Water Management Optimization Project

Finding of No Significant Impact and Environmental Assessment

November 2024

Joint Lead Agencies

Central Utah Water Conservancy District

U.S. Department of the Interior, CUPCA Office

Utah Reclamation Mitigation and Conservation Commission

CENTRAL UTAH WATER CONSERVANCY DISTRICT

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UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

United States Department of the Interior
Central Utah Completion Act Office

Central Utah Water Conservancy District

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Water Management Optimization Project

NOVEMBER 2024

Recommended by: _____ Date: Nov. 26, 2024

Gene Shawcroft
General Manager
Central Utah Water Conservancy District

Recommended by: _____ Date: Nov. 26, 2024

W. Russ Findlay
Senior Program Coordinator
U.S. Department of the Interior
Central Utah Project Completion Act Office

Approved by: _____ Date: Nov. 26, 2024

Paul B. Christensen
Program Director
U.S. Department of the Interior
Central Utah Project Completion Act Office

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In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA), as amended, the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and the U.S. Department of the Interior regulations for implementation of NEPA (43 CFR Part 46), the U.S. Department of the Interior, Central Utah Project Completion Act Office (Interior) and the Central Utah Water Conservancy District (District), find that the Proposed Action in the Environmental Assessment (EA) for the Water Management Optimization Project (Project) would not significantly affect the quality of the natural or human environment. The District and Interior have determined that the Proposed Action scope and degree of impacts are within the range of effects that no environmental effects, as described and evaluated in the EA, meet the definition of significance in context or intensity defined in 40 CFR § 1501.3(d). This finding is based on the information and analysis in the EA, which is attached hereto. Therefore, an Environmental Impact Statement is not required for the Project.

PROJECT AREA

The project area is generally the area encompassed by the District boundaries within Utah County, Salt Lake County, and Strawberry Reservoir in Wasatch County, Utah. The Proposed Action would not require construction-related activities and there would be no ground disturbances.

NEED OF THE WATER MANAGEMENT OPTIMIZATION PROJECT

The need for the Water Management Optimization Project is to improve the management and delivery of Central Utah Project, Bonneville Unit water from Jordanelle and Strawberry Reservoirs through operational flexibility in use of water sources, delivery timing and methods, and adjustment of contracts in coordination with the signatory parties, environmental documents, and reports.

PURPOSES OF THE PROPOSED ACTION

The purposes of the Water Management Optimization Project are:

- Optimize the use of CUP Bonneville Unit water sources and deliveries.
- Increase flexibility, resiliency, and reliability of the CUP Bonneville Unit facilities, water sources, and deliveries.
- Assist with maintaining and improving the yield of Strawberry and Jordanelle Reservoirs.
- Allow the Central Utah Water Conservancy District the operational flexibility to deliver water to sales petitioners, as determined by the District, from Strawberry or Jordanelle Reservoirs, and exchange specific Provo River direct flow rights for an equivalent storage volume in Jordanelle Reservoir, within capacity limits, constraints, and contractual agreements of Bonneville Unit facilities and Partner Facilities.
- Allow for operational redundancy during times of drought, operational constraints, and other emergency conditions.
- Reduce operational losses due to system inefficiencies and constraints.
- Improve management of Provo River direct flow rights held by the Utah Reclamation Mitigation and Conservation Commission, Provo City, and Central Utah Water Conservancy District.

- Improve flexibility for delivery of instream flows for the June sucker, its ecosystem, and to better meet the JSRIP hydrographs for the Provo River.

ALTERNATIVES

No Action Alternative

Under the No Action Alternative, which is further described in Chapter 2 of the EA, the District would continue current operations. The District would not be able to optimize the Municipal and Industrial System (M&I System), and the Utah Lake Drainage Basin Water Delivery System (ULS) water supplies developed in Jordanelle and Strawberry Reservoirs. For the M&I System water, the District would continue to deliver the following water from Jordanelle Reservoir:

- 16,125 acre feet (AF) – M&I System Central Utah Project (CUP) water for North Utah County
- 70,000 AF – M&I System CUP water for Salt Lake County
- 4,875 AF – 207 conserved water for the Provo River (see section 1.2.4 in the EA for definition of 207 conserved water)

For the ULS, the District would continue to deliver the following water from Strawberry Reservoir:

- 22,000 AF – ULS CUP water for Salt Lake County
- 23,090 AF – ULS CUP water for South Utah County
- 16,500 AF – ULS CUP 207 conserved water for the Provo River and Hobble Creek

The District would not divert Provo River direct flow rights for use in northern Utah County and store an equivalent volume in Jordanelle Reservoir for later use by the owner of the exchanged direct flow rights. River direct flow rights would be required to be used when they are available per their water rights.

Proposed Action Alternative

The Proposed Action contains the following four components:

- M&I System CUP Water Delivered from Strawberry Reservoir
- ULS CUP Water Delivered from Jordanelle Reservoir
- Accounting of and Balancing CUP Water Delivered from Unassigned Reservoir
- Provo River Direct Flow Rights Exchange

Each component of Proposed Action is described in detail in section 1.3 of the EA. Below is a summary of the Proposed Action.

M&I System CUP Water Delivered from Strawberry Reservoir

The Proposed Action would allow the District the flexibility of delivering M&I System CUP water from Strawberry Reservoir. It would require a balancing of water volume owed to Strawberry Reservoir since the M&I System CUP Water is assigned, by contract, to be delivered from Jordanelle (see below the Proposed Action section titled ULS CUP Water Delivered from Jordanelle Reservoir). The M&I System CUP water considered for the Proposed Action includes:

- 16,125 AF – M&I System CUP water for North Utah County
- 70,000 AF – M&I System CUP water for Salt Lake County

- 4,875 AF – 207 conserved water for the Provo River

ULS CUP Water Delivered from Jordanelle Reservoir

The Proposed Action would allow the District the flexibility of delivering ULS CUP water from Jordanelle Reservoir. It would require a balancing of water volume owed to Jordanelle since the ULS CUP water is assigned, by contract, to be delivered from Strawberry Reservoir (see above the Proposed Action section titled M&I System CUP Water Delivered from Strawberry Reservoir). The ULS water considered as part of the Proposed Action includes:

- 22,000 AF – ULS CUP water for Salt Lake County
- 23,090 AF – ULS CUP water for South Utah County
- 16,500 AF – ULS CUP 207 conserved water for the Provo River and Hobble Creek

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoir

The Proposed Action would allow the District to utilize the Strawberry/Jordanelle Reservoir Water Balancing Account (SJWB) to account for, report, and document the volume of water used to balance the water owed to Strawberry Reservoir (delivery of M&I System CUP water) and to Jordanelle Reservoirs (delivery of ULS CUP water).

Balancing M&I System CUP Water Delivered from Strawberry Reservoir

When M&I System CUP water is delivered from Strawberry Reservoir, an equivalent volume of water is owed to Strawberry Reservoir. The methods that the District would use to balance the volume of water owed to Strawberry Reservoir include the following:

- **Strawberry Reservoir Fills to Capacity** – When Strawberry Reservoir fills to capacity, no additional storage can be provided in the reservoir. Therefore, there would be no means or need for the M&I System CUP Water delivered from Strawberry Reservoir to be replenished; and
- **ULS CUP Water Delivered from Jordanelle Reservoir** – The District would deliver ULS CUP water from Jordanelle to balance M&I System CUP Water delivered from Strawberry Reservoir. When ULS CUP water is delivered from Jordanelle Reservoir it would allow Strawberry Reservoir to retain that amount of water thereby "replacing" M&I System CUP Water delivered from Strawberry Reservoir.

Balancing ULS CUP Water Delivered from Jordanelle Reservoir

When ULS CUP water is delivered from Jordanelle Reservoir, an equivalent volume of water is owed to Jordanelle. The methods that the District would use to balance the volume of water owed to Jordanelle include the following:

- **Jordanelle Reservoir Fills to Capacity** – Jordanelle Reservoir fills to capacity on average every four years. At full storage capacity, no additional water can be held in Jordanelle. Therefore, there would be no means or need for the ULS CUP Water delivered from Jordanelle Reservoir to be replenished;
- **M&I System Water Delivered from Strawberry Reservoir** – The District would deliver M&I System CUP water from Strawberry Reservoir. M&I System CUP water is assigned to be stored and delivered from Jordanelle. When M&I System

CUP water is delivered from Strawberry Reservoir it would allow Jordanelle to retain that amount of water thereby "replacing" or balancing ULS CUP Water delivered from Jordanelle Reservoir; and

- **Non-CUP Provo River Water Delivered from Strawberry Reservoir** – Instead of releasing water from Deer Creek Reservoir, the District would deliver ULS CUP water from Strawberry Reservoir to fulfill non-project water deliveries in the Provo River. A like volume of non-project water would be stored in an upstream exchange of water in Deer Creek or Jordanelle Reservoirs and would be stored as M&I system CUP water and be counted towards balancing ULS CUP Water delivered from Jordanelle Reservoir.

Provo River Direct Flow Rights Exchange

The Proposed Action would allow the District to divert Provo River direct flow water rights in place of releasing M&I System CUP water stored in Jordanelle Reservoir. In exchange, the amount of water diverted would be stored in Jordanelle and would be provided to the owner of the Provo River direct flow rights whose water was diverted. These water rights would then be released on demand when they provide the most benefit to the owner of the direct flow water rights, pending approvals and in accordance with losses as determined by the Provo River Commissioner. These direct flow water rights are owned by the Utah Reclamation Mitigation and Conservation Commission, Provo City, and the District. Under the Proposed Action, the District would account for and report to the owners monthly the direct flow rights water used under respective separate accounts in Jordanelle Reservoir.

FINDINGS

The Finding of No Significant Impact (FONSI) is based on the analysis presented in the EA, which is attached hereto. The District and Interior have determined that the Proposed Action scope and degree of impacts are within the range of effects that no environmental effects, as described and evaluated in the EA, meet the definition of significance in context or intensity defined in 40 CFR § 1501.3(d). The resources evaluated in Chapter 3 and a summary of impacts are provided below.

Water Resources (see section 3.2 in the EA)

The following water resources were evaluated:

- Utah Lake
- Great Salt Lake
- Return Flows
- Provo River

Utah Lake

The EA evaluated the effects of the Proposed Action to Utah Lake and its storage rights, water surface elevations, and spills to the Jordan River. The District and Interior concluded that the Proposed Action would have no significant and no measurable effects on Utah Lake because its storage rights would not be impacted, the lake's water surface elevation would not fluctuate more than it has historically, and the lake would continue to spill as it has historically.

Great Salt Lake

The EA evaluated the effects of the Proposed Action on the Great Salt Lake. The Proposed Action would have no measurable impact on the Great Salt Lake. The Proposed Action would not alter or change the volume of water delivered to areas that contribute to Utah Lake and the Jordan River and thus the Great Salt Lake through return flows.

Return Flows

The same volume of water would return to Utah Lake and the Great Salt Lake. As discussed in the EA, the Proposed Action would have no significant impact to return flows because the same volume of water would be delivered to the same areas (*e.g.,* Salt Lake County).

However, the return flows to Utah Lake from the Proposed Action of ULS CUP Water Delivered from Jordanelle Reservoir would not be accounted for as import water since it does not originate from Strawberry Reservoir, which is located in the Colorado River Basin. If ULS CUP Water delivered from Jordanelle Reservoir impacts the Strawberry/Utah Lake/Jordanelle exchange because of insufficient CUP water in Utah Lake, the Jordanelle Reservoir water that is stored in Strawberry Reservoir under the SJWB account would be released to Utah Lake as the Strawberry/Utah Lake/Jordanelle exchange requires.

Provo River

M&I System CUP Water delivered from Strawberry Reservoir may result in less water being delivered into the Provo River (up to 85 cubic feet per second). As discussed in the EA, the Proposed Action would have no significant impact to the Provo River. The Provo River flows fluctuate greatly, and any change would be within its normal flow range. The Proposed Action would not have any impact to Provo River minimum instream flow requirements. Minimum instream flows in the Provo River have been established by the Final Environmental Statement for the Municipal and Industrial System and Central Utah Project Completion Act legislation (Public Law 102-575) and would be maintained and not be affected by the Proposed Action. Any decrease or increase in Provo River flows from the Proposed Action would be within the natural variability of the river.

The reduction in flows would be between Deer Creek Reservoir and Murdock Diversion but would be within the flow variability of the Provo River. There would be no change to the flows below Murdock Diversion to Utah Lake. Also, ULS CUP Water delivered from Jordanelle Reservoir at times would increase flows in the Provo River.

Water Rights (see section 3.3 in the EA)

The Provo River Direct Flow Rights Exchange for storage in Jordanelle Reservoir would require additional approvals from the Utah Division of Water Rights. The entity requesting their water to be used as part of this Proposed Action would be required to file the necessary water right applications and obtain approval from Utah Division of Water Rights prior to its implementation.

The Proposed Action that consists of M&I System CUP Water delivered from Strawberry Reservoir, ULS CUP Water delivered from Jordanelle Reservoir, and Accounting of and Balancing CUP Water delivered from Unassigned Reservoirs would require no additional water right approvals, and the CUP water can be used within District boundaries.

The Proposed Action would have no effect on existing water rights because the water rights considered for the Project is storage water in Jordanelle and Strawberry Reservoirs. Utah Code Annotated §73-3-2(2)(d)(iii) states "The storage of water by means of a reservoir shall be regarded as a diversion, and the point of diversion in those cases is the point where the longitudinal axis of the dam crosses the center of the stream bed."

Water Quality (see section 3.4 in the EA)

Based on the analysis found in section 3.4 of the EA, the District and Interior have determined that there will be no significant impact on water quality. The water quality comparison shown in Table 3-4 in the EA demonstrates that there are no significant water quality differences between the Provo River (assigned CUP water source for the M&I System) and the Strawberry Reservoir (assigned CUP water source for the ULS) that would be expected to impact conventional water treatment processes.

However, the agencies responsible for treating water for indoor use would need to coordinate with the Utah Division of Drinking Water to obtain approval to treat Strawberry Reservoir water and to ensure all drinking water regulations are met. The Salt Lake County entities that have contracted with the District are aware that treating Strawberry Reservoir water would require additional approvals. Per their water petitions, these agencies are required to obtain any necessary approvals to treat Strawberry Reservoir water. Strawberry Reservoir has been designated by the Utah Division of Water Quality as a source for drinking water and is already protected by approved source water protection plans. Therefore, the Proposed Action would have minimal effects on water quality and would require coordination with regulatory agencies that has already been planned for.

Indian Trust Assets (see section 3.5 in the EA)

There were no Indian Trust Assets identified. Therefore, the Proposed Action will have no significant impact to Indian Trust Assets.

Climate Change (see section 3.6 in the EA)

The Proposed Action would have no effect on climate change, nor would it create vulnerability to climate change impacts. The Proposed Action will not cause an increase in CO_2 or other greenhouse gas emissions. Also, the Proposed Action requires no ground-disturbing activities or construction.

Cumulative Impacts (see section 3.7 in the EA)

The Proposed Action would have no cumulative impacts. In conjunction and through analysis of past, present, and reasonably foreseeable future impacts, the District and Interior have determined that the Proposed Action will have a negligible and insignificant effect on the water resources (*e.g.,* Provo River, Utah Lake) water rights, and water quality, and other resources.

DECISION

The District and Interior have decided to implement the Proposed Action as described in section 1.3 in the EA.

ENVIRONMENTAL COMMITMENTS

No environmental commitments are needed to implement the Proposed Action.

PERMITS, CONTRACTS, AND AUTHORIZATIONS

The Proposed Action will comply with all federal, state, and local regulations as described in section 1.6 in the EA. The Salt Lake County entities that have contracted with the District are aware that treating Strawberry Reservoir water would require additional approvals. These agencies are required to obtain all necessary approvals to treat Strawberry Reservoir water.

PUBLIC SCOPING AND COMMENT PERIOD

The public scoping and comment period is described in detail in section 4.1 of the EA. The District and Interior (as well as the Utah Reclamation Mitigation and Conservation Commission) presented the Proposed Action to agencies, cities, and entities that have interest in the Project. Public and agency scoping was held between Friday, January 19 through Friday, March 22, 2024, during which the public and agencies were invited to review project information and to submit comments.

Scoping Comments Received

A total of eight entities submitted comments during the scoping period including:

- MWDSLS
- PRWUA
- Strawberry Water Users Association
- Mapleton City
- Weber Basin Water Conservancy District
- Hinon'einino' Northern Arapaho Tribe
- Utah Department of Natural Resources, Public Lands Policy Coordinating Office
- Utah Division of Emergency Management

The comments and responses are shown in Table 4-1 in the EA.

EA – PUBLIC REVIEW AND COMMENTS

The EA was released on Tuesday, September 10, 2024, for public and agency review. The review and comment period ended Friday, October 11, 2024. Activities used to notify the public and agencies consisted of:

- Letters were mailed to local, state, and federal agencies and interested parties with Project information and directions on how to comment.
- Project website was updated and included a copy of the EA along with a means to provide comments.

A total of three comments were received on the EA and are summarized in Table FONSI-1 along with responses. Comments were received from the Utah Department of Natural Resources, Public Lands Coordinating Office, the Jordan Valley Water Conservancy District (JVWCD), and a late comment by Provo City.

AVAILABILITY OF THE EA AND FONSI

The EA and FONSI are available on the internet at www.doi.gov/cupcao and https://cuwcd.gov/watermanagement. Copies of the EA and FONSI are available on request by contacting:

Sarah Sutherland
Central Utah Water Conservancy District
Environmental Programs Manager
Telephone: (801) 226-7100
Email: sarah@cuwcd.gov

TABLE FONSI-1: COMMENTS RECEIVED ON THE EA AND RESPONSES

Comment #	Comments	Responses
	Utah Department of Natural Resources, Public Lands Policy Coordinating Office	
1A	The State of Utah supports this Project. As a semi-arid state, Utah continues to face unprecedented challenges in water management. Our local water management agencies and districts must be given the flexibility and the necessary tools to adjust techniques as issues arise. This Project assists local agencies in ensuring the reliability and resiliency of water supply for future generations of Utahns. Additionally, the EA appears to address the concerns raised by stakeholders in the scoping process. The State also encourages Interior and URMCC to explore additional avenues allowing state, quasi-state, and local agencies and districts to assume more management authority over natural resources within their borders. State and local-level agencies and districts are in the best position to make management decisions regarding water within the state. This is due to their proximity to and persistent work in the waters within the state's borders. Nobody understands the water situation in Utah better than local employees tasked with managing the resource.	The District and Interior appreciate the support of the State of Utah for this important Project.
	Jordan Valley Water Conservancy District	
2A	JVWCD is supportive of the Water Management Optimization Project as it will provide significant benefits to the residents of Salt Lake County with a resilient, reliable, and flexible water supply. JVWCD has reviewed the EA and supports the findings of that report.	The District and Interior appreciate the support of JVWCD for this important Project.
2B	JVWCD is interested in further discussions on water accounting for the Project to include multi-year scenarios comparing the existing water accounting to the proposed system. JVWCD would also be willing to participate as a direct flow partner with CUWCD and would be open to further discussions if this would be beneficial to the Project. We appreciate CUWCD's efforts to gather input from stakeholders on this Project and look forward to continued engagement with CUWCD.	The District will coordinate with JVWCD regarding multi-year scenarios regarding the Project. The District has recently initiated the Integrated Water Supply Plan that will assist in addressing and understanding multi-year scenarios in respect to CUP water supplies. The District will continue to coordinate with JVWCD regarding direct flows.
	Provo City	
3A	The EA tiers from prior NEPA documents because it states there have not been any significant changes to the evaluated resources. EA, at 1. There have been substantial changes in the recent past to the evaluated resources.	The volumes of water, location of use (e.g., North Utah County, Salt Lake County, Provo River), and facilities used to deliver the CUP water have not changed from what was analyzed in the previous NEPA documents. The District and Interior have determined that the Proposed Action scope and degree of impacts are within the range of effects that no environmental effects, as described and evaluated in the EA, meet the definition of significance in context or intensity defined in 40 CFR § 1501.3(d).

Comment #	Comments	Responses
3B	of delivering ULS water to the M&I System and vice versa. EA, at 1, 20-24. The CUP Project relies on Colorado River Flows. EA at 2-3. The EA does not analyze the changed flows in the Colorado River drainage and how that may impact the Project. From 1906 to 2022, the natural flows in the Colorado River averaged about 14.6 million acre feet annually.[2] From 2000-2022, the natural flows averaged about 12.1 million acre feet annually.[3] Because the CUP relies on very junior water rights in the Colorado River drainage, the EA must analyze the documented reduced Colorado River flows and a Colorado River Compact curtailment that would interrupt the flow of water from Strawberry Reservoir to the Utah Lake drainage and make the Project infeasible. These are significant changes to the evaluated resources that prior NEPA documents did not address.	As is mentioned in sections 1.5.1 and 1.5.2, the Proposed Action was necessary in part to allow for operational redundancy in times of drought. Curtailments to the Colorado River would be due to drought. The ULS CUP water is assigned to be delivered from Strawberry Reservoir as stated in District sales petitions to contract holders. The ability to delivery ULS CUP water, that has been assigned to be delivered from Strawberry Reservoir, from Jordanelle Reservoir provides another means to make the CUP water supply more resilient. Potential curtailments on the Colorado River due to drought would affect CUP water supplies regardless of the Proposed Action.
3C	The EA states the need for the Project is to "improve the management and delivery of Central Utah Project, Bonneville Unit water from Jordanelle and Strawberry Reservoirs through operational flexibility in use of water sources, delivery timing and methods . . ." EA, at 34. It does not describe why the JLAs do not already have this operational flexibility—i.e. the current operational constraints that prevent this flexibility. The EA does not describe why the JLAs need increased operational flexibility to meet their commitments—it only states generally that "[i]t is widely recognized that there is a need to protect and improve the water supply from threats of drought, natural and man-caused emergencies, and maintenance shutdowns due to aging infrastructure." EA, at 34. For example, if the Project need is that District has ULS system commitments in the winter but cannot deliver ULS water to the ULS system in the winter because of facility constraints, the EA should state this as a need. (*See* EA, at 41 stating "[c]urrently, the Diamond Fork System and ULS only operate during the irrigation season (approximately April 1st to October 31st). At some point in the future, minor modifications to these conveyance systems could be made for winter operation.") The JLAs operate the ULS system only in the irrigation season, but could they operate it in the winter utilizing the assigned ULS water instead of the M&I system water? If system constraints are the need to be solved, an alternative could be to repair those parts of the system.	As described in sections 1.3 and 1.6 of the EA, the existing NEPA documents that the EA tiers to and the existing sales petitions create operational constraints which is why the EA is needed to provide flexibility. The reasons that the improved management and delivery of the CUP, Bonneville Unit water from Jordanelle and Strawberry Reservoirs is needed is discussed in section 1.4 in the EA. Currently, ULS CUP contract holders have deferred the delivery and use of the majority of their contracted water for up to ten years. Therefore, the need to operate the Diamond Fork System and ULS in the winter is currently not needed. The District will be able to deliver CUP water to contract holders once the deferment period has concluded from Strawberry Reservoir.

