds from CUWCD
    - Total: $291,000 allocated ($145,000 Authority, $146,000 CUWCD)
    - FY27: No additional funds
- Agreements: Funding Agreement between Authority and CUWCD. Services Agreement between CUWCD and AES. Services Agreement between CUWCD and Jacobs Engineering. Services Agreement between CUWCD and Snowshoe Engineering. Services Agreement between AES and Private Landowner. Services Agreement between AES and USU.
- Timeline: FY24 – FY27

Key Partners

- CUWCD, USU, Jacobs Engineering, AES International PLLC, Private Landowner, Snowshoe Engineering, UGS, OpenET

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