Comment #	Comments	Responses
3D	The EA states the Project will comply with applicable Utah state water law. EA, at 35. However, it does not analyze the water rights the JLAs will use for the Project or what Utah state water law processes are required. The EA must address this issue because the Project is not feasible under the JLAs' existing water rights. Section 3.3.1 states the water right for M&I System CUP may be used within District boundaries; section 3.3.2 says no new water right approvals are needed for ULS CUP Water delivered from Jordanelle. This is not accurate. The CUP is comprised principally of water rights 55-1875, 55-4494, 55-4495, and 43-3822 and exchange applications E399 and E398. Only water right 43-3822 may be used within both the M&I system and the ULS system. The remaining water rights do not have an authorized place of use for the ULS system. The applications for water rights 55-1875, 55-4494, and 55-4495 state that the place of use is "from Provo City on the south to Salt Lake City on the north, in Heber Valley and Kamas Valley, and in Goshen Valley." South Utah County, including but not limited to, Spanish Fork, Salem, Payson, Santaquin, and Genola are not within the authorized place of use. The authorized place of use for E398 and E399, includes parts of Springville and the southwest corner of Utah Lake, but does not include the remainder of Southern Utah County. A water right change application is required to use M&I System/Jordanelle Reservoir water in the ULS system, as proposed. Furthermore, an exchange application is required to accomplish the exchange described in section 1.3.3 (page 26)("To balance ULS CUP water delivered from Jordanelle, non-CUP water could be released from Strawberry, conveyed through the SFPRCP and delivered to the PRA and/or the Provo River. The non-CUP water from Strawberry would be delivered to fulfill Provo River non-CUP water demands on the lower Provo River.") The EA must specify which water rights it proposes to use for the Project to fully analyze whether the Project is feasible with the JLAs' existing water rights.	As stated in the EA describing the Strawberry Reservoir water right in section 3.3, "this water right has been perfected as defined by State law to a certificate issued in 2019 and can be used for M&I purposes within the District boundaries." Additionally, when describing the Jordanelle Reservoir water right, the EA states "this water right has yet to be perfected but is an approved application to appropriate that can be used for M&I purposes within the District boundaries." The water rights and exchanges mentioned in this comment are discussed in section 3.3.1 of the EA. During the scoping process, the District and Interior (as well as the Utah Reclamation Mitigation and Conservation Commission) met with the Division of Water Rights to discuss the Project and the Proposed Action (see section 4.1.1). The Division of Water Rights raised no concerns regarding the Proposed Action. The Utah Department of Natural Resources, Public Lands Policy Coordinating Office provided written support for the Project during scoping (see Table 4-1, comment #7A) and on the public and agency review of the EA (see comment #1A above). The EA discusses that the Provo River Commissioner determines the priority distribution on the Provo River and exchanges related to the Utah Lake Distribution Plan.

Comment #	Comments	Responses
3E	The EA does not describe what time of year the JLAs will deliver Jordanelle Reservoir water to the ULS system or ULS system water to the M&I System. The EA must analyze how the Project will impact other water right holders on the Provo River and Utah Lake depending on the time of year it sends water from one system to the other. For example, Provo City holds water right 55-11004 for winter flows in the Provo River with a point of diversion below the SFPRCP. Any diversion of Jordanelle Reservoir water from the Provo River in the winter into the SFPRCP would impair Provo's water rights—even if the system is made whole later. The JLAs have argued in other contexts that water right 55-11004 is a non-consumptive power right. Of course, Provo disagrees, but, even if true, because the point of diversion for 55-11004 is below the SFPRCP, any diversion into the SFPRCP would impair Provo's water rights. Therefore, the EA for the Project must describe the times of year and hydrologic situations the JLAs propose to implement the Project and analyze the Project's impacts to senior water rights at varying times of year.	When it is determined that water needs to be sent from Jordanelle Reservoir to South Utah County, the required amount of water would be released from Jordanelle Reservoir to the Provo River for diversion at the Olmsted Diversion (the SFPRCP is connected to the Olmsted facilities at the Olmsted Hydroelectric Power Plant). There would be no impact to other water right holders in the Provo River. In section 3.3.1, the EA states that the Provo River Commissioner determines the priority distribution on the Provo River and exchanges related to the Utah Lake Distribution Plan.
3F	The Project proposes to send water from the Provo River to uses in South Utah County. This will alter the timing of Provo River water entering Utah Lake and may reduce the amount of water available in Utah Lake in the Spring when water is needed for irrigation under senior water rights. The EA must analyze how the Project will alter the timing of Provo River water entering Utah Lake and the resulting harm.	See section 3.2 – Water Resources in the EA for more information regarding Utah Lake. See response to Comment #3E.

Comment #	Comments	Responses
3F	In a recent NEPA process involving water rights on the Provo River, District commented that use of water from the Provo River in the winter could reduce CUWCD contract water supplies for municipal customers as well as DOI June Sucker water and habitat, impacting both high flows during the spawning season and summer base flows. Specifically, CUWCD commented that diverting 20 cfs in the winter would reduce water to the June Sucker by 6,000 to 36,000 af 13 out of 24 years modeled. The EA does not specify the Project's timing of diversions or diversion rate from the Provo River into the SFPRCP for use in the ULS system. The EA states the amount of June Sucker flows will not change, but it does not address how the Project will affect the timing of June Sucker flows.	The timing of June sucker flows would be taken into consideration. No deliveries would be made that would impact the June sucker flows. One of the Project purposes is to "improve flexibility for delivery of instream flows for the June sucker, its ecosystem, and to better meet the JSRIP hydrographs for the Provo River" (see section 1.5.2 of the EA). As discussed in section 1.4 of the EA, the Project would provide many benefits to water users on the Provo River including the June Sucker Recovery Implementation Program (JSRIP). Detailed in section 1.4.6 of the EA, one of the operational benefits of Project is the ability to deliver all of the June sucker Provo River flows from Jordanelle Reservoir to better meet the June sucker hydrographs developed for its recovery (see Figure 1-15 in the EA). EA Section 1.2.4 states the June sucker flows in the Provo River consist of 207 conserved water returned to Interior. Only 4,875 AF of June sucker flow water is assigned to be delivered from Jordanelle Reservoir while up to 12,500 AF is assigned to be delivered from Strawberry Reservoir through the ULS. EA states "the Proposed Action would allow all of the 207 ULS conserved water to be delivered from the Jordanelle Dam outlet works". Having the ability to release all of the June sucker Provo River water from Jordanelle Reservoir would not affect the timing of the June sucker flows but does provide a benefit and the ability to better meet the Provo River hydrographs to assist with its recovery from the Endangered Species list. See response to Comment #3E.

Water Management Optimization Project

Environmental Assessment

CENTRAL UTAH WATER CONSERVANCY DISTRICT

U.S. DEPARTMENT OF THE INTERIOR · MARCH 3, 1849 ·

UTAH RECLAMATION MITIGATION AND CONSERVATION COMMISSION

September 2024

Joint Lead Agencies

Central Utah Water Conservancy District

U.S. Department of the Interior, Central Utah Project Completion Act Office

Utah Reclamation Mitigation and Conservation Commission

Responsible Officials

Gene Shawcroft
Central Utah Water Conservancy District
1426 East 750 North, Suite 400
Orem, Utah 84097-5474

Paul Christensen
U.S. Department of the Interior-CUPCA Office
302 East Lakeview Pkwy
Provo, Utah 84606-7317

Mike Mills
Utah Reclamation Mitigation and Conservation Commission
230 South 500 East, Suite 230
Salt Lake City, Utah 84102-2045

For information, contact:

Sarah Sutherland
Central Utah Water Conservancy District
1426 East 750 North, Suite 400
Orem, Utah 84097-5474
(801) 226-7147
sarah@cuwcd.gov

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Abbreviations and Acronyms

Abbreviation/Acronym	Name
ACHP	Advisory Council on Historic Preservation
AF	acre feet
AMSL	above mean sea level
APA	Agricultural protection areas
APE	Area of Potential Effects
BMP	Best Management Practice
BU	Bonneville Unit
CAAA	Clean Air Act Amendments
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	cubic feet per second
CUP	Central Utah Project
CUPCA	Central Utah Project Completion Act
CUPCA Office	U.S Department of the Interior-Central Utah Project Completion Act Office
CUWCD	Central Utah Water Conservancy District
CWP	Central Water Project
DACRWTP	Don A Christiansen Regional Water Treatment Plant
DEQ	Utah Division of Water Quality
DWRi	Utah Division of Water Rights
Distribution Plan	Utah Lake Interim Water Distribution Plan
District	Central Utah Water Conservancy District
DPR	Definite Plan Report
DOI	U.S. Department of the Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
Interior	U.S. Department of the Interior-Central Utah Project Completion Act Office
IPaC	Information for Planning and Consultation
ITAs	Indian Trust Assets
JLAs	Joint Lead Agencies
JSRIP	June Sucker Recovery Implementation Program
JVWCD	Jordan Valley Water Conservancy District
M&I System	Municipal and Industrial System
MBTA	Migratory Bird Treaty Act
MWDSLS	Metropolitan Water District of Salt Lake and Sandy
MG	million gallons
Mitigation Commission	Utah Reclamation Mitigation and Conservation Commission
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding

Abbreviation/Acronym	Name
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
OHPP	Olmsted Hydroelectric Power Plant
PL	Public Law
PRA	Provo River Aqueduct
PRP	Provo River Project
PRWUA	Provo River Water Users Association
Reclamation	U.S. Bureau of Reclamation
SFHA	Special Flood Hazard Area
SACS	Strawberry Aqueduct and Collection System
SFPRCP	Spanish Fork Provo Reservoir Canal Pipeline
SFSP	Spanish Fork – Santaquin Pipeline
SHPO	State Historic Preservation Office
SJWB	Strawberry/Jordanelle Reservoirs Water Balancing Account
SPC	species of concern
SR	state road
SVP	Strawberry Valley Project
SWPPP	Storm Water Pollution Prevention Plan
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality
UDCC	Utah Data Conservation Center
UDEQ	Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
UDWR	Utah Division of Wildlife Resources
UNHP	Utah Natural Heritage Program
ULS	Utah Lake Drainage Basin Water Delivery System
UPDES	Utah Pollutant Discharge Elimination System
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
ULJEM	Utah Lake Jordanelle Exchange Model
yr	Year

Chapter 1: PURPOSE AND NEED

1.1 Introduction

The Central Utah Water Conservancy District (District), the United States Department of the Interior – Central Utah Project Completion Act Office (Interior), and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission), as Joint Lead Agencies (JLAs), are proposing the Water Management Optimization Project (Proposed Action). The Proposed Action would allow the delivery of Central Utah Project (CUP) Bonneville Unit, Municipal and Industrial System (M&I System) contracted water, at times, from Strawberry Reservoir (Strawberry), instead of from Jordanelle Reservoir (Jordanelle); allow the delivery, at times, of Utah Lake Drainage Basin Water Delivery System (ULS) contracted water from Jordanelle, instead of from Strawberry; account for and balance CUP water delivered from unassigned reservoirs; and allow Provo River direct flow water rights to be delivered to M&I System sales petitioners in North Utah County when a M&I System sales petitioner's demand coincides with available direct flow rights in the Provo River. The direct flow rights would be delivered in place of releasing an equivalent storage volume in Jordanelle or Deer Creek Reservoir.

1.1.1 Tiering from Previous NEPA Documents

In accordance with 40 Code of Federal Regulations (CFR) § 1501.11, the Water Management Optimization Project Environmental Assessment tiers to the following approved National Environmental Policy Act (NEPA) documents:

- Utah Lake Drainage Basin Water Delivery System, Environmental Impact Statement (EIS) published in 2004. The ULS EIS Records of Decisions were signed by Interior and Mitigation Commission in 2004 and 2005; and
- Final Environmental Statement for the Municipal and Industrial System (1979).

Since these previous NEPA documents are older than five years, the JLAs evaluated their alternatives, resources addressed, and the changed conditions since they were completed. The JLAs determined that there have not been significant changes to the alternatives considered and the resources evaluated. However, since these NEPA documents have been completed, the M&I System and the ULS conveyance systems have been connected and those connections have been analyzed in the ULS EIS, the Realignment of a Portion of the Utah Lake Drainage Basin Water Delivery System Final Environmental Assessment (EA), Olmsted Hydroelectric Power Plant Replacement Project Final EA, and the ULS Orem Reach 2 Realignment Final EA.

1.1.2 Joint Lead Agencies

Central Utah Water Conservancy District

The District is a political subdivision of the State of Utah, organized in 1964 under the laws of the state and is the local sponsor of the CUP. Under the Central Utah Project Completion Act (CUPCA) legislation, the District acts as a federal agency with respect to environmental requirements (Title II, Section 205(b) of Public Law (PL) 102-575).

Department of the Interior – Central Utah Project Completion Act Office

The CUPCA Office is located in Provo, Utah, and was created by the CUPCA legislation to oversee completion of the CUP. The CUPCA Office coordinates with the District, the Mitigation Commission, the U.S. Bureau of Reclamation (Reclamation), and other key federal and state agencies involved with completion of the CUP.

Utah Reclamation Mitigation and Conservation Commission

The Mitigation Commission is located in Salt Lake City, Utah, and was created by the CUPCA legislation. The Mitigation Commission is responsible for designing, funding, and implementing projects to offset the impacts to fish, wildlife, and related recreation resources caused by the CUP.

1.1.3 Cooperating Agencies

As defined in 40 CFR § 1501.8, a Cooperating Agency participates in the NEPA process, provides information for preparing environmental analyses for which the Cooperating Agency has jurisdiction by law or special expertise, and is part of a proposed project's interdisciplinary team. The JLAs invited Reclamation to participate as a Cooperating Agency and they accepted.

1.1.4 National Environmental Policy Act

This Environmental Assessment presents and evaluates the potential effects of the Proposed Action to determine whether it could cause significant impacts to the human or natural environment as defined by the National Environmental Policy Act of 1969, as amended (42 USC §§ 4321 *et seq.*), the Council on Environmental Quality (CEQ) regulations (40 CFR §§ 1500 *et seq.*), and the U.S. Department of the Interior regulations implementing NEPA (43 CFR § 46). The JLAs will use the EA process to satisfy disclosure requirements and as a means for public participation mandated by NEPA and CUPCA legislation. The requirements under Section 106 of the National Historic Preservation Act of 1966 (NHPA), Section 7 of the Endangered Species Act of 1973 (ESA), and other state and local regulatory obligations will be satisfied by this NEPA process or are not applicable. If the analysis shows no significant impacts, then a Finding of No Significant Impact (FONSI) will be issued. If it is determined that there may be significant impacts, the JLAs would initiate an EIS prior to implementing the Proposed Action.

1.2 Background

1.2.1 Central Utah Project/Central Utah Project Completion Act

The CUP is the State of Utah's largest and most comprehensive federal water development project. It moves water from the Colorado River Basin in eastern Utah to the western slopes of the Wasatch Mountain range where population growth and industrial development are occurring rapidly. The CUP also develops and provides water for the Uinta Basin. It provides water for municipal and industrial (M&I) use, irrigation, hydroelectric power, fish and wildlife, conservation, and recreation, as well as improved flood control and water quality. The CUP was authorized as a participating project of the Colorado River Storage Project Act of 1956 (70 Stat. 105) to utilize a portion of Utah's Colorado River allotment and yield. The CUP was divided into six units for planning and construction purposes. CUPCA was enacted on October 30, 1992, to complete the CUP. It transferred the responsibility for CUP Bonneville Unit planning and construction activities to the District and federal oversight to Interior.

1.2.2 Bonneville Unit

The Bonneville Unit of the CUP collects and diverts water within the Uinta Basin (part of the Colorado River Basin) to the Bonneville and Uinta Basins, providing water for all or parts of Salt Lake, Utah, Wasatch, Juab, Duchesne, and Summit Counties. The Bonneville Unit contains a vast network of reservoirs, aqueducts, tunnels, canals, pipelines, pumping plants, and other facilities that develop water for irrigation, M&I use, instream flows, and hydropower production. A map of the Bonneville Unit is shown in Figure 1-1. It is comprised of six systems: Starvation Collection System, Strawberry Aqueduct & Collection System, M&I System, Diamond Fork System, ULS, and Wasatch County Water Efficiency/Daniel Replacement Project. Much of the Bonneville Unit is completed, and the remaining ULS features are currently under construction.

1.2.3 Diamond Fork System, ULS, and M&I System

The Diamond Fork System, ULS, and M&I System are shown in Figure 1-2. The Diamond Fork System conveys water stored in Strawberry Reservoir to the Wasatch Front through a system of pipelines, aqueducts, and tunnels. It also conveys water for the Strawberry Valley Project (SVP). The Diamond Fork System and the ULS are connected near the mouth of Diamond Fork Canyon through the Spanish Fork Canyon Pipeline. ULS facilities relevant to the Proposed Action are the Spanish Fork Canyon Pipeline, Mapleton Springville Regulating Tank, Mapleton Springville Pipeline, Spanish Fork Provo Reservoir Canal Pipeline (SFPRCP), Hobble Creek Flow Control Structure, Provo River Flow Control structure (PRFCS), and the Spanish Fork Santaquin Pipeline (SFSP). The ULS and M&I System are connected near the mouth of Provo Canyon at the Olmsted Hydroelectric Power Plant (OHPP) as shown in Figure 1-3. The SFPRCP has a capacity of 120 cubic feet per second (cfs) and connects to the Provo River Aqueduct (PRA) at the PRFCS and to the Alpine Aqueduct at the OHPP. The SFPRCP has a 35 cfs capacity dedicated for instream flows for the June sucker. The M&I System facilities relevant to the Proposed Action consist of Jordanelle Reservoir, Olmsted Diversion and Flowline, OHPP, Olmsted 10-million-gallon (MG) Reservoir, and Alpine Aqueduct. The Diamond Fork System, ULS, and M&I System facilities are owned by Interior but operated and maintained by the District.

1.2.4 CUPCA Section 207 Water Conservation Projects

Water conservation goals were established by Section 207 of the CUPCA legislation (known as 207 conserved water in this document). The conserved volume of water is a result of water conservation measures such as lining or enclosing canals and construction of secondary irrigation water systems. The water saved by these conservation measures has been returned to Interior to assist in the recovery of the threatened June sucker for instream flows in the Provo River and Hobble Creek. The 207 conserved water supply is provided from both the M&I System and ULS water allotments delivered from Jordanelle and Strawberry Reservoirs respectively as shown in Figure 1-4.

M&I System 207 Conserved Water

A total of 4,875 acre feet (AF) of 207 conserved water has been provided for use in the Provo River from water conservation projects in North Utah County. The North Utah County cities of Alpine, Highland, Lehi, Lindon, and Pleasant Grove have returned 3,875 AF of their M&I System CUP water allotment resulting from the installation of secondary irrigation systems in each city. An additional 1,000 AF has been returned to Interior from piping the Upper East Union Canal. Currently, the M&I System 207 conserved water is supplied from Jordanelle.

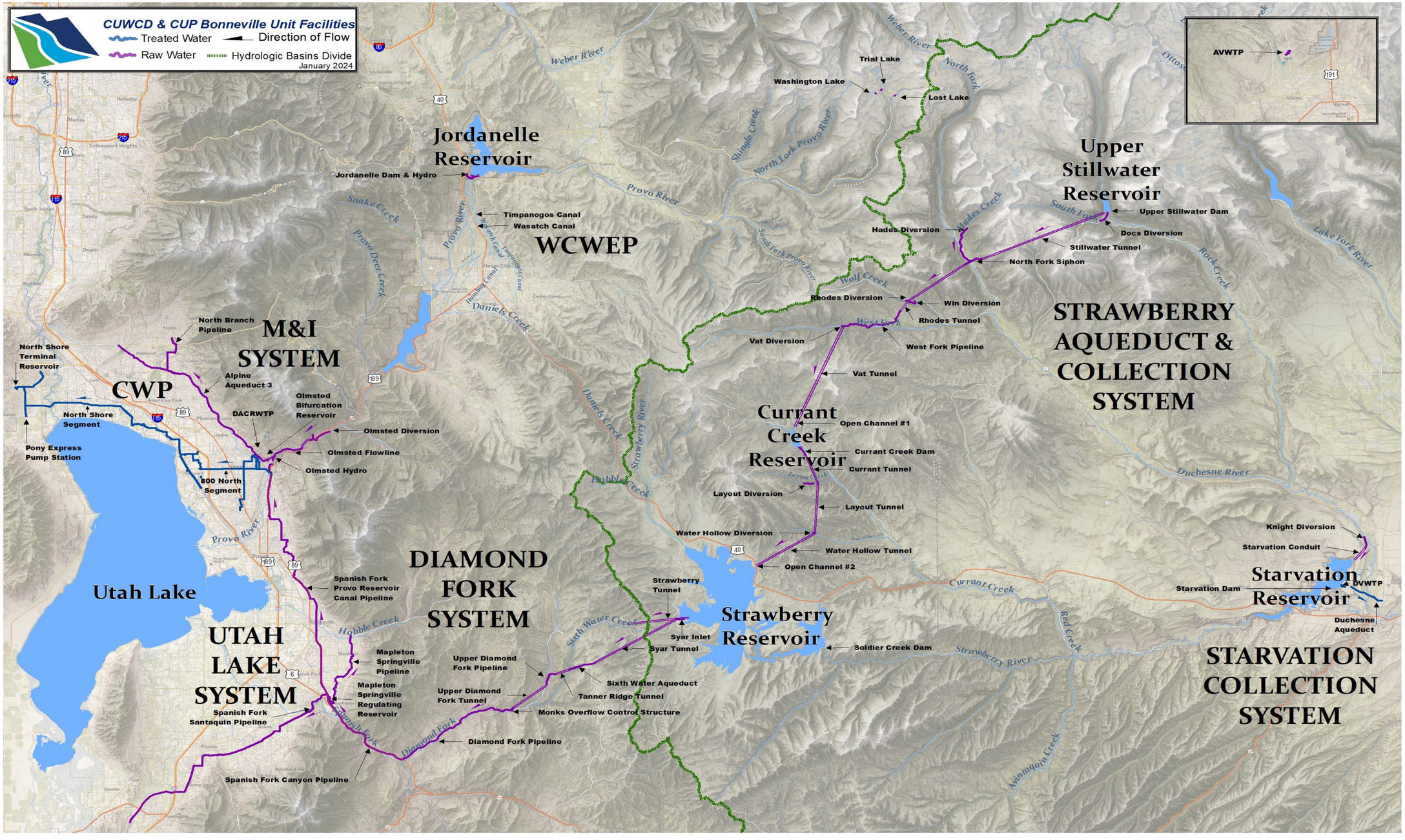

FIGURE 1-1: BONNEVILLE UNIT OF THE CUP

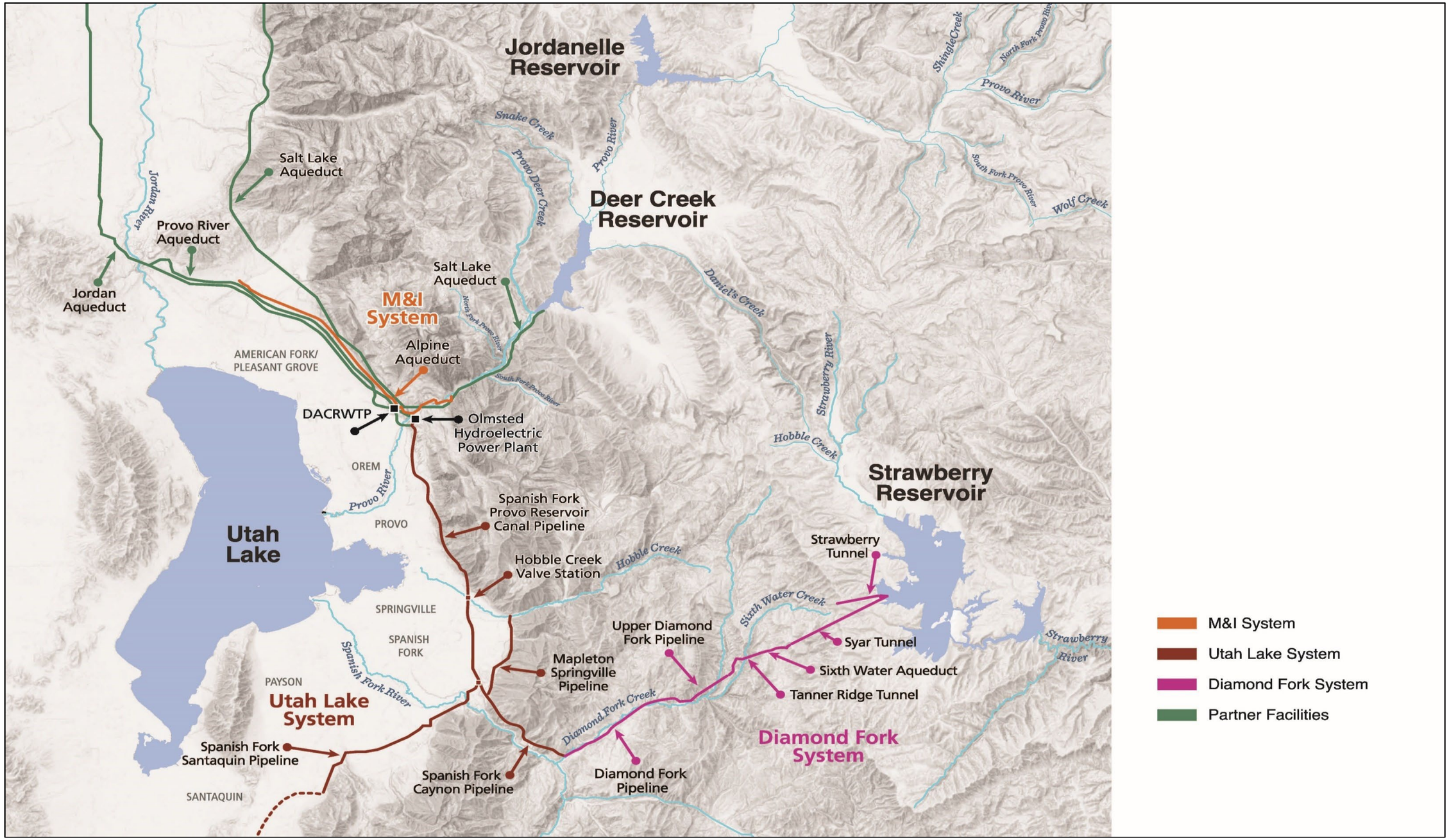

FIGURE 1-2: DIAMOND FORK SYSTEM, ULS, M&I SYSTEM, AND PARTNER FACILITIES

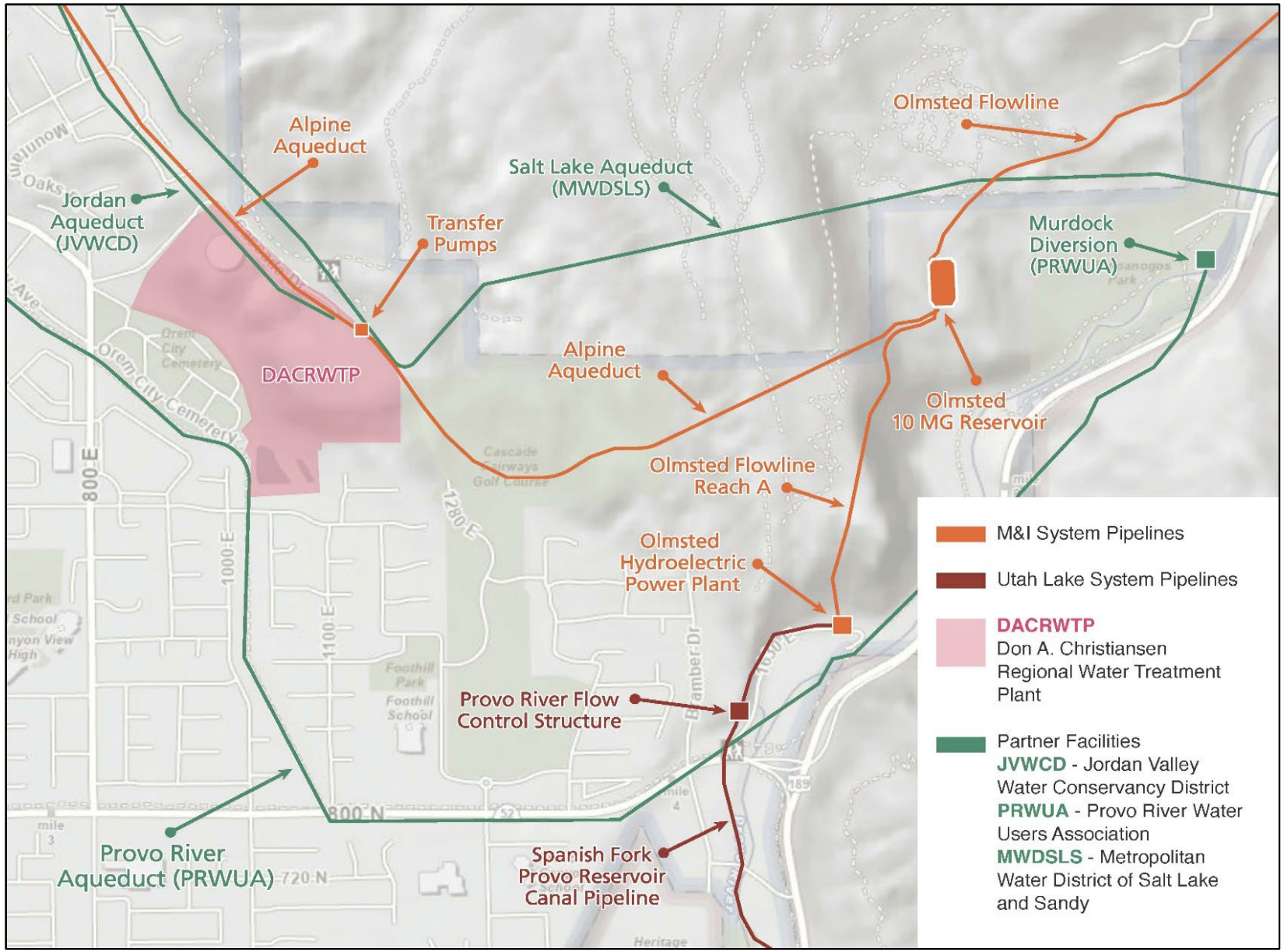

FIGURE 1-3: M&I SYSTEM AND ULS CONNECTION AT THE MOUTH OF PROVO CANYON

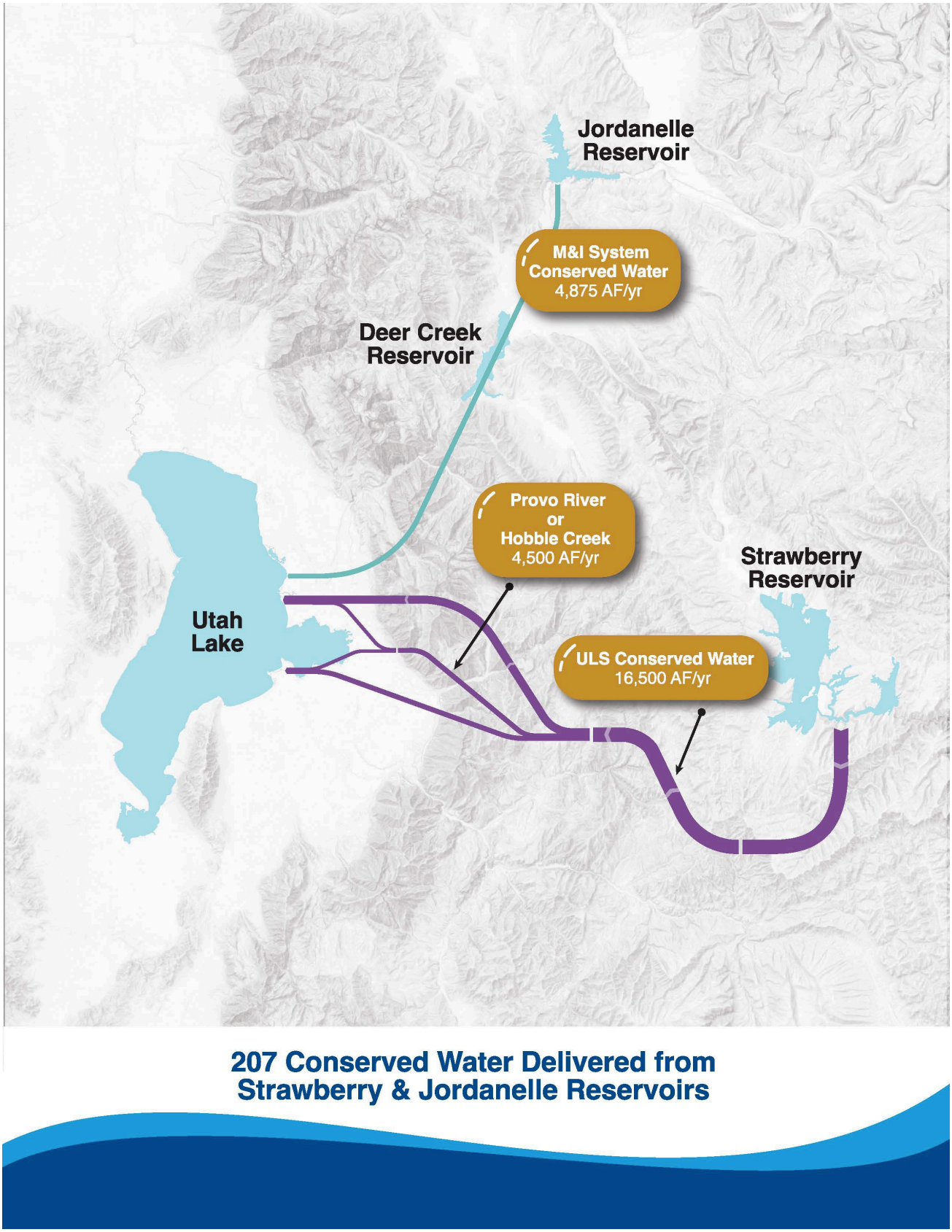

FIGURE 1-4: 207 CONSERVED WATER DELIVERED FROM STRAWBERRY AND JORDANELLE RESERVOIRS

ULS 207 Conserved Water

A total of 16,500 AF of 207 conserved water has been provided for use in the Provo River and Hobble Creek from water conservation projects in South Utah County and from piping the PRA. The cities of Santaquin, Payson, Salem, Spanish Fork, Mapleton, and Springville have returned 4,500 AF of their ULS CUP water allotment because of the installation of secondary irrigation systems. Also, 8,000 AF of 207 conserved water has been returned to Interior for piping the PRA and 4,000 AF for piping the Mapleton Springville Lateral. The ULS 207 conserved water is supplied from Strawberry Reservoir.

1.2.5 Current Operation of the Municipal and Industrial System

The M&I System is part of the Bonneville Unit with its primary functions to collect, store, and deliver M&I water from Jordanelle. The M&I System CUP water is stored and released from Jordanelle Reservoir and diverted into its conveyance systems or Partner Facilities (see *Partner Agencies Conveyance Facilities Used to Deliver CUP Water* on Page 14). In accordance with the Deer Creek Jordanelle Operating Agreement (Operating Agreement), M&I System CUP water may be delivered from either Deer Creek or Jordanelle Reservoir, both on the Provo River. The Operating Agreement is a policy document that governs the management of water supplies between the two reservoirs along with their respective water rights. Interior, District, Provo River Water Users Association (PRWUA), Reclamation, and the Utah Department of Natural Resources signed the Operating Agreement, and its main purposes are to:

- Fully utilize the yield of the Provo River Project (PRP) waters for use by PRWUA without adversely affecting the rights of the District;
- Fully utilize the yield of the Bonneville Unit waters for use by the District without adversely affecting the rights of PRWUA; and
- Operate the reservoirs without impairing the existing water rights in the Provo River, Weber River, Duchesne River, or Utah Lake.

When requested by sales petitioners, M&I System CUP water may be conveyed in Partner Facilities including the Salt Lake Aqueduct (SLA), PRA, and Jordan Aqueduct. Jordanelle Dam was completed in the spring of 1993, creating the reservoir on the middle Provo River. Jordanelle collects and stores water for multiple purposes and has a capacity of approximately 363,500 AF which includes about 49,500 AF for flood control. The M&I System CUP water volumes relevant and evaluated as part of the Proposed Action were determined by Interior and the District and are documented in the 2004 Supplement to the Bonneville Unit Definite Plan Report (DPR) (see Table 4-1 in the Water Supply Appendix, Volume 5-Provo River). Annually, a total of 16,125 AF of M&I System CUP water is allocated to North Utah County cities, and 70,000 AF to Salt Lake County agencies. The M&I System CUP water considered as part of the Proposed Action is shown in Figure 1-5.

16,125 AF – North Utah County

16,125 AF of contracted M&I System CUP water is delivered from Jordanelle into the Provo River and diverted at the Olmsted Diversion for delivery to North Utah County entities. This water can also be diverted at the Murdock Diversion (below Olmsted Diversion on the Provo River) and conveyed in the PRA in accordance with sales petitions and agreements with PRWUA.

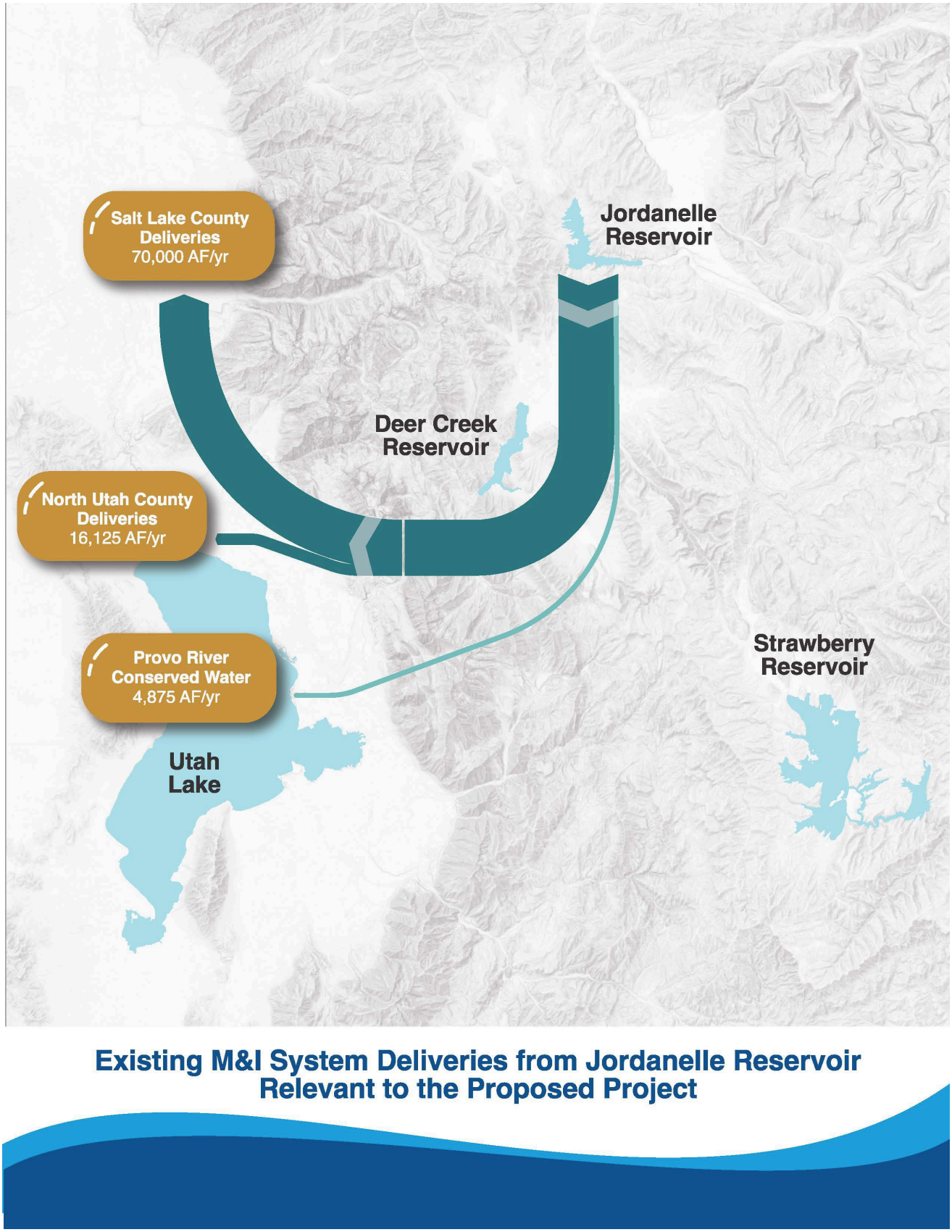

FIGURE 1-5: M&I SYSTEM CUP WATER SUPPLY DELIVERIES

70,000 AF – Salt Lake County

70,000 AF of contracted M&I System CUP water is delivered from Jordanelle into the Provo River and diverted at the Olmsted Diversion and into the M&I System conveyance pipelines. The District's responsibility is to deliver these M&I System CUP water supplies to the inlet of the Jordan Aqueduct, which begins and is connected to the Alpine Aqueduct Reach 1 at the Don A. Christiansen Regional Water Treatment Plant (DACRWTP). Through agreements with PRWUA, this water can be released from Deer Creek and diverted into the SLA when requested by Metropolitan Water District of Salt Lake and Sandy (MWDSLS). Jordan Valley Water Conservancy District (JVWCD), at times, may have its M&I System CUP water delivered through the SLA in coordination with MWDSLS, Interior, and the District. This water may also be diverted at the Murdock Diversion and conveyed in the PRA.

4,875 AF – 207 Conserved Water

4,875 AF of M&I System 207 conserved water is assigned and delivered from Jordanelle or Deer Creek Reservoirs following the Operating Agreement. This water provides instream flows for the June sucker, which is listed as a threatened species under the Endangered Species Act.

1.2.6 Current Operation of the ULS and Strawberry Reservoir

The purposes of the ULS are to convey and deliver a portion of the CUP Bonneville Unit water supply from Strawberry Reservoir to the Wasatch Front Area for M&I, environmental, and temporary agricultural uses. ULS conveyance facilities consist principally of buried pipelines that begin at the terminus of the Diamond Fork System (see Figure 1-2). The Proposed Action only analyses the CUP ULS water supply stored in Strawberry and does not consider any of the SVP contract water.

Strawberry Reservoir was originally constructed in 1908 as part of the federal SVP. The reservoir was enlarged as a CUP Bonneville Unit facility to its current capacity of 1,106,500 AF with the construction of Soldier Creek Dam. Strawberry is fed by many natural creeks and streams as well as the 37-mile Strawberry Aqueduct and Collection System (SACS). SACS provides the largest inflow into the reservoir and diverts water that would naturally flow to the Colorado River. The dam and reservoir are owned by the United States and operated by the District, which administers the delivery of water stored in the reservoir to its users.

The ULS CUP water volumes evaluated as part of the Proposed Action were determined by Interior and the District. These volumes are documented in the DPR (see Table 3-3 in the Water Supply Appendix, Volume 4-Diamond Fork Creek and Spanish Fork River). Annually, a total of 23,090 AF has been allocated for South Utah County and 22,000 AF to Salt Lake County agencies. The ULS CUP water evaluated for the Proposed Action is shown in Figure 1-6.

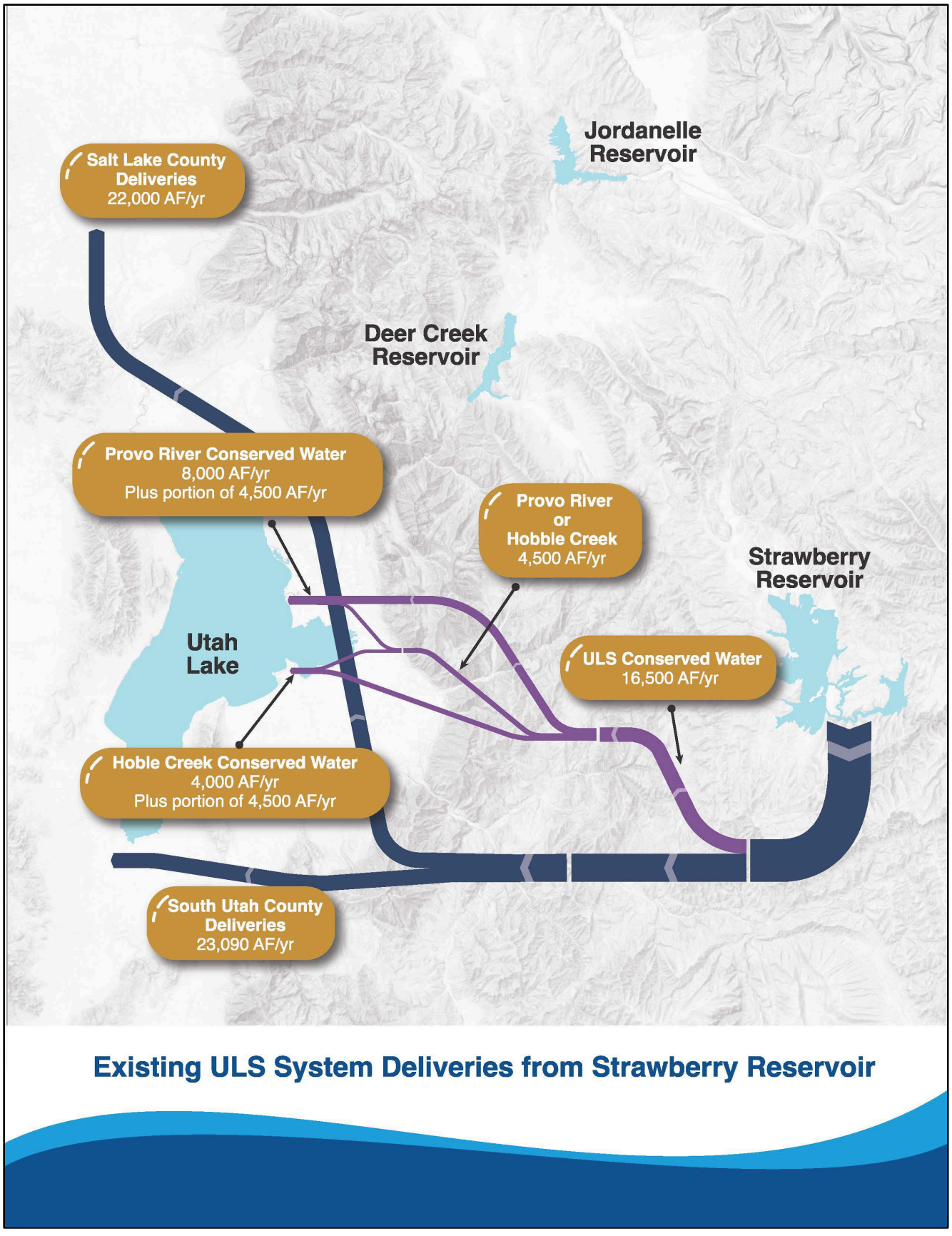

FIGURE 1-6: ULS CUP WATER SUPPLY DELIVERIES EVALUATED

23,090 AF – South Utah County

The South Utah County ULS CUP water is conveyed through the Spanish Fork Santaquin Pipeline (SFSP) and Mapleton Springville Pipeline and delivered to South Utah County entities (see Figure 1-7). A portion of the ULS is currently under construction and will deliver this water once completed.

22,000 AF – Salt Lake County

The Salt Lake County ULS CUP water is conveyed through the SFPRCP to the mouth of Provo Canyon. The District's responsibility is to deliver the ULS CUP water to the inlet of the Jordan Aqueduct at the DACRWTP and/or to the PRA at the PRFCS (see Figure 1-3). Also, depending on capacity, operational constraints, and upon request, the Salt Lake County ULS CUP water may be pumped from the Alpine Aqueduct at the DACRWTP into the SLA in coordination with MWDSLS, Interior, and the District.

16,500 AF – 207 CUP Conserved Water

The ULS CUP 207 conserved water is delivered from Strawberry Reservoir for the recovery efforts of threatened June sucker in the Provo River and Hobble Creek.

8,000 AF ULS 207 Conserved Water for the Provo River

8,000 AF annually of 207 conserved water has been returned to Interior for use in the Provo River from the water savings resulting from the enclosure of the PRA. This water is released from Strawberry into the Diamond Fork System and ULS where it is discharged to the Provo River through the OHPP, which has a connection with the SFPRCP.

8,500 AF ULS 207 Conserved Water for the Provo River and Hobble Creek

8,500 AF annually of ULS CUP 207 conserved water has been returned to Interior through the completion of seven water conservation projects in southern Utah County. A minimum of 4,000 AF is required to be delivered to Hobble Creek and the remaining 4,500 AF can be delivered to either the Provo River or Hobble Creek. The 4,500 AF (maximum volume) of ULS CUP 207 conserved water may be discharged through the OHPP to the Provo River using the ULS. The 4,000 AF (minimum volume) is discharged into Hobble Creek using either the Mapleton Springville Pipeline or the Hobble Creek Valve Station which is part of the ULS (see Figure 1-2). Any remaining portion of the 4,500 AF may be released into Hobble Creek in the same manner.

The ULS CUP water is stored and delivered from Strawberry Reservoir and conveyed into the Diamond Fork System, which is connected to the ULS. The ULS and the M&I System are connected at the OHPP near the mouth of Provo Canyon. The ULS pipelines at the mouth of Spanish Fork Canyon are shown in Figure 1-7.

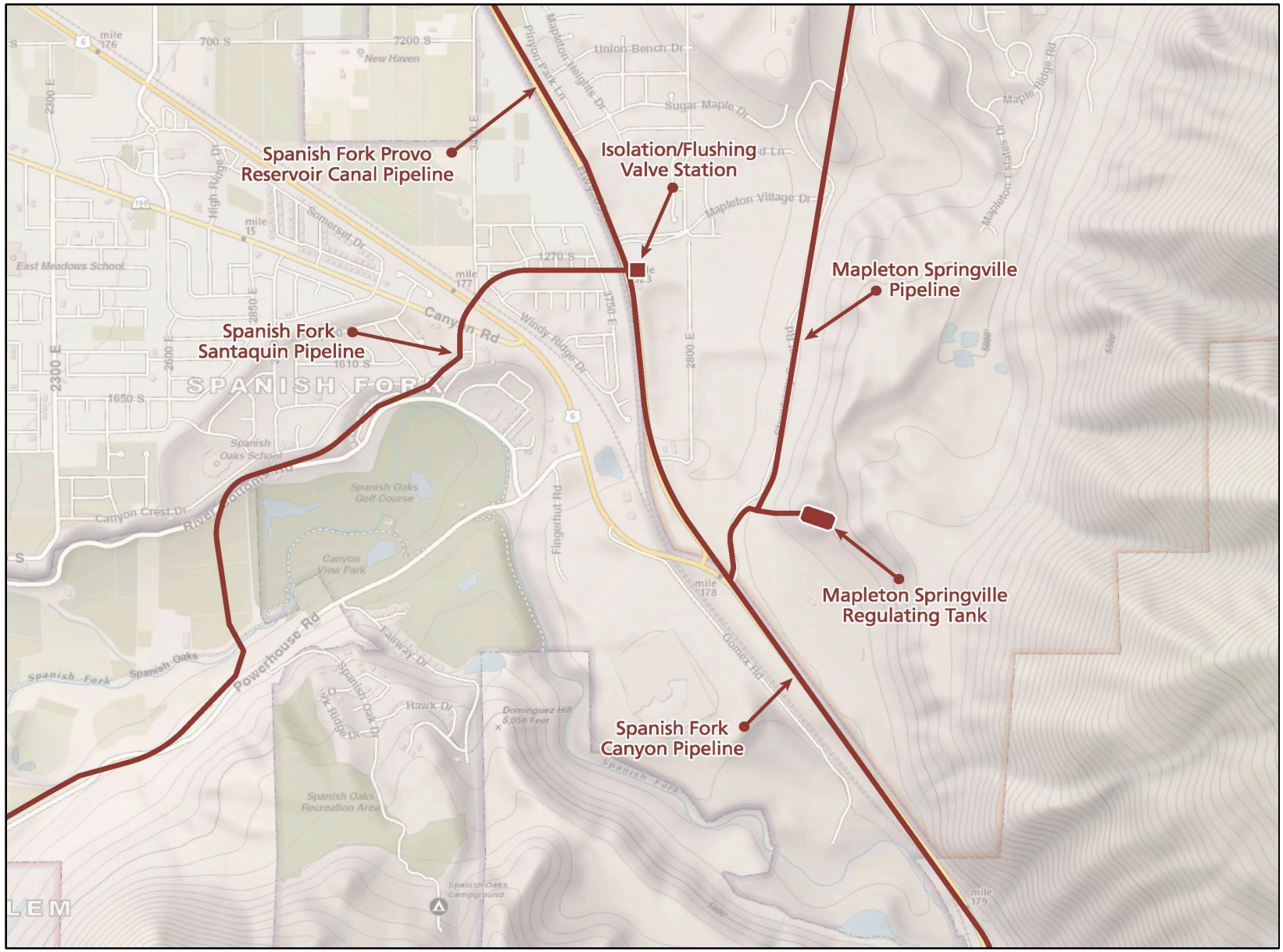

FIGURE 1-7: ULS AT THE MOUTH OF SPANISH FORK CANYON

1.2.7 Partner Agencies Conveyance Facilities Used to Deliver CUP Water

The delivery of M&I System and ULS CUP waters into Salt Lake County requires the use of Jordan Aqueduct and/or the PRA, and when requested by MWDSLS, the SLA. Section 4(c) of the Provo River Project Transfer Act (PL 108-382) states CUP water can be conveyed in the SLA and PRA:

> "any entity with contractual Provo Reservoir Canal or Salt Lake Aqueduct capacity rights in existence on the date of enactment of this Act may, in addition to the uses described in the existing contracts, use the capacity rights, without additional charge or further approval from the Secretary, to transport Central Utah Project water on behalf of the entity or others".

The conveyance of CUP water in these facilities must be approved by the District and Interior. This same language is found in the Master Agreement for the Provo Reservoir Canal Enclosure Project dated 2010. These aqueducts are operated and maintained by other agencies, are used to deliver non-CUP water.

Salt Lake Aqueduct

The Salt Lake Aqueduct begins near the base of Deer Creek Dam and conveys water into Salt Lake County. It is a 69-inch concrete pipeline constructed by Reclamation as part of the federal PRP. The title was later transferred from Reclamation to MWDSLS. As part of the title transfer, the parties agreed that the SLA would continue to carry federal project water in non-federal facilities. The SLA terminates near 3300 South in eastern Salt Lake County and has a capacity of up to 175 cfs. Water can also be pumped from the Alpine Aqueduct into the SLA near the DACRWTP upon request by MWDSLS and in coordination with the District and Interior. Water can also be delivered to the Alpine and Jordan Aqueducts from the SLA at the DACRWTP.

Provo River Aqueduct

The Provo River Aqueduct was enlarged by Reclamation as a feature of the federal PRP. The canal was later enclosed by PRWUA, and title was transferred from Reclamation to PRWUA pursuant to PL 108-392. As part of the title transfer, the parties agreed that the PRA would continue to carry federal project water in non-federal facilities. The PRA begins at the Murdock Diversion at the mouth of Provo Canyon and terminates in south Salt Lake County. The PRA is 120- to 126-inch welded steel pipe with a capacity of up to 620 cfs.

Jordan Aqueduct

The Jordan Aqueduct is owned by Interior and was constructed as part of the CUP Bonneville Unit, M&I System. It is operated and maintained by JVWCD. The Jordan Aqueduct begins with a connection to the Alpine Aqueduct at the DACRWTP and ends near 2100 South in Salt Lake Valley. It is a 48- to 78-inch diameter welded steel pipe with a capacity of up to 270 cfs.

1.2.8 Importance of Utah Lake to CUP Operations

Utah Lake plays an important role in making the delivery of CUP water possible through approved exchanges. It is the largest freshwater body in the State and is located in the center of Utah Valley. Utah Lake is approximately 148 square miles and is surrounded by municipalities and agricultural lands on the north, east, and south shorelines and Lake Mountain to the west. The lake's main tributaries are the Provo River, Spanish Fork River, Hobble Creek, and American Fork River. Naturally occurring springs, groundwater, and treated wastewater from adjacent treatment facilities contribute to the flow entering Utah Lake. The Jordan River is Utah Lake's only natural river outlet and is a tributary to the Great Salt

Lake. Evaporation also accounts for a large volume of the lakes' outflow. Utah Lake has a maximum depth of 14 feet below the compromise level (4498.045 feet above mean sea level (AMSL)). Approximately 760,000 AF flows into Utah Lake every year and about 340,000 AF evaporates annually from it.

Utah Lake Interim Water Distribution Plan

Water rights and distributions of water from Utah Lake are managed under the Utah Lake Interim Water Distribution Plan (Distribution Plan) administered by the State Engineer at the Utah Division of Water Rights. The purpose of the Distribution Plan, dated November 1992, is to establish a general framework within which the Utah Lake Drainage Basin water rights could be administered including the rights on the Provo River, Spanish Fork River, Jordan River, Utah Lake, among other sources including transbasin deliveries (PRP and CUP import waters). It was prepared in response to growth along the Wasatch Front and changes to water usage in the area since the Morse and Booth decrees in the early 1900s. The Distribution Plan manages water rights as one system and considers the relationship of storage rights in Utah Lake and upstream reservoirs.

Utah Lake is used as a storage reservoir for irrigation companies in the Salt Lake Valley and for federal water projects. At the time of implementing the Distribution Plan, transbasin diversions from the Colorado River Basin to the Bonneville Basin amounted to over 300,000 AF annually from the federal PRP and CUP. The Distribution Plan dedicates the first 125,000 AF of active storage capacity in Utah Lake for primary storage rights to satisfy the diversion requirement of the primary water rights. The Strawberry/Utah Lake/Jordanelle Exchange follows requirements of Bonneville Unit water rights and the Utah Lake Interim Water Distribution Plan.

Compromise Elevation

Compromise elevation is the maximum legal storage elevation in Utah Lake. It was first established in 1885 and has since been revised in 1985 to its current elevation of 4489.045 feet AMSL. When the water level in the lake is at and above this elevation the control gates at the mouth of the Jordan River are required to be fully opened with the exception that the maximum flows in the river cannot be exceeded. Utah Lake has a total volume of 870,000 AF with an active storage volume of 710,000 AF at the compromise elevation.

Water Rights

Primary Storage Rights

Primary storage is the first 125,000 AF of active storage in Utah Lake, which is set aside to satisfy the diversion requirement of the primary water rights. It is legal storage use associated with a water right and is not subject to call or use by other right(s). Primary storage can be diverted and used in accordance with the right in Utah Lake in years of successive drought.

System Storage

System storage is the total active storage in Utah Lake minus primary storage, including water that can be stored out of priority in upstream reservoirs. The total maximum volume of system storage is 585,000 AF, but actual storage volume varies throughout the year. The water stored in upstream reservoirs is water that would naturally reach Utah Lake. System storage water that is stored

upstream is subject to call and use by the water right holder to satisfy the diversion requirements of primary and secondary Utah Lake storage rights.

PRIORITY STORAGE

Priority storage is legal storage under a given water right. Such water stored is not subject to call by other right holders and can be diverted and used in accordance with the right.

Water Balance

Utah Lake has experienced times of drought and floods. In times of drought, the lake has seen a level more than nine feet below the compromise elevation. During flood events, the level of Utah Lake can rise more than five feet above the compromise elevation which floods surrounding lands and impacts areas adjacent to the Jordan River. Utah Lake will always be subject to drought and flooding cycles as seen throughout its history.

Water Surface Elevations

The physical water surface elevation of Utah Lake fluctuates annually mostly as a result of the hydrologic conditions within its watershed. Also, the water surface fluctuates due to water use and deliveries upstream and downstream of the lake. Evaporation also contributes to the lake's large water surface elevation changes. Figure 1-8 shows the fluctuation in Utah Lake surface elevations from the years 1884 and 2024. The green line is the lake compromise elevation, and the red line is its inactive storage.

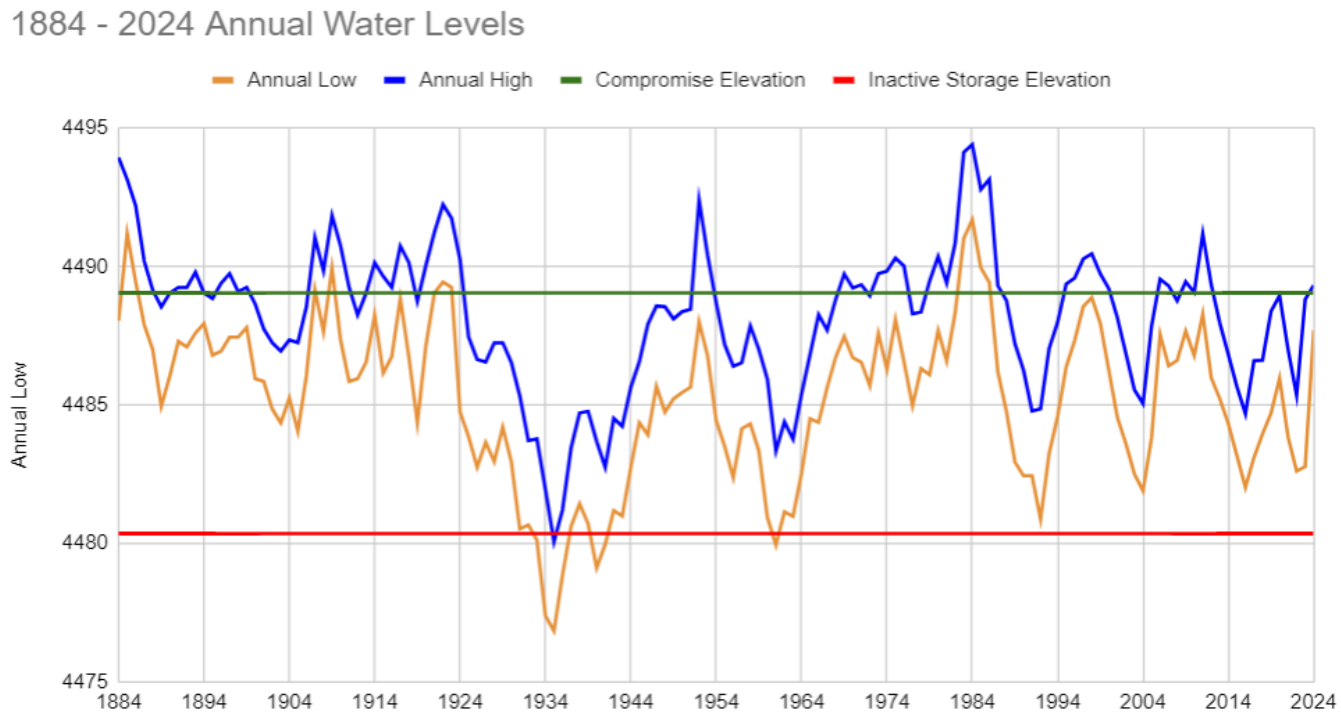

FIGURE 1-8: UTAH LAKE WATER SURFACE ELEVATIONS 1884-2024

CUP Import Water Delivered to Utah Lake

CUP import water is a transbasin diversion redirected from Colorado River Basin tributaries and delivered into the Bonneville Basin. The CUP import water is delivered from Strawberry Reservoir to Utah Lake and its main purpose is to replace the Bonneville Unit M&I System water stored in Jordanelle Reservoir that would naturally flow to the lake. Up to 42,433 AF of CUP import water is delivered to Utah Lake each year through the Provo River, Hobble Creek, Sixth Water/Diamond Fork Creeks via the Spanish Fork River, and return flows. Unused CUP import water that is not utilized to replace or exchange the CUP M&I System water use from Jordanelle contributes to Utah Lake's water surface elevation and volume. However, this water is subject to evaporation losses and spills to the Jordan River.

Principal Purpose of CUP Import Water

Once the CUP import water reaches Utah Lake, its primary purpose is to be used for the Strawberry/Utah Lake/Jordanelle Exchange which was developed as part of the M&I System. Its impacts were evaluated in the M&I System EA (see page A-2).

> "Jordanelle Dam would be constructed on the Provo River about 38 miles upstream from Utah Lake and would store flows of the river for project use. Since all but flood flows in high runoff years are already appropriated by downstream users, including those users of storage from Utah Lake, the water withheld at Jordanelle would have to be replaced for its present use at the lake. This replacement or exchange would be made by augmenting an existing water import system in which water from Strawberry Reservoir and then down the interconnected Sixth Water Creek, Diamond Fork, and the Spanish Fork River to Utah Lake."

The primary purpose of the CUP import water for exchange was further solidified along with its importance to the CUP water supply in the ULS EIS. On page 1-77 it states:

> "Approximately 84,510 acre-feet would be required in Utah Lake to complete the exchange to Jordanelle Reservoir. This includes: 40,310 acre-feet that would be released from Strawberry Reservoir as described above; 9,660 acre-feet of Bonneville Unit water return flows to Utah Lake; and DOI acquiring the District's secondary water rights in Utah Lake to yield a firm average annual of at least 34,540 acre-feet. The exchanged water would be stored in Jordanelle Reservoir for M&I delivery to Salt Lake County and northern Utah County under existing contracts."

Other Benefits of CUP Import Water in Utah Lake

The CUP import water provides instream flows in the Provo River, Hobble Creek, Sixth Water/Diamond Fork Creeks (flows into the Spanish Fork River) as it makes its way to Utah Lake. Once it reaches the lake it also provides secondary environmental benefits to Utah Lake and is additional water that would otherwise not be there. This benefits the aquatic wildlife, water quality, and other lake resources, including the threatened June sucker.

On the occasion that Utah Lake spills to the Jordan River, the CUP import water is the first to spill from the lake and cannot be used for the Strawberry/Utah Lake/Jordanelle Exchange. This water provides an environmental benefit to the Jordan River and, if it isn't diverted or lost, to the Great Salt Lake. Return flows from CUP and other water uses in the Salt Lake Valley flow into the Jordan River and contribute to the river's flow.

CUP Exchanges

Utah Lake is a key component for the operation of the M&I System of the CUP. Jordanelle Reservoir stores and delivers Provo River water that would otherwise naturally flow into Utah Lake. In order for

water to be stored in Jordanelle and delivered to northern Utah and Salt Lake Counties, an exchange of water transaction is required, and Utah Lake is the centerpiece of this exchange. Utah water law defines an exchange as a release of water into a stream, reservoir, or other body of water in exchange or replacement for a like quantity withdrawn at another point. For Utah Lake, an exchange is needed for water stored in the reservoirs above because the lake water rights are senior to the reservoir's storage rights. Over 107,000 AF of exchange water is available annually in Utah Lake which can be made from two transactions.

- Use of primary and secondary Utah Lake water rights owned by the District and Interior (known as the Utah Lake/Jordanelle Reservoir Exchange)
- Use of CUP import water delivered from Strawberry Reservoir to Utah lake (known as the Strawberry/Utah Lake/Jordanelle Exchange)

Strawberry/Utah Lake/Jordanelle Exchange

The District delivers CUP import water from Strawberry Reservoir to Utah Lake which can be used to replace the Provo River system water stored in Jordanelle Reservoir. The CUP import water is a transbasin delivery from the Colorado River Basin into the Bonneville Basin and is water that can be fully consumed or used up. This water, once in Utah Lake, is subject to evaporation losses and spills to the Jordan River when the lake reaches the compromise elevation. Approximately 42,433 AF annually of CUP import water is conveyed to the lake by way of three different deliveries – instream flows, conserved water from projects authorized under Section 207 of CUPCA, and Bonneville Unit return flows.

Natural Losses of CUP Import Water in Utah Lake

Natural losses of CUP import water once in Utah Lake occur from evaporation and spills to the Jordan River.

SPILLS TO THE JORDAN RIVER

Once water in Utah Lake reaches the compromise elevation (4489.045 feet AMSL), the lake is considered full and the primary and secondary water rights are whole. At this level per the Distribution Plan, the control gates at the mouth of the Jordan River must be fully opened with the exception that the maximum flows in the river cannot exceed 3,400 cubic feet per second (cfs) at 2100 South in Salt Lake County and cause flooding.

Figure 1-9 shows the Utah Lake elevations along with the compromise elevation (red line) between the years 1995 and 2019. This figure shows periods of drought (*i.e.,* 2000-2004 and 2012-2018) as well as periods of normal or above normal hydrologic conditions (*i.e.,* 1997-1999 and 2011). Figure 1-9, as well as Figure 1-8, illustrate the variable nature of the Utah Lake hydrologic basin and how it effects, along with other factors, Utah Lake's volume, water surface elevation, and spills to the Jordan River.

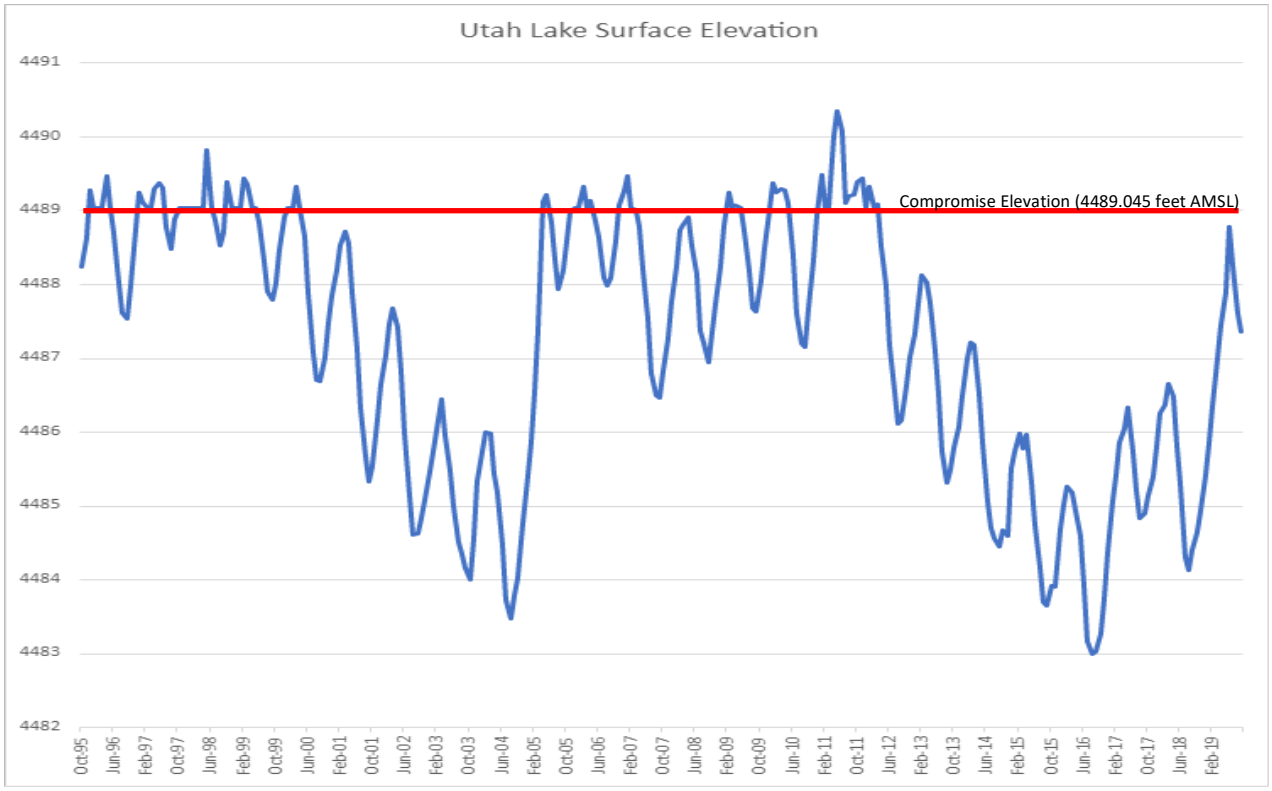

FIGURE 1-9: MONTHLY UTAH LAKE ELEVATIONS BETWEEN 1995 TO 2019

EVAPORATION

As documented in the Bonneville Unit Definite Plan Report, Utah Lake loses about 340,000 AF annually from evaporation. The CUP import water is subject to incremental evaporation losses in the lake. Table 1-1 shows the evaporation losses of the CUP import water for Water Years (WY) 2016 through 2021. Each water year begins November 1st and runs through October 31st. The calculated evaporation losses would be greater without the implementation of the Distribution Plan and applying incremental evaporation as defined within this plan.

TABLE 1-1: CUP IMPORT WATER EVAPORATION LOSSES IN UTAH LAKE (AF)

WY2016	WY2017	WY2018	WY2019	WY2020	WY2021	Total Evaporation Loss (2016-2021)
14,566	11,580	13,850	12,226	12,492	19,186	**83,900 (AF)**

1.3 Proposed Action

The Proposed Action would allow the delivery of M&I System CUP water from Strawberry Reservoir (currently delivered from Jordanelle Reservoir), the delivery of ULS CUP water from Jordanelle Reservoir (currently delivered from Strawberry Reservoir), the accounting of and balancing of CUP water delivered from unassigned reservoirs, and the delivery of Provo River direct flow rights to M&I System sales petitioners in North Utah County while storing an equivalent volume in Jordanelle for later use by the owner of the direct flow rights when requested. The Proposed Action would increase reliability and resiliency for these connected systems and would provide the flexibility to optimize the CUP water supply sources stored in Strawberry and Jordanelle Reservoirs through delivery methods, facilities utilized, and timing. The CUP water would be conveyed through existing Bonneville Unit pipelines, aqueducts, and facilities, as well as partner facilities in accordance with existing agreements. No new facilities would be constructed.

1.3.1 M&I System CUP Water Delivered from Strawberry Reservoir

The Proposed Action would allow the District the flexibility to deliver contracted M&I System CUP water from Strawberry Reservoir, instead of Jordanelle, using existing facilities, when doing so would be beneficial, depending on hydrologic conditions, demand, timing, and operational conditions. The delivery of M&I System CUP water from Strawberry would require the use of Diamond Fork System, ULS, and M&I System facilities (the same conveyance facilities used for the delivery of ULS CUP water from Strawberry to Salt Lake County). The District has contracted with North Utah County and Salt Lake County entities for the M&I System CUP water to be delivered to the Jordan Aqueduct, Alpine Aqueduct, and/or the PRA. The M&I System CUP water supply for the Proposed Action is shown in Figure 1-10.

16,125 AF of M&I System CUP water for North Utah County from Strawberry Reservoir

The delivery of up to 16,125 AF of M&I System CUP water to North Utah County from Strawberry would use the Diamond Fork System, ULS, and M&I System facilities. This water would be conveyed through the Alpine Aqueduct or the PRA (both are connected to the SFPRCP) to sales petitioners in North Utah County.

70,000 AF of M&I System CUP water for Salt Lake County from Strawberry Reservoir

The delivery of up to 70,000 AF of M&I System CUP water to Salt Lake County from Strawberry would use the Diamond Fork System, ULS, and M&I System facilities. The Jordan Aqueduct begins with a connection to the Alpine Aqueduct at the DACRWTP. Also, this water could be pumped from the Alpine Aqueduct at the DACRWTP into the SLA if requested by MWDSLS and in coordination with the District and Interior. Water can also be delivered to the PRA from the ULS.

4,875 AF of M&I System 207 Conserved Water from Strawberry Reservoir

The delivery of up to 4,875 AF of M&I System 207 conserved water for the June sucker in the Provo River from Strawberry would use the Diamond Fork System, ULS, and M&I System facilities. This water would be conveyed through the SFPRCP and released to the Provo River through the OHPP.

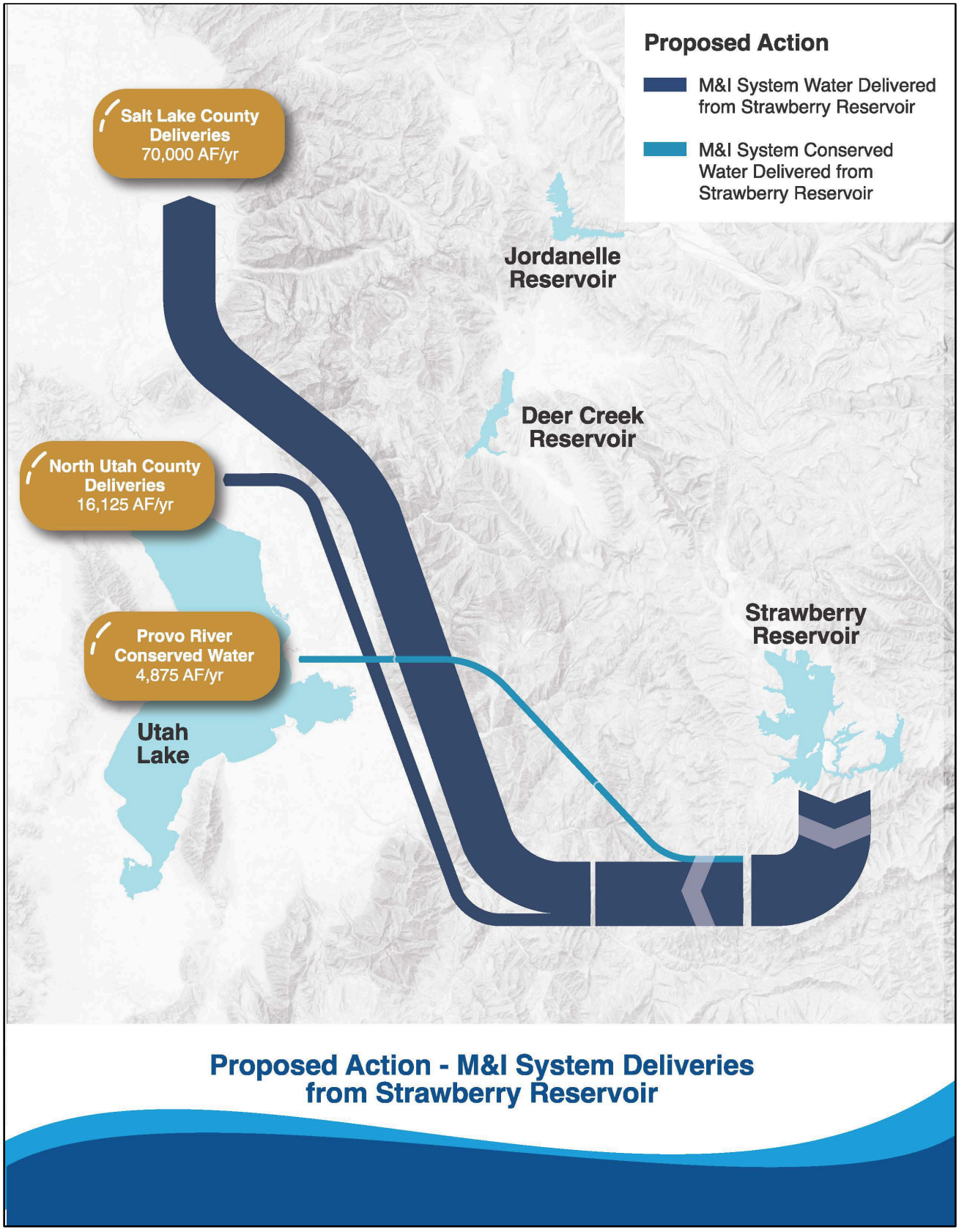

FIGURE 1-10: PROPOSED ACTION – M&I SYSTEM CUP WATER DELIVERED FROM STRAWBERRY RESERVOIR

1.3.2 ULS CUP Water Delivered from Jordanelle Reservoir

The Proposed Action would allow the District the flexibility to meet contractual water delivery obligations to ULS sales petitioners with water from Jordanelle Reservoir instead of water from Strawberry using existing facilities, when doing so would be beneficial, depending on hydrologic conditions, demand, timing, and pipeline capacities. The delivery of ULS CUP water from Jordanelle would use the Provo River where the water could be diverted into the various conveyance facilities (SLA, Olmsted Flowline/Jordan Aqueduct, PRA) to sales petitioners in Salt Lake County (the same way M&I System CUP water from Jordanelle is delivered to Salt Lake County). CUP water delivered from Strawberry to Salt Lake County normally runs from the south at the mouth of Spanish Fork Canyon to the north to the mouth of Provo Canyon and into a conveyance facility. As part of this Proposed Action, CUP water delivered from Jordanelle would be released into the Provo River and diverted into an existing conveyance facility, to meet Salt Lake County ULS contract obligations. The Proposed Action to deliver ULS CUP water is shown in Figure 1-11 and described below.

23,090 AF of ULS CUP water for South Utah County from Jordanelle Reservoir

South Utah County entities have been allocated 23,090 AF per year of ULS CUP water that is assigned to be delivered from Strawberry Reservoir. To deliver this water into South Utah County from Jordanelle, the ULS CUP water would be released from the reservoir into the Provo River where it could be diverted and conveyed into M&I System and ULS facilities. The M&I System and ULS are connected at the OHPP. The ULS CUP water would flow from the mouth of Provo Canyon in the SFPRCP to South Utah County. The delivery of this ULS CUP water would not be used at times when service pressure requirements are higher than what can be provided through the M&I System facilities (*e.g.*, Mapleton City high pressure turnout).

22,000 AF of ULS CUP water for Salt Lake County from Jordanelle Reservoir

Salt Lake County entities have been allocated 22,000 AF per year of ULS CUP water that is assigned to be delivered from Strawberry Reservoir. To deliver this water into Salt Lake County from Jordanelle, the ULS CUP water would be released into the Provo River where it would be diverted and conveyed in the SLA, PRA, and the Jordan Aqueduct per agreements and sales petitions with MWDSLS, PRWUA, and JVWCD. This delivery would be the same way M&I System CUP water from Jordanelle is delivered to Salt Lake County.

16,500 AF of ULS 207 Conserved Water from Jordanelle Reservoir

16,500 AF of ULS 207 conserved water has been returned to Interior for June sucker flows in the Provo River and Hobble Creek resulting from conservation projects (see section titled *CUPCA Section 207 Water Conservation Projects* on Page 3). The ULS CUP 207 conserved water would be delivered from Jordanelle into the Provo River or diverted into the M&I System and into the SFPRCP for conveyance to Hobble Creek.

ULS 207 Conserved Water for the Provo River Delivered from Jordanelle Reservoir

8,000 AF annually of ULS 207 conserved water has been returned to Interior for June sucker flows in the Provo River. Jordanelle is located on the Provo River and the ULS 207 conserved water would be released directly from the reservoir into the Provo River. The water would be diverted at the Olmsted Diversion and then returned back to the Provo River through the OHPP tail race.

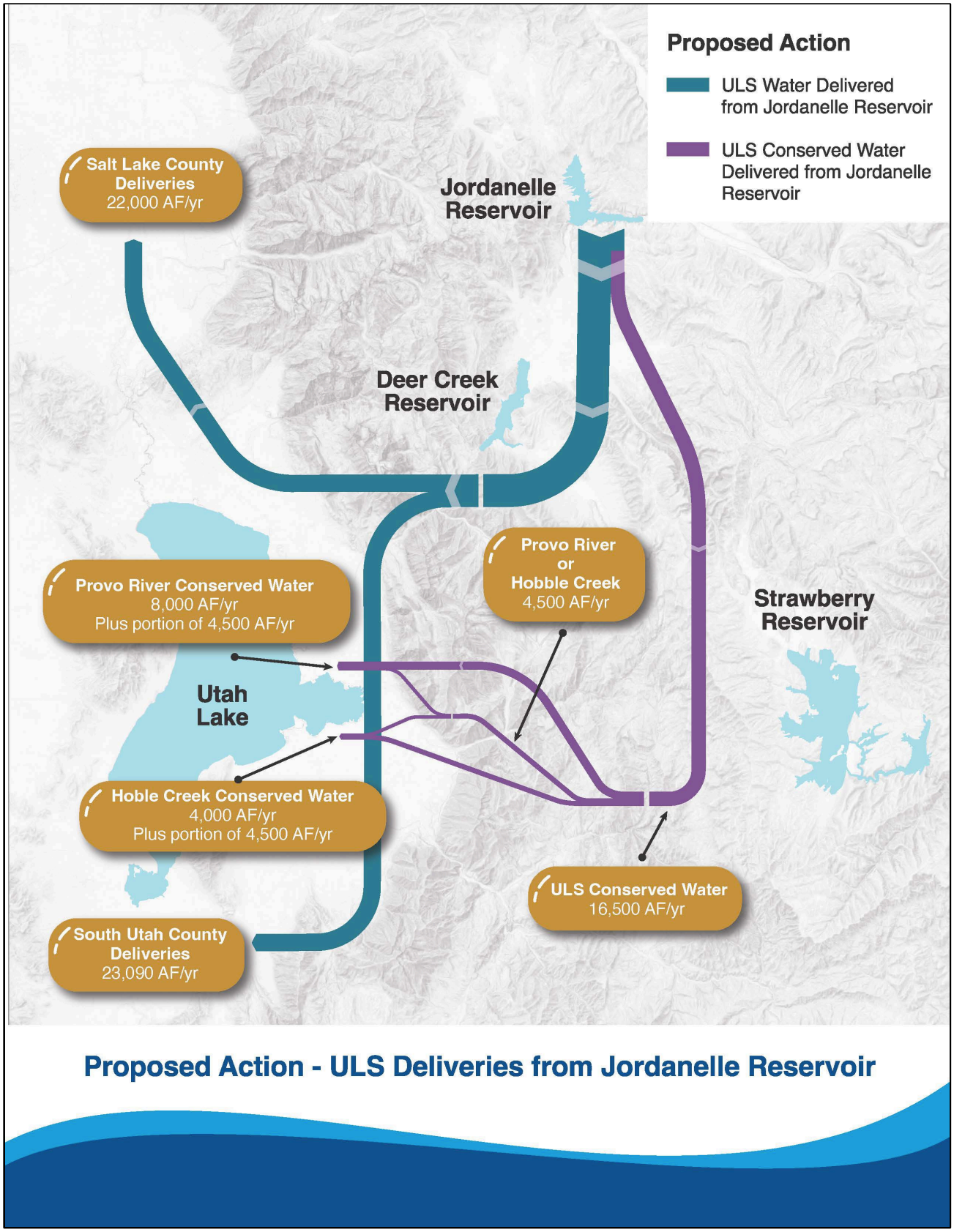

FIGURE 1-11: PROPOSED ACTION – ULS CUP WATER DELIVERED FROM JORDANELLE RESERVOIR

ULS 207 CONSERVED WATER FOR THE PROVO RIVER (MAX. 4,500 AF) AND HOBBLE CREEK (MIN. OF 4,000 AF) DELIVERED FROM JORDANELLE RESERVOIR

8,500 AF annually of ULS 207 conserved water has been returned to Interior through the completion of seven water conservation projects in southern Utah County (see section titled *CUPCA Section 207 Water Conservation Projects* on Page 3). The ULS 207 conserved water would be released from Jordanelle directly into the Provo River. It would also be diverted into M&I System facilities for delivery to Hobble Creek using the SFPRCP and released at the Hobble Creek Valve Station or the Mapleton Springville Pipeline.

- **Provo River** – A maximum of 4,500 AF would be delivered to the Provo River from Jordanelle as described above. The water would be diverted at the Olmsted Diversion and then returned back to the Provo River through the OHPP tail race.
- **Hobble Creek** – A minimum of 4,000 AF would be delivered to Hobble Creek by releasing this water into the Provo River below Jordanelle. The water would then be diverted into the M&I System and conveyed into the SFPRCP for release to Hobble Creek at the Hobble Creek Valve Station or through the Mapleton Springville Pipeline, when space is available depending on conditions.

1.3.3 Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs

The District manages multiple water delivery contracts for water stored in Strawberry and Jordanelle Reservoirs. Under the Proposed Action described above, *M&I System CUP Water Delivered from Strawberry Reservoir* and *ULS CUP Water Delivered from Jordanelle Reservoir* would be accounted for, reported, and the reservoirs would be balanced and made whole through delivery balancing methods.

Accounting of CUP Water Delivered from Unassigned Reservoirs

The District would apply a tracking system called the Strawberry/Jordanelle Reservoirs Water Balancing Account (SJWB). The District would provide a report to project water sales petitioners at the end of each water year outlining the accounting of the *M&I System CUP Water Delivered from Strawberry Reservoir* and *ULS CUP Water Delivered from Jordanelle Reservoir*. The SJWB account would be managed by the District's operation and maintenance personnel and would include sales petitioner requesting water, delivery source (Strawberry or Jordanelle Reservoir), conveyance facilities used (Diamond Fork System, ULS, M&I System, Partner Facilities), delivery volume, and expected return flow volumes.

Using the SJWB account would assist the District in determining the best approach to balancing the use of water supplies between the Strawberry and Jordanelle Reservoirs through optimized deliveries.

Balancing CUP Water Delivered from Unassigned Reservoirs

Since the Proposed Action would deliver contracted CUP water from unassigned reservoirs (M&I System water from Strawberry and ULS water from Jordanelle), the unassigned reservoir that supplied the water would be reduced by the volume of water delivered.

M&I SYSTEM CUP WATER DELIVERED FROM STRAWBERRY RESERVOIR

The M&I System CUP water has been assigned, by contract, to be stored and delivered from Jordanelle Reservoir. Therefore, the Proposed Action of *M&I System CUP Water Delivered from Strawberry Reservoir* would require an equivalent amount of water be retained in Strawberry to

make the Strawberry water supply whole. The methods in which Jordanelle can make it possible for Strawberry to retain additional water to offset the M&I System water that was delivered are discussed below.

Strawberry Reservoir fills to Capacity

When Strawberry fills to capacity, no additional water can be stored in it. Therefore, there would be no means or need for the *M&I System CUP Water Delivered from Strawberry Reservoir* to be replenished. The Strawberry water account is considered whole.

ULS CUP water delivered from Jordanelle Reservoir

The District would deliver water from Jordanelle to ULS System sales petitioners (see Figure 1-11 on Page 23). Water delivered from Jordanelle as a ULS supply is part of the Proposed Action discussed in section 1.3.2. ULS CUP water is assigned to be stored and delivered from Strawberry and when it is delivered from Jordanelle the water would be counted towards balancing *M&I System CUP Water Delivered from Strawberry*.

ULS CUP Water Delivered from Jordanelle Reservoir

The ULS CUP water has been assigned, by contract, to be stored and delivered from Strawberry. Therefore, the Proposed Action of *ULS CUP Water Delivered from Jordanelle Reservoir* would require an equivalent amount of water be retained in Jordanelle to make the Jordanelle water supply whole. The methods in which Strawberry can make it possible for Strawberry to retain additional water to offset the ULS CUP water that was delivered are discussed below.

Jordanelle Reservoir fills to Capacity

When Jordanelle Reservoir fills to capacity, no additional water can be stored in it. Therefore, there would be no means or need for the *ULS CUP Water Delivered from Jordanelle Reservoir* to be replenished. The Jordanelle water account is considered whole. Jordanelle is efficient and, on average, fills to capacity every four years. As a result, *ULS CUP Water Delivered from Jordanelle Reservoir* assists to better manage the water supply along the Wasatch Front.

M&I System CUP Water delivered from Strawberry Reservoir

For this method, the District would deliver M&I System CUP water from Strawberry Reservoir to M&I System sales petitioners in North Utah County and Salt Lake County (see Figure 1-10 on Page 21). Delivering M&I System CUP Water from Strawberry Reservoir is a component of the Proposed Action discussed in section 1.3.1. M&I System CUP water is assigned to be stored and delivered from Jordanelle and when it is delivered from Strawberry the water would be counted towards balancing *ULS CUP Water Delivered from Jordanelle Reservoir*.

Non-CUP Provo River Water Delivered from Strawberry Reservoir

Another method that may be implemented to balance the volume of *ULS CUP Water Delivered from Jordanelle Reservoir* would be to deliver an equivalent volume of non-CUP Provo River water from Strawberry. Then, the non-CUP water would not be released into the Provo River from Deer Creek/Jordanelle but would be exchanged to balance the volume of ULS CUP water delivered from Jordanelle. The non-CUP Provo River water that could be delivered from Strawberry under this method are canal companies who have diversions on the Provo River below Murdock Diversion and Provo River Project water delivered to the PRA.

Normally, these non-CUP water supplies are released into the Provo River from Deer Creek upon demand. The canal companies (those with diversion rights below Murdock Diversion) water is then diverted into their respective canal systems and used per their individual water rights. The PRP water is released from Deer Creek to the Provo River and diverted at the Murdock Diversion where it enters the PRA for use in North Utah County and Salt Lake County. To balance ULS CUP water delivered from Jordanelle, non-CUP water could be released from Strawberry, conveyed through the SFPRCP and delivered to the PRA and/or the Provo River. The non-CUP water from Strawberry would be delivered to fulfill Provo River non-CUP water demands on the lower Provo River. Therefore, the equivalent volume of non-CUP water would remain in Deer Creek or Jordanelle storage where it would make whole and balance Jordanelle Reservoir. The water not released would be exchanged to a CUP water supply stored in Jordanelle following existing water rights and exchanges. The JLAs commit to coordinate with the PRWUA, Provo River Commissioner, and others, as needed, for the non-CUP Provo River water exchange with Strawberry Reservoir.

For example, if in a given year 12,500 AF of 207 conserved water that is contracted to be delivered to the Provo River from Strawberry is instead delivered from Jordanelle, the water supply in Jordanelle would have a deficit of 12,500 AF and Strawberry would have a surplus of 12,500 AF. The District would then apply SJWB delivery methods to balance the Jordanelle deficit and the Strawberry surplus.

Figure 1-12 shows an example of using non-CUP Provo River water to balance the water supply for ULS CUP water that was delivered from Jordanelle. Currently, ULS conserved water is assigned and delivered from Strawberry to the Provo River at the OHPP tail race (see inset ‘A’ in Figure 1-12). The Proposed Action would deliver 12,500 AF of ULS conserved water from Jordanelle where it would be released to the river, then diverted downstream at the Olmsted Diversion for power generation, and then be rereleased back to the lower Provo River at the OHPP tail race (see inset ‘B’). When ULS CUP water is delivered from Jordanelle, the water supply in Jordanelle Reservoir must be balanced. In this case, 12,500 AF must be accounted for and balanced because ULS water is assigned to be delivered from Strawberry but was delivered from Jordanelle. Under existing conditions and water rights, non-CUP water is released from Jordanelle or Deer Creek to the Provo River and diverted into the PRA at the Murdock Diversion for use in North Utah County (see inset ‘C’). To balance the Jordanelle water supply, the District would store the non-CUP water in Jordanelle or Deer Creek and not release it to the Provo River. Instead, the District would meet the non-CUP demand by delivering up to 85 cfs from Strawberry to the PRA using the ULS (see inset ‘D’).

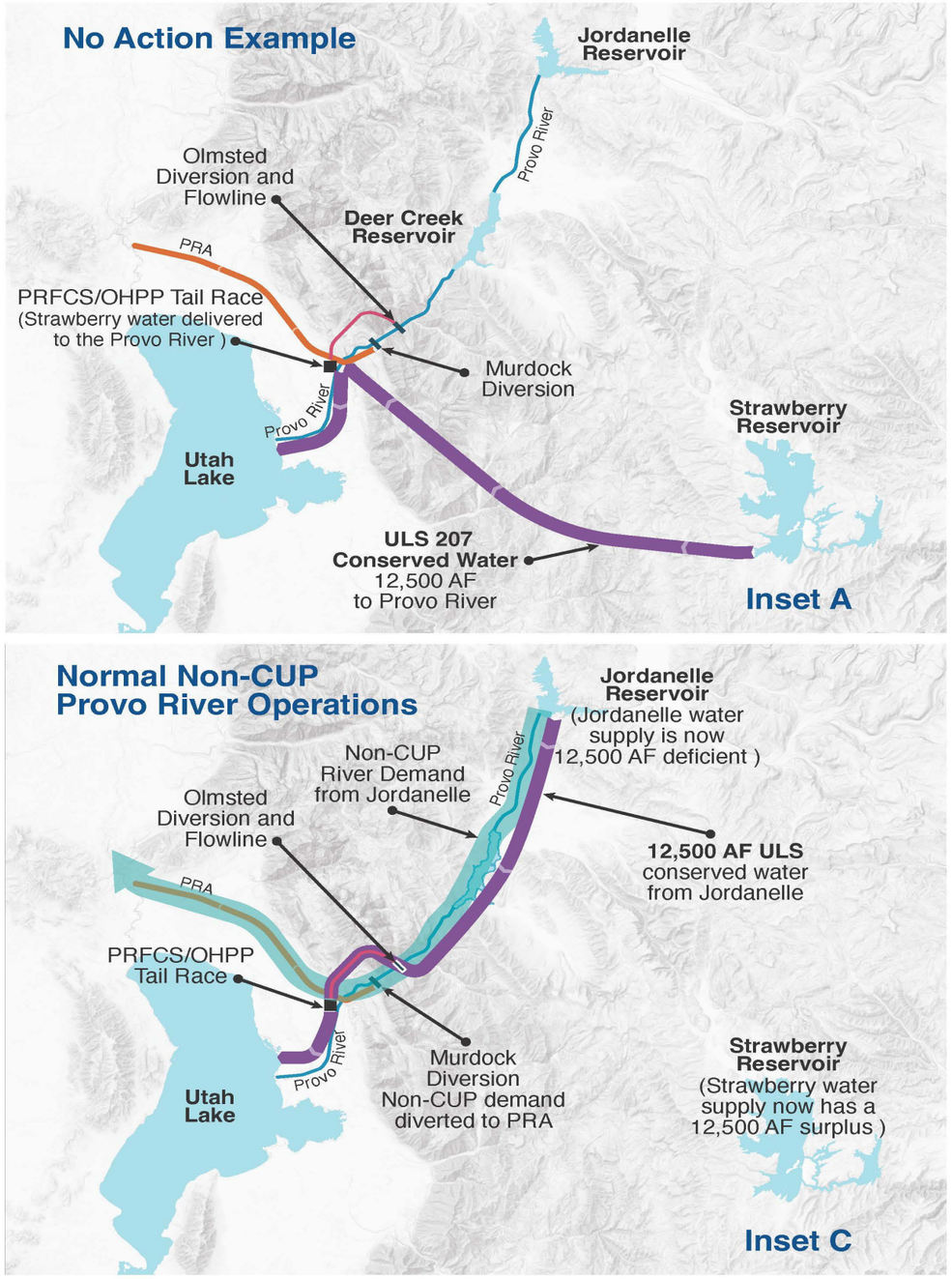

FIGURE 1-12: EXAMPLE SHOWING HOW NON-CUP WATER CAN BALANCE JORDANELLE RESERVOIR WATER SUPPLY

1.3.4 Provo River Direct Flow Rights Exchange

A direct flow right is water that naturally runs in a river or stream and is diverted from a surface source according to its priority date. These rights typically have no storage component and are used when the water is available. The Proposed Action would allow the JLAs to divert the direct flow water in place of CUP water stored in Jordanelle Reservoir. This exchange would only be allowed in accordance with existing reservoir storage agreements and is subject to water right laws, regulations, and approvals. For this exchange, within operational constraints and in coordination with direct flow water right owners (Owner), the District would divert a specific quantity of the direct flow water right when M&I System CUP water has been requested. The amount would be based on the quantity of direct flow rights available, and the amount requested by North Utah County entities. In exchange, CUP storage in Jordanelle of the same quantity diverted, pending approvals, would be provided to the Owner whose direct flow water was previously diverted and used. The stored water would then be released from Jordanelle when it provides the most benefit as determined by the Owner and in accordance with its water right and any approved changes. Water stored in Jordanelle is subject to losses at the time of release as determined by the Provo River Commissioner.

The JLAs have identified three Provo River direct flow right water users whose water rights would be evaluated as part of the Proposed Action. Other direct flow rights may be added at a later time which would require additional NEPA. Existing Owner's that have been identified as potential candidates for this exchange are the Mitigation Commission, Provo City, and the District.

For the Provo River Direct Flow Rights Exchange to occur there needs to be a North Utah County M&I System sale petitioner calling for their CUP water at a time when the Owner's direct flow water rights are available, but not in use by the Owner. Additionally, the Owners must have storage agreements in Jordanelle and the place of use for their direct flow water rights must be within the District's service area. Because of this, exchange opportunities will be limited. The CUP water available for the exchange is the 16,125 AF M&I System CUP water allocated to North Utah County. Typically, most of this water is delivered in the summer months when other water sources, including Provo River Direct Flows Rights, are in use or unavailable. The opportunity for exchange will usually occur in March, April, May, June, September, and October when direct flow rights are available and water use is low. Considering these factors, it's anticipated the District would be able to exchange between 2,000 to 6,000 AF of the M&I System CUP water per year.

Accounting of Provo River Direct Flows

For the Provo River direct flow water rights, the District would track each direct flow right used by the individual entity requesting the water, and the volume diverted along with its use and timing. The District would then use this information to exchange an equal volume of water that would be stored in Jordanelle.

1.4 Benefits of the Water Management Optimization Project

The Water Management Optimization Project provides many benefits to water users of both Jordanelle and Strawberry Reservoirs including the CUP sales petitioners in Utah and Salt Lake Counties, the June Sucker Recovery Implementation Program (JSRIP), and other water users in Utah and Salt Lake Counties. The Proposed Action provides a benefit to the Mitigation Commission, Provo City, and the District

through the exchange of their Provo River Direct Flow Rights for storage in Jordanelle Reservoir. Specific benefits of the Proposed Action are described below.

1.4.1 Optimization of Jordanelle and Strawberry Reservoirs Operations

Jordanelle and Strawberry Reservoirs are both Bonneville Unit features of the CUP, and both deliver CUP water supplies to sales petitioners in Utah and Salt Lake Counties. In addition, Jordanelle provides instream flows to the Provo River and Strawberry provides instream flows to the Provo River and Hobble Creek (through the SFPRCP), Sixth Water/Diamond Fork Creeks, and the Strawberry River below Soldier Creek Dam. Water supplies for both reservoirs were modeled and analyzed prior to construction. The District has operated and maintained both reservoirs, as well as their dams and conveyance systems, since construction was completed. Over the years as key features of the Bonneville Unit have been completed and the District began operation and maintenance responsibilities of these facilities, additional information, experience, and actual data has been obtained and used to better understand the hydraulics and interconnection of the Diamond Fork System, ULS, and M&I System; the hydrology of both reservoirs and their basins that supply water; the pattern and timing of demands for the CUP water supplies; and needs of each sales petitioner.

Prior to construction and operation of the M&I System and ULS, water sales contracts were issued based on the completed modeling. Now as the District has experienced real world scenarios, and with the interconnection of these systems that was not originally planned, the District has recognized opportunities to more efficiently manage and optimize the delivery of CUP water

Currently, Jordanelle has been assigned to deliver CUP water developed as part of the M&I System and Strawberry has been assigned to deliver CUP water developed as part of the ULS. The delivery pipelines used to convey both M&I System CUP water from Jordanelle and ULS CUP water from Strawberry are operated and maintained by the District and have been since their construction was completed. The M&I System and ULS conveyance facilities are connected at the OHPP. The Proposed Action, as described in detail in this chapter, would allow the District to optimize the operations and water supplies of Jordanelle and Strawberry Reservoirs by delivering, when conditions allow and when it would be beneficial to the water supply, M&I System CUP water from Strawberry and ULS CUP water from Jordanelle.

In addition, the Proposed Action assists with CUP drought resiliency by optimizing which reservoir would supply water to sales petitioners. Having the water stored higher in the system minimizes evaporation and losses and helps to make the CUP water supply more resilient during times of drought.

1.4.2 Utilize Efficiency of Jordanelle Reservoir to Assist with Strawberry Reservoir

The construction of Jordanelle Dam was completed in 1993. Since its completion, the reservoir fills to capacity on average every four years. Figure 1-13 shows the water level (left Y-axis) of Jordanelle Reservoir and the releases from the reservoir to the Provo River (right Y-axis).

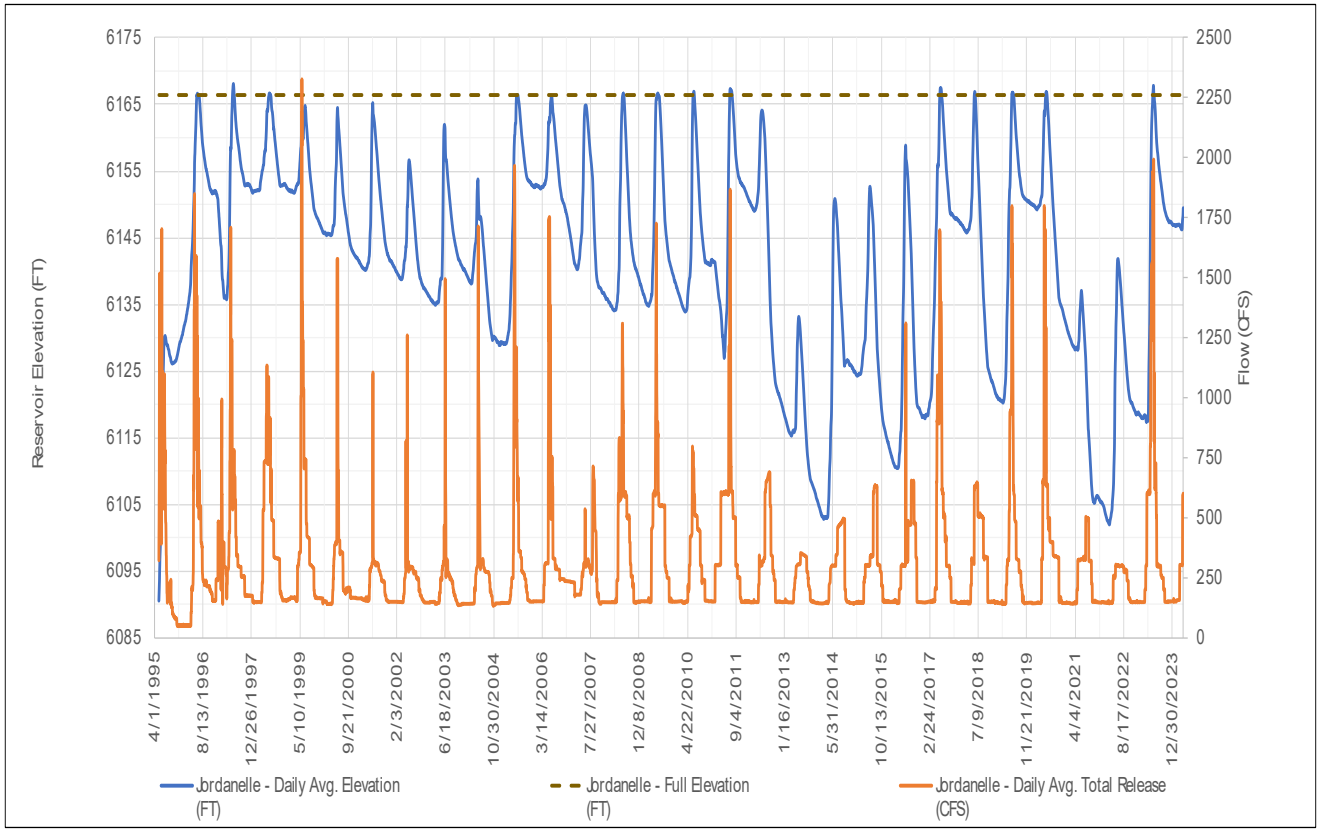

FIGURE 1-13: JORDANELLE RESERVOIR WATER SURFACE ELEVATIONS AND RELEASES TO THE PROVO RIVER

Strawberry Reservoir has filled only three time since it was enlarged in the 1980s. Figure 1-14 shows the water surface elevation at the reservoir which is impounded by Soldier Creek Dam on the Strawberry River. Strawberry is the largest reservoir of the Bonneville Unit and can hold more than three times the volume of Jordanelle. Because of its size and high elevation in the drainage basin, Strawberry does not reach capacity nearly as often as Jordanelle.

Annually, Strawberry Reservoir delivers a combined 162,900 AF of federal water supply that includes ULS CUP water (at full demand) to Utah County and Salt Lake County sales petitioners, and SVP water to South Utah County. In addition, nearly 16,000 AF is released for instream flows into the middle Strawberry River (part of the Colorado River Basin) through the outlet works at Soldier Creek Dam.

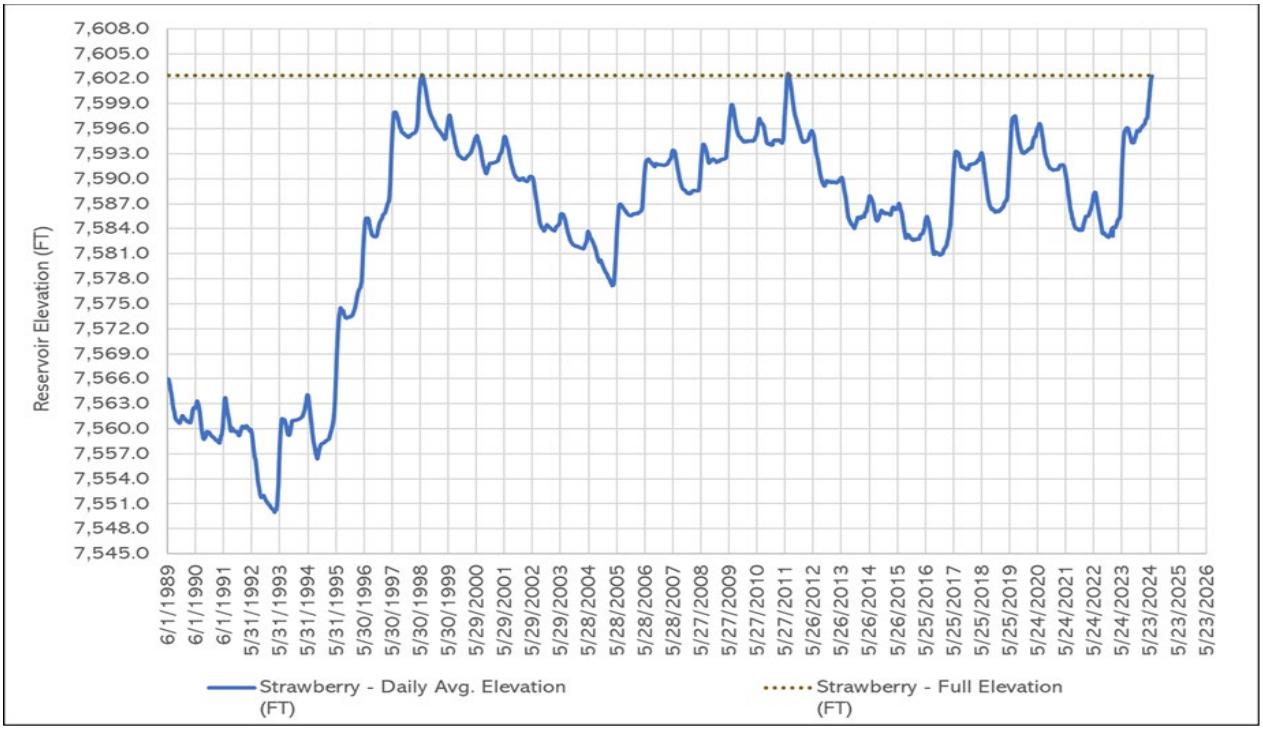

FIGURE 1-14: STRAWBERRY RESERVOIR WATER SURFACE ELEVATIONS

1.4.3 Operational Constraints of the Diamond Fork System and ULS

ULS CUP water delivered to sales petitioners from Strawberry utilizes the Diamond Fork System and ULS conveyance facilities. The ULS CUP water is a municipal and industrial supply, and the District is required to deliver it on demand to sales petitioners year-round per contract. Currently, the Diamond Fork System and ULS only operate during the irrigation season (approximately April 1st to October 31st). At some point in the future, minor modifications to these conveyance systems could be made for winter operation. Until then when ULS CUP water is called for outside of the irrigation season, the Proposed Action to deliver ULS CUP from Jordanelle provides additional operational flexibility for the District.

1.4.4 System Redundancy

At times of extraordinary maintenance or repair on either of these systems (ULS or M&I System) conveyance facilities, delivering ULS CUP water from Jordanelle or M&I System CUP water from Strawberry would provide redundancy and reduces the risk of this water supply to sales petitioners. The Provo River is used to convey both federal and non-federal water supplies to much of the population of the State of Utah. CUP water is stored and released from Jordanelle, through Deer Creek, and conveyed using the Provo River to North Utah County and Salt Lake County. CUP water is diverted into conveyance facilities including the SLA, Alpine Aqueduct, Jordan Aqueduct, and the PRA (see section titled *Partner Agencies Conveyance Facilities Used to Deliver CUP Water* on Page 14). By releasing ULS CUP water from Jordanelle, these conveyance facilities provide redundancy and increase resiliency rather than simply relying on the Diamond Fork System and ULS with its connection to the SLA (through pumping at the DACRWTP), Alpine Aqueduct, Jordan Aqueduct, and PRA.

1.4.5 Provo River Risks

The Provo River is used to convey both federal and non-federal water supplies to approximately 1.6 million people in Utah. Utilizing the Provo River for conveyance poses several risks described below.

Semitruck/vehicle Accidents

US-189 is a major highway that runs through Provo Canyon connecting Provo City with Heber City. Between Deer Creek Reservoir and the mouth of Provo Canyon, US-189 parallels the Provo River. According to 2022 traffic counts conducted by the Utah Department of Transportation (UDOT), approximately 14,000 vehicles travel daily along this stretch of highway which is adjacent to Deer Creek Reservoir and the Provo River. Of this number, semitrucks account for 29% of the traffic volume on this section of roadway. These semitrucks often transport hazardous chemicals and pose a risk to the water supply in Deer Creek Reservoir and the Provo River. There have been accidents involving semitrucks crashing into Deer Creek Reservoir and into the Provo River. When this occurs, the conveyance systems (*e.g.,* SLA, Olmsted Diversion and Flowline, and PRA) are shut down to allow for cleanup so these pipelines are not contaminated.

Debris Flows and Avalanches

Provo Canyon is known for avalanches. There are a number of locations in the canyon that are susceptible to debris flows and avalanches including Slide Canyon, Bridal Veil Falls, Lost Creek, and others. In 2023, an avalanche at Bridal Veil Falls resulted in damming up the Provo River at that location. Depending on the location, when debris flows or avalanches block the flow of the Provo River water may not be available to be diverted into the conveyance systems (e.g., SLA, Olmsted Diversion and Flowline, PRA).

Wildfires

The Provo River Drainage is susceptible to wildfires. The drainage basin is largely high mountain and forest. Runoff after wildfires can contaminate water sources such as the Provo River. Recently, there have been wildfires adjacent to the Provo River that resulted in an emergency water quality situation and required that water treatment plants use extraordinary procedures to treat the water.

It is likely at some point that water deliveries using the Provo River will be shut down due to contamination or poor water quality issues, emergency conditions, or other operational constraints. The ability to deliver M&I System CUP water from Strawberry instead of Jordanelle (through the Provo River) provides a redundant means of water delivery to sales petitioners and others, thus increasing the reliability of the water supply in Utah and Salt Lake Counties.

1.4.6 Ability to Meet June Sucker Hydrograph on the Provo River

12,875 AF of 207 conserved water has been obtained by Interior for instream flows on the Provo River. up to 4,500 AF of additional 207 conserved water can be used in the Provo River or Hobble Creek. The 207 conserved water assists in the recovery of the threatened June sucker in the Provo River and Hobble Creek. The 207 conserved water is part of water conservation goals established by Section 207 of the CUPCA legislation. The volume of 207 conserved water is a result of water conservation measures such as lining or enclosing canals and construction of secondary irrigation water systems. The water saved by these conservation measures has been returned to Interior for instream flow uses.

The 207 conserved water from CUPCA conservation projects is provided from both the M&I System and ULS water allotments. For example, originally, 30,000 AF of ULS CUP water was allocated to Salt Lake County for M&I uses. Of the 30,000 AF, 8,000 AF has been returned to Interior for instream flow and June sucker recovery uses in the Provo River from water conserved by piping the Provo River Aqueduct.

The JSRIP has developed typical hydrographs for the beneficial use of the 207 conserved water on the Provo River (see Figure 1-15).

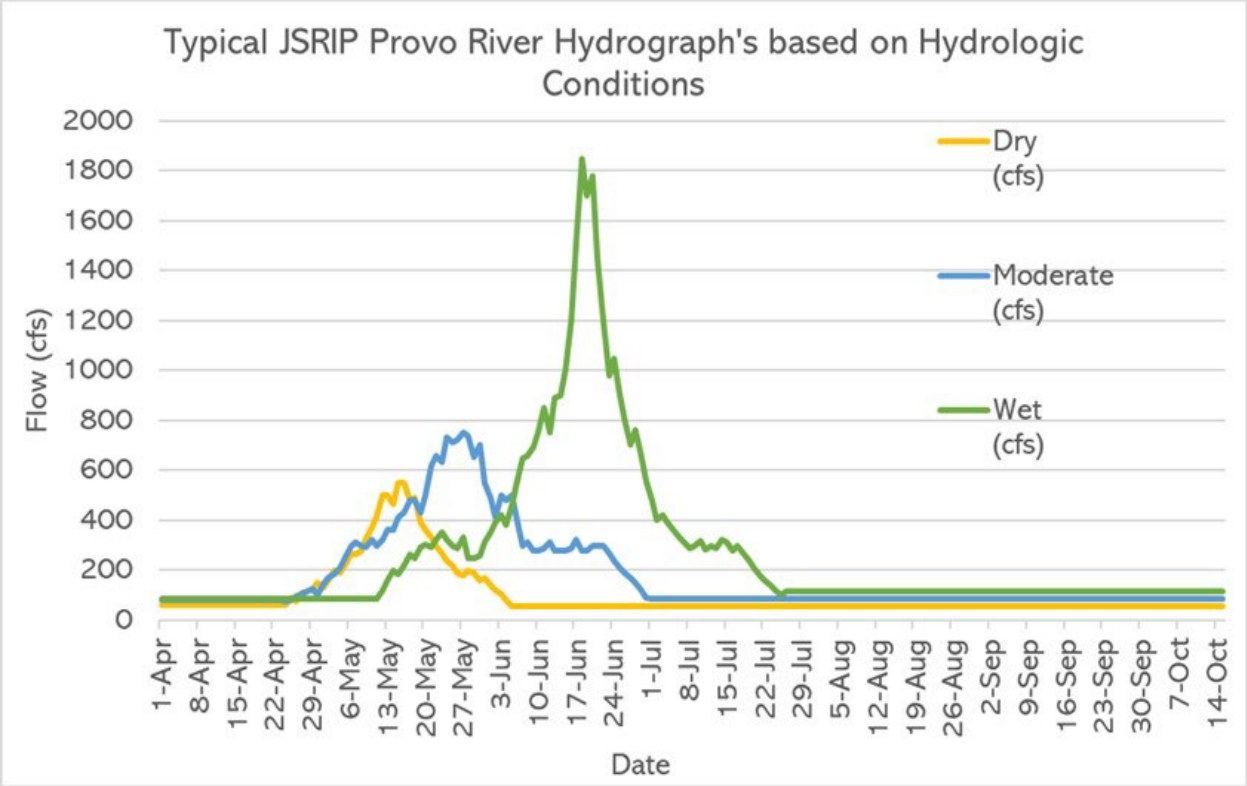

FIGURE 1-15: JSRIP PROVO RIVER HYDROGRAPH

Only 4,875 AF of the 207 conserved water for the Provo River is delivered from Jordanelle, while 8,000 AF to 12,500 AF of the remaining water is assigned to be delivered from Strawberry. The ability to deliver this water in a pattern to achieve the desired hydrograph from Strawberry is limited due to capacity and operational constraints of the Diamond Fork System and ULS. Water delivered to the Provo River from Strawberry is discharged from the OHPP trail race. The Proposed Action would allow all of the 207 ULS conserved water to be delivered from the Jordanelle Dam outlet works, that have a capacity of 3,800 cfs. The river's typical hydrograph peaks range from 400 to 1,800 cfs. The capacity of the SFPRC is 120 cfs with a dedicated flow rate capacity for 207 conserved water of 35 cfs. For these reasons, the 207 conserved water delivered from Strawberry cannot be delivered in the required volume and timing. However, if the 207 conserved water is released from Jordanelle, the hydrograph is more easily met.

All 207 conserved water for Hobble Creek is assigned to be delivered from Strawberry through the Mapleton Springville Pipeline or the SFPRCP at the Hobble Creek Valve Station. Under the Proposed Alternative, the District would have the ability to deliver this water, under certain hydrologic and other conditions, to Hobble Creek from Jordanelle using the SFPRCP's connection to the M&I System and the Provo River.

1.4.7 Increased Resiliency during Drought Operations

Jordanelle Reservoir has a storage volume of 314,006 AF. Its main water supply is the Provo River. However, as part of the federal PRP, import water is delivered to the Provo River above Jordanelle for use by the PRWUA. Transbasin or import water for the PRP is delivered from the upper Weber River watershed through the Weber-Provo Diversion Canal and from the Duchesne River watershed through the Duchesne Tunnel into the Provo River. Jordanelle delivers 104,500 AF of M&I System CUP water annually and functions as a long-term holdover reservoir to provide storage through a three-year drought period.

Strawberry Reservoir's main water supply is the SACS which is a system of reservoirs, tunnels, pipelines, and diversion dams designed to collect flows of ten streams that are tributary to the Strawberry and Duchesne Rivers. SACS has a capacity to discharge up to 620 cfs into Strawberry. The reservoir also collects water from the many natural creeks and drainages tributary to the Strawberry River. Strawberry Reservoir annually delivers a combined 162,900 AF of ULS CUP and SVP water to Utah and Salt Lake Counties. In addition, nearly 16,000 AF is delivered for instream flows into the middle Strawberry River (part of the Colorado River Basin) which is released from the base of Soldier Creek Dam. Strawberry Reservoir functions as a long-term holdover reservoir to provide storage through a seven-year drought period.

The Proposed Action would increase drought resiliency for CUP sales petitioners by maximizing the use of water supplies at Jordanelle and Strawberry Reservoirs. Under the Proposed Action and during typical water years, some ULS CUP water would be delivered from Jordanelle to reduce the volume released through the Diamond Fork System and ULS. This would allow more water to be stored in the larger Strawberry reservoir, creating a more resilient water supply. During drought conditions of minimal inflows to Jordanelle, CUP water could be delivered from Strawberry to meet M&I System CUP water demands in North Utah County and Salt Lake County that is normally delivered from Jordanelle. This would decrease water delivery releases from Jordanelle creating a more resilient water supply in that reservoir. The amount of CUP water delivered from the contrasting reservoir would be monitored and accounted for allowing the District to properly balance supplies in both reservoirs.

1.5 Purpose and Need

1.5.1 Need of the Proposed Action

The Proposed Action is a step towards the State's efforts to improve the overall reliability, resiliency, and flexibility of Utah's water supply. It is widely recognized that there is a need to protect and improve the water supply from threats of drought, natural and man-caused emergencies, and maintenance shutdowns due to aging infrastructure. The need for the Proposed Action is to improve the management and delivery of Central Utah Project, Bonneville Unit water from Jordanelle and Strawberry Reservoirs through operational flexibility in use of water sources, delivery timing and methods, and adjustment of contracts in coordination with the signatory parties, environmental documents, and reports.

1.5.2 Purposes of the Proposed Action

The purposes of the Proposed Action are:

- Optimize the use of CUP Bonneville Unit water sources and deliveries.
- Increase flexibility, resiliency, and reliability of the CUP Bonneville Unit facilities, water sources, and deliveries.
- Assist with maintaining and improving the yield of Strawberry and Jordanelle Reservoirs.
- Allow the Central Utah Water Conservancy District the operational flexibility to deliver water to sales petitioners, as determined by the District, from Strawberry or Jordanelle Reservoirs, and exchange specific Provo River direct flow rights for an equivalent storage volume in Jordanelle Reservoir, within capacity limits, constraints, and contractual agreements of Bonneville Unit facilities and Partner Facilities.
- Allow for operational redundancy during times of drought, operational constraints, and other emergency conditions.
- Reduce operational losses due to system inefficiencies and constraints.
- Improve management of Provo River direct flow rights held by the Utah Reclamation Mitigation and Conservation Commission, Provo City, and Central Utah Water Conservancy District.
- Improve flexibility for delivery of instream flows for the June sucker, its ecosystem, and to better meet the JSRIP hydrographs for the Provo River.

1.6 Permits, Contracts, and Authorizations

The Proposed Action would comply with all federal, state, and local regulations. The JLAs, prior to implementing the Proposed Action, would adhere to Utah State water law and continue coordination efforts with the Division of Water Rights (DWRi) and other stakeholders. All appropriate water right procedures would be followed, and approvals would be obtained prior to the implementation of the Proposed Action. The owner of the direct flow water rights considered for the Proposed Action includes the Mitigation Commission, Provo City, and the District. These entities would be required to submit and receive the appropriate approvals from the State Engineer and other applicable state or federal agencies to allow delivery of their direct flow rights to customers in exchange for an equal amount of water in the form of storage in Jordanelle Reservoir. The Proposed Action would not affect or require any modifications to the agreements listed below:

- Strawberry Reservoir Operating Agreement;
- Deer Creek Reservoir/Jordanelle Reservoir Operating Agreement; and
- Master Agreement (Provo Reservoir Canal Enclosure Project).

The agreements, Block Notices, water petitions, and 207 conserved water contracts may have specific language regarding which reservoir their waters would be supplied from. Therefore, as part of the Proposed Action, the JLAs would evaluate these documents to determine which ones may need to be modified prior to implementation. Table 1-2 lists the Block Notices that may require amendments or modifications.

TABLE 1-2: BLOCK NOTICES THAT ARE PART OF THE PROPOSED ACTION

Block Notice	Description
4A and 4B	M&I System water for North Utah County and Salt Lake County
5A	M&I System water for North Utah County and Salt Lake County
5C	M&I System water for Salt Lake County
5D	ULS (municipal and industrial) water for South Utah County from Strawberry Reservoir
6	M&I System water for North Utah County and Salt Lake County
7A-1	June sucker water from Strawberry Reservoir
7A-2	ULS water for Salt Lake County
7B-1	June sucker water from Strawberry Reservoir
7B-2 thru 5	ULS water for South Utah County
Special 2	M&I System water for Salt Lake County
7B Future	ULS water for South Utah County

Table 1-3 lists the water sales petitions that may require amendments or modifications.

TABLE 1-3: WATER PETITIONS THAT ARE PART OF THE PROPOSED ACTION

Sales Petition	
MWDSLS M&I System	
JVWCD M&I System	
North Utah County M&I System	
Alpine	Lindon
American Fork	Lehi
Cedar Hills	Lindon
Highland	Metropolitan Water District of Orem
Pleasant Grove	Metropolitan Water District of Provo
	Vineyard
MWDSLS ULS	
JVWCD ULS	
South Utah Valley Municipal Water Association ULS	

Table 1-4 lists the water supply contracts between Interior and the District that may require an amendment or modification. The contract number and sponsoring entity of the completed 207 conserved water projects are shown below.

TABLE 1-4: 207 CONSERVED WATER CONTRACTS THAT ARE PART OF THE PROPOSED ACTION

Contract Number	Sponsoring Entity for 207 Conserved Water Projects
13-WC-40-523	Mapleton City and Springville City
99-07-40-R6330 -1	Alpine City
99-07-40-R6331	Alpine City
00-WC-40-653	Highland City
98-07-40-R5070	JVWCD
03-WC-40-8580	JVWCD
00-07-40-R6510	Lindon City
04-WC-40-080	Pleasant Grove City
99-07-40-6170	Pleasant Grove City
04-WC-40-8980	Upper East Union Canal
09-WC-40-361	Provo Reservoir Canal
13-WC-40-523	Mapleton-Springville Lateral
04-WC-40-070	Payson City
13-WC-40-523	Salem City
13-WC-40-523	Santaquin City
03-WC-40-8540	Spanish Fork City

1.7 Related Projects and Documents

As discussed in *Tiering from Previous NEPA Documents* on page 1, the Proposed Action tiers from two completed and approved NEPA documents. The Proposed Action has been developed with consideration given to the related planning and environmental documents listed below:

- Final Environmental Statement, Bonneville Unit of the CUP (1972)
- Final Supplemental to the Final Environmental Statement for the Municipal and Industrial System (1987)
- Final Supplemental to the Final Environmental Impact Statement for the Diamond Fork System (1999)
- Supplement to the Bonneville Unit Definite Plan Report (2004)
- Realignment of a Portion of the Utah Lake Drainage Basin Water Delivery System Final Environmental Assessment and Finding of No Significant Impact (2010)

- Olmsted Hydroelectric Power Plant Replacement Project Final Environmental Assessment and Finding of No Significant Impact (2015)
- ULS Orem Reach 2 Realignment Final Environmental Assessment and Finding of No Significant Impact (2015)
- Block Notice 7A-2 Temporary Use in North Utah County Final Environmental Assessment and Finding of No Significant Impact (2021)
- Central Water Project – Water Service Agreement Final Environmental Assessment and Finding of No Significant Impact (2023)

Chapter 2: ALTERNATIVES

2.1 No Action Alternative

Under the No Action Alternative, the District would not be able to optimize the M&I System and ULS water supplies developed in Jordanelle and Strawberry Reservoirs. For the M&I System water, the District would continue to deliver the water listed in section 1.3.1 from Jordanelle Reservoir. For the ULS, the District would continue to deliver the water listed in section 1.3.2 from Strawberry Reservoir. The District would not divert Provo River direct flow rights for use in northern Utah County and store an equivalent volume in Jordanelle Reservoir for later use by the Owner. The Provo River direct flow rights associated with the Proposed Action would be required to be used when they are available per their water rights.

2.2 Proposed Action Alternative

2.2.1 M&I System CUP Water Delivered from Strawberry Reservoir

This Proposed Action would allow the District the flexibility of delivering M&I System CUP water from Strawberry Reservoir (for more detail see section 1.3.1 on Page 20). The Proposed Action would require a balancing of water volume owed to Strawberry since the M&I System CUP Water is assigned, by contract, to be delivered from Jordanelle. The balancing methods for water owed to Strawberry Reservoir are discussed in the Proposed Action section 1.3.3 titled *Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs* found on Page 24. The M&I System CUP water considered as part of this Proposed Action includes:

- 16,125 AF – M&I System CUP water for North Utah County
- 70,000 AF – M&I System CUP water for Salt Lake County
- 4,875 AF – 207 conserved water for the Provo River

2.2.2 ULS CUP Water Delivered from Jordanelle Reservoir

This Proposed Action would allow the District the flexibility of delivering ULS CUP water from Jordanelle Reservoir (for more detail see section 1.3.2 on Page 22). The Proposed Action would require a balancing of water volume owed to Jordanelle since the ULS CUP water is assigned, by contract, to be delivered from Strawberry. The balancing methods for water owed to Jordanelle are discussed in the Proposed Action section 1.3.3 found on Page 24. The ULS water considered as part of this Proposed Action includes:

- 22,000 AF – ULS CUP water for Salt Lake County
- 23,090 AF – ULS CUP water for South Utah County
- 16,500 AF – ULS CUP 207 conserved water for the Provo River and Hobble Creek

2.2.3 Accounting of and Balancing CUP Water Delivered from Unassigned Reservoir

This Proposed Action is described in detail in section 1.3.3 on Page 24. The District would utilize the SJWB account to account for, report, and document the volume of water used to balance the water owed to Strawberry (delivery of M&I System CUP water) and to Jordanelle Reservoirs (delivery of ULS CUP water).

Balancing M&I System CUP Water Delivered from Strawberry Reservoir

When M&I System CUP water is delivered from Strawberry Reservoir, an equivalent volume of water is owed to Strawberry. The methods that the District would use to balance the volume of water owed to Strawberry include the following:

- **Strawberry Reservoir Fills to Capacity** – When Strawberry Reservoir fills to capacity, no additional storage can be provided in the reservoir. Therefore, there would be no means or need for the *M&I System CUP Water Delivered from Strawberry Reservoir* to be replenished; and
- **ULS CUP Water Delivered from Jordanelle Reservoir** – The District would deliver ULS CUP water from Jordanelle to balance *M&I System CUP Water Delivered from Strawberry Reservoir*. When ULS CUP water is delivered from Jordanelle Reservoir it would allow Strawberry to retain that amount of water thereby "replacing" *M&I System CUP Water Delivered from Strawberry Reservoir*.

Balancing ULS CUP Water Delivered from Jordanelle Reservoir

When ULS CUP water is delivered from Jordanelle Reservoir, an equivalent volume of water is owed to Jordanelle. The methods that the District would use to balance the volume of water owed to Jordanelle include the following:

- **Jordanelle Reservoir Fills to Capacity** – Jordanelle Reservoir fills to capacity on average every four years. At full storage capacity, no additional water can be held in Jordanelle. Therefore, there would be no means or need for the *ULS CUP Water Delivered from Jordanelle Reservoir* to be replenished;
- **M&I System Water Delivered from Strawberry Reservoir** – The District would deliver M&I System CUP water from Strawberry Reservoir. M&I System CUP water is assigned to be stored and delivered from Jordanelle. When M&I System CUP water is delivered from Strawberry it would allow Jordanelle to retain that amount of water thereby "replacing" or balancing *ULS CUP Water Delivered from Jordanelle Reservoir*; and
- **Non-CUP Provo River Water Delivered from Strawberry Reservoir** – For this method, instead of releasing water from Deer Creek Reservoir, the District would deliver ULS CUP water from Strawberry to fulfill non-project water deliveries in the Provo River. A like volume of non-project water would be stored in an upstream exchange of water in Deer Creek or Jordanelle Reservoirs and would be stored as M&I system CUP water and be counted towards balancing *ULS CUP Water Delivered from Jordanelle Reservoir*.

2.2.4 Provo River Direct Flow Rights Exchange

This Proposed Action is described in detail in section 1.3.4 on Page 28. It would allow the JLAs to divert a direct flow water right in place of releasing M&I System CUP water stored in Jordanelle. In exchange, the amount of water diverted would be stored in Jordanelle and would be provided to the Owner whose water was diverted. These waters would then be released on demand when they provide the most benefit to the Owner pending approvals and in accordance with losses as determined by the Provo River Commissioner. Direct flow water right user's water considered as part of the Proposed Action are owned by the Mitigation

Commission, Provo City, and the District. The Proposed Action would account and report the direct flow right waters used under respective separate accounts in Jordanelle Reservoir.

2.3 Alternatives Considered but Eliminated from Consideration

The CUP water considered for the Proposed Action and their conveyance facilities have been evaluated in previous NEPA documents. These NEPA documents describe the alternatives developed and considered and the reason alternatives were eliminated from further study.

The JLAs considered and evaluated an alternative to deliver ULS CUP water from Jordanelle Reservoir without the component of balancing because Jordanelle fills every four years on average and could therefore be made whole in a relatively short timeframe. However, this alternative only meets a small portion of the purpose and need to provide a more reliable and resilient water supply though flexibility in water resources, timing, and delivery methods. The JLAs determined that the alternative to deliver ULS CUP water from Jordanelle does not meet the Proposed Action purpose and need and will not be carried forward for further evaluation.

Chapter 3: Affected Environment and Environmental Consequences

This chapter outlines the environmental resources that could be impacted by the Proposed Action. It includes a detailed analysis of the resources that were thoroughly evaluated, as well as those that were considered but excluded from further detailed study. For each resource analyzed in detail, this chapter first presents the current conditions or characteristics of that resource. It then discusses the anticipated impacts resulting from both the No Action and Proposed Action Alternatives.

3.1 Resources Considered but Dismissed from Further Analysis

The JLAs identified and subsequently excluded several resources from detailed analysis as shown in Table 3-1. The reasoning for eliminating each of them is discussed in this table.

Table 3-1: Resources Considered and Eliminated from Further Consideration

Resource	Reasoning for Elimination
Air Quality	The Proposed Action does not require any construction or ground disturbance activities. There would be no impact to air quality.
Transportation	The Proposed Action does not require any construction or ground disturbance activities. There would be no impact to transportation.
Prime, Unique, and Statewide Important Farmland	The Proposed Action does not require any new right-of-way nor any construction or ground disturbance activities. There would be no impact to prime, unique, and statewide important farmland.
Soils	The Proposed Action does not require any new right-of-way nor any construction or ground disturbance activities. There would be no impact to soils.
Vegetation and Habitat	The Proposed Action would deliver the same volume of water as evaluated in previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). Any fluctuations within the Provo River flow rates or within Jordanelle Reservoir, Strawberry Reservoir, and Utah Lake are within their normal conditions. There would be no impact to vegetation and habitat.
Invasive Species	The Proposed Action does not require any new right-of-way nor any construction or ground disturbance activities. There would be no increase or effect to invasive species.
Cultural Resources	The Proposed Action does not require any new right-of-way nor any construction or ground disturbance activities. There would be no impact to cultural resources.
Groundwater	The Proposed Action would deliver the same volume of water as evaluated in the previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). There would be no impact to groundwater.

Resource	Reasoning for Elimination
Wetlands and Waters of the U.S.	The Proposed Action would deliver the same volume of water as evaluated in previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). Any fluctuations within the Provo River flow rates or within Jordanelle Reservoir, Strawberry Reservoir, and Utah Lake are within their normal conditions. There would be no impact to wetlands and waters of the U.S.
Floodplains	The Proposed Action would deliver the same volume of water as evaluated in previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). Any fluctuations within the Provo River flow rates or within Jordanelle Reservoir, Strawberry Reservoir, and Utah Lake are within their normal conditions. There would be no impact to floodplains.
Wildlife	The Proposed Action does not require any construction or ground disturbance activities. There would be no impact to wildlife.
Threatened and Endangered Species	The Proposed Action would deliver the same volume of water as evaluated in previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). There would be no impact to threatened and endangered species.
Fisheries	The Proposed Action would deliver the same volume of water as evaluated in previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). Any fluctuations within the Provo River flow rates or within Jordanelle Reservoir, Strawberry Reservoir, and Utah Lake are within their normal conditions. There would be no impact to fisheries.
Wild and Scenic Rivers	There are no wild and scenic rivers within Wasatch, Utah, or Salt Lake Counties.
Land Use Plans and Policies	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities.
Recreation	The Proposed Action would deliver the same volume of water as evaluated in previous NEPA documents. Also, the Proposed Action would not change the use of CUP water (e.g., M&I, instream flows). There would be no recreational impacts as a result of the Proposed Action.
Visual Resources	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities. There would be no impact to visual resources.
Wilderness Areas	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities. There would be no impact to wilderness areas.

Resource	Reasoning for Elimination
Socioeconomics	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities. There would be no impact to socioeconomics.
Environmental Justice	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities. There would be no change to the quantity or quality of water delivered to sales petitioners and no change to costs or timing associated with the Proposed Action. The conditions between existing and the Proposed Action would not change. There would be no environmental justice impacts.
Public Health and Safety	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities. There would be no impacts to public health and safety.
Hazardous Waste	The Proposed Action does not require any new right-of-way and does not require any construction or ground disturbance activities. There would be no potential for hazardous waste impacts.

3.1.1 Resources Evaluated Further

The following resources have been analyzed further and addressed in more detail in this chapter:

Section 3.2 – Water Resources
Section 3.3 – Water Rights
Section 3.4 – Water Quality
Section 3.5 – Indian Trust Assets
Section 3.6 – Climate Change

This chapter also includes an analysis on the Proposed Action for Cumulative Impacts (section 3.7).

3.2 Water Resources

3.2.1 Affected Environment

Utah Lake

Utah Lake is the largest freshwater body in the State and is located in the center of Utah Valley. It is approximately 148 square miles and is surrounded by municipalities and agricultural lands on the north, east, and south shorelines and Lake Mountain to the west. The lake's main tributaries are the Provo River, Spanish Fork River, Hobble Creek, and American Fork River. Naturally occurring springs, groundwater, and treated wastewater from adjacent treatment facilities contribute to the flow entering Utah Lake. The Jordan River is Utah Lake's only natural river outlet and is a tributary to the Great Salt Lake. Evaporation also accounts for a large volume of the lakes' outflow. Utah Lake has a maximum depth of 14 feet below the compromise level (4498.045 feet AMSL). The importance of Utah Lake and its relationship to the CUP is described in Chapter 1 beginning on page 14.

Great Salt Lake

The Great Salt Lake is the largest saltwater lake in the Western Hemisphere and is the eighth largest terminal reservoir in the world. There are no naturally occurring outlets that convey water out of the Great Salt Lake. It is located in Salt Lake, Davis, Weber, Tooele, and Box Elder Counties. The surface area of the Great Salt Lake fluctuates depending on hydrologic conditions within its watershed but was at its largest size of 3,300 square miles in the 1980s. The lake's main tributaries are the Jordan River, Weber River, and Bear River.

Return Flows

Return flows are diverted water that returns to the natural system (i.e., surface or ground water) after their intended use. Return flows from the Bonneville Unit are discussed throughout the ULS EIS. On pages 1-33 and 1-78 respectively stating:

> "Return flows to Utah Lake from water delivered under the ULS would total approximately 9,660 acre-feet. These return flows would become part of the ULS water supply by exchange to Jordanelle Reservoir for delivery to M&I users in Salt Lake County."
>
> "Bonneville Unit M&I System water delivered from Jordanelle Reservoir to Salt Lake, Utah and Wasatch counties and Bonneville Unit agricultural water delivered to Wasatch and Summit counties would return flows in the form of municipal wastewater from culinary water, drainage from M&I secondary water used for outdoor irrigation, and drainage from sprinkler and flood irrigation practices. Return flows accruing to the hydrologic system are either credited as Bonneville Unit return flows or are considered natural flows in the system. The distinction is specified by the State Engineer in the administration of various project water rights, whether they involve transbasin water, basin water, or a combination of both. Return flows that are credited as Bonneville Unit return flows are available to the project to be used for downstream deliveries or for Bonneville Unit exchanges."

The JLAs account for return flows in Utah Lake which can be used for the Strawberry/Utah Lake/Jordanelle Reservoir exchange. The ULS EIS states on page 1-77:

> "Approximately 84,510 acre-feet would be required in Utah Lake to complete the exchange to Jordanelle Reservoir. This includes: 40,310 acre-feet that would be released from Strawberry Reservoir as described above; 9,660 acre-feet of Bonneville Unit water return flows to Utah Lake; and DOI acquiring the District's secondary water rights in Utah Lake to yield a firm average annual of at least 34,540 acre-feet. The exchanged water would be stored in Jordanelle Reservoir for M&I delivery to Salt Lake County and northern Utah County under existing contracts."

Provo River

The Provo River is approximately 71 miles in length, originates in the Uintah Mountains, and terminates at Utah Lake. The Provo River is a major source of drinking water for residents along the Wasatch Front in Wasatch, Utah, and Salt Lake Counties serving about 50 percent of Utah's population. The river is also used for agricultural irrigation purposes and is a popular destination for recreational uses. Sections of the Provo River are known nationally as blue-ribbon trout fisheries and are heavily used for fishing. The JLAs have completed habitat restoration projects along the Provo River.

VARIABLE NATURE OF PROVO RIVER FLOWS

The Provo River flows below Jordanelle and Deer Creek Reservoirs largely consists of:

- Federal water development projects (PRP and CUP);
- Upper Lake Storage water (Upper Lake reservoirs of Trial, Washington, and Lost Lake – and 12 other stabilized reservoirs improved as part of CUPCA);

- Return flows from M&I and agricultural uses; and
- Natural inflows from drainages that flow into the river (*e.g.*, South Fork of the Provo River).

The water sources listed above are used to maintain the minimum flow rates in the river. Both the Final Environmental Statement for the Municipal and Industrial System completed in 1979 (M&I System ES) and CUPCA mandate minimum flow rates of 125 cfs in the Provo River from the base of Jordanelle Dam to where it enters Deer Creek Reservoir. (PL 102-575, Title III, Section 303(c) (2-4)). Both the M&I System ES and CUPCA mandate a minimum flow rate of 100 cfs in the Provo River below Deer Creek Dam to the Olmsted Diversion in Provo Canyon (PL 102-575, Title III, Section 303(c)(3)). Minimum flows are released from the dam outlet works and spillway and/or through the hydroelectric power plant. A minimum flow of 25 cfs is required below Olmsted Diversion to Utah Lake in the winter.

Water is released from Jordanelle and Deer Creek Reservoirs for instream flows and on demand when called for by the Provo River Commissioner as requested by water users. The largest lower Provo River water users below Deer Creek Dam are:

- District – The District supplies CUP M&I System water to JVWCD and MWDSLS. Also, the District owns and operates the non-federal Central Water Project that supplies over 53,000 AF of M&I water to North Utah County and JVWCD.
- Provo River Project – The PRP is a federal water development project on the Provo River. In 2023, more than 146,000 AF of import water was diverted into the Provo River using the Duchesne Tunnel and the Weber-Provo River Diversion Canal.
- JVWCD – JVWCD supplies M&I System water to southern and western Salt Lake County. They convey water to Salt Lake County using the Jordan Aqueduct and other Partner Facilities.
- MWDSLS – MWDSLS supplies water to eastern Salt Lake County through the SLA and PRA. They also have water allotments in the PRP that are delivered via the Provo River.
- PRWUA – PRWUA operates Deer Creek Reservoir, PRA, and other facilities and manage water rights associated with the federal PRP. They supply PRP water to North Utah County cities as well as to JVWCD and MWDSLS.
- Orem City – The city owns water rights in the Provo River that are treated at the DACRWTP.
- Provo City – The city owns water rights in the Provo River that are diverted and used within the city.
- North Utah County Cities – Multiple cities in North Utah County including Lehi, Alpine, Highland, American Fork, Pleasant Grove, Lindon have water allotments in the PRP that requires the use of the Provo River for their delivery.
- Interior – The 207 conserved water used in support of the June sucker recovery is delivered via the Provo River.
- Brigham Young University and Utah Valley University – Both universities have water rights, as part of irrigation companies, in the Provo River.
- Irrigation Companies – The list below is of irrigation companies that use the lower Provo River:

- Provo Bench, West Smith, West Union, Tanner Race, Lake Bottom, Upper East Union, Fort Field

Other natural flow water accrued higher in the system is stored in Deer Creek or Jordanelle in accordance with existing water rights. There are many tributaries below Deer Creek Reservoir that contribute to the Provo River flow, but the majority of the flows in the Provo River below the dam are largely dictated by releases from the reservoir based on water demands downstream from the entities listed above. Due to the varying needs of waters users as discussed above and the natural hydrologic conditions in the drainage basin, flows in the Provo River below Deer Creek Dam are highly variable. For these reasons, minimum flow rates were established as part of the M&I ES and CUPCA legislation. Figure 3-1 shows the variable nature of the release from Deer Creek Dam resulting in the large variations in the flows of the Provo River.

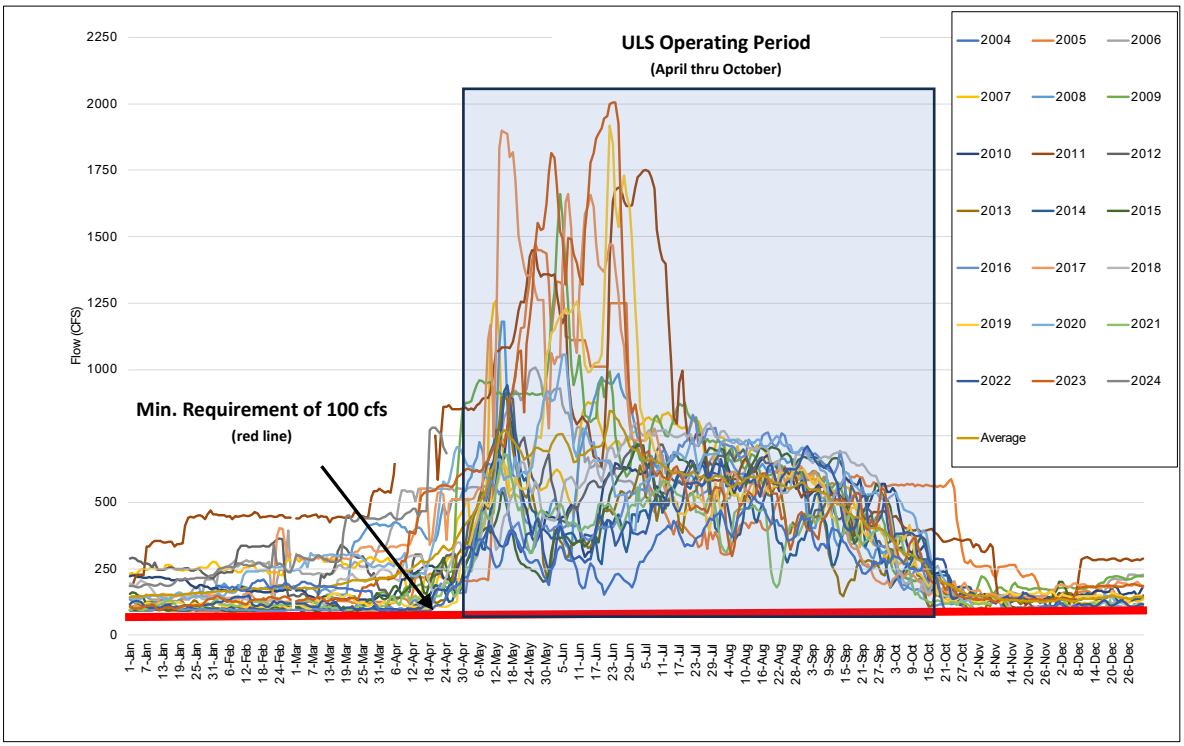

FIGURE 3-1: PROVO RIVER FLOWS BELOW DEER CREEK DAM

3.2.2 Environmental Consequences

No Action Alternative

The No Action Alternative would have no effect on Utah Lake, the Great Salt Lake, return flows, or to the Provo River. The District would continue to deliver the M&I System and ULS waters from their assigned reservoir to sales petitioners in Salt Lake County, North Utah County, South Utah County, and to the Provo River and Hobble Creek. The District would not divert Provo River direct flow rights when there is a need and store an equivalent volume in Jordanelle Reservoir for later use.

Proposed Action Alternative

M&I System CUP Water Delivered from Strawberry Reservoir

Utah Lake

M&I System CUP Water Delivered from Strawberry Reservoir would have no measurable impact on Utah Lake. Specifically, this Proposed Action would have no impact to storage rights and no measurable impact to water surface elevation and spills to the Jordan River. The effects on Utah Lake of the Strawberry/Utah Lake/Jordanelle Exchange were evaluated in the M&I System ES and ULS EIS which this EA tiers from (see section *Tiering from Previous NEPA Documents* on Page 1).

Storage Rights

The Proposed Action of *M&I System CUP Water Delivered from Strawberry Reservoir* would have no effect on Utah Lake storage rights. The CUP import water is fully depletable and is not associated with any primary and secondary Utah Lake water rights. The primary reason and use for the CUP import water is for the Strawberry/Utah Lake/Jordanelle Exchange which can be completed under water right exchange numbers E398 and E399.

There would be no impact to Utah Lake storage rights from this Proposed Action because the primary and secondary water rights have priority. The CUP import water is stored on a conditional basis subject to loss or volume reductions from Utah Lake reaching the compromise elevation and spilling to the Jordan River and evaporation losses. Utah Lake storage rights are not subject to these losses.

Water Surface Elevation Fluctuations

Utah Lake is operated as a water storage reservoir. The CUP import water contributes to Utah Lake's water surface elevation. The lake's water surface elevation fluctuations range annually by up to six feet. Utah Lake's volume and water surface elevation changes depending on the hydrologic conditions in the drainage basin, upstream and downstream demands, and evaporation. The JLAs have determined that *M&I System CUP Water Delivered from Strawberry Reservoir* would not have measurable impacts to the water surface elevations of Utah Lake.

Frequency of Spills to the Jordan River

Generally, Utah Lake spills on average about once every 10 years once it reaches the compromise elevation. The Proposed Action of *M&I System CUP Water Delivered from Strawberry Reservoir* would have no measurable and insignificant impacts on the number and magnitude of Utah Lake spills because the lake would continue to spill as it has in the past. Utah Lake spills are largely dependent on the hydrologic conditions within the basin.

Based on the above analysis, the JLAs concluded that the Proposed Action of *M&I System CUP Water Delivered from Strawberry Reservoir* would have no significant and no measurable effects on Utah Lake because the storage rights would not be impacted, the lake's water surface elevation would not fluctuate more than it has historically, and the lake would continue to spill as it has historically.

Great Salt Lake

M&I System CUP Water Delivered from Strawberry Reservoir would have no measurable impact on the Great Salt Lake.

Return Flows

The same volume of water would return to Utah Lake and the Great Salt Lake. However, the water delivered to Utah and Salt Lake Counties would be considered an import source from the Colorado River Basin. When M&I System CUP water is delivered from Strawberry Reservoir to sales petitioners who produce return flows that are tributary to Utah Lake, the return flows associated with that sales petitioner's use of the CUP water would be accounted for as CUP import water in Utah Lake. This water is stored on a space available basis and is subject to incremental evaporation and spills. The CUP import water can be used for the Strawberry/Utah Lake/ Jordanelle exchange or other approved CUP import water uses.

Provo River

Minimum instream flows have been established by the M&I ES and CUPCA legislation. The Provo River minimum instream flows would be maintained and would not be affected by the Proposed Action. Flows from the OHPP tail race to Utah Lake would be maintained according to the JSRIP Hydrograph or minimum streamflow requirements.

Flows in the Provo River vary from year to year. Figure 3-1 and the discussion in the section titled "*Variable Nature of Provo River Flows*" on Page 45 illustrates the unpredictability and fluctuating nature of the Provo River. There are several natural inflows to the Provo River below Deer Creek Dam that are not shown on Figure 3-1. Provo River flows released from Jordanelle and Deer Creek Reservoirs are influenced by instream flow commitments, water demand from the irrigation companies, federal water development projects and demands, various demands from communities in Wasatch, Utah, and Salt Lake counties, and natural inflows such as North and South Fork of the Provo River, Bridal Veil Falls, and Provo Deer Creek. On a daily basis, sales petitioners, PRWUA, and other Provo River water right holders request changes to their water deliveries that are often much larger than any anticipated reduction in the river flows than what could result from water delivered through the ULS (maximum of 120 cfs). Combined, the SLA, Olmsted Diversion, and Murdock Diversion can divert 1,245 cfs of Provo River flows according to water rights. During the high demand summer months, Provo River flow rates are typically higher while in the winter months they are lower. Jordanelle Reservoir is also operated for flood control and often releases water to maintain flood storage capacity requirements during the high runoff months depending on hydrological conditions and forecasts.

If the Proposed Action was implemented and releases from Deer Creek Reservoir were reduced during irrigations season because the M&I System CUP water would be delivered from Strawberry to sales petitioners by way of the ULS to the PRA at the PRFCS, then the average release from Deer Creek Reservoir would be reduced by 85 cfs (maximum M&I delivery through the ULS to the PRA). This change in the flows from Deer Creek Reservoir would be small when considered with the large amounts of water in the Provo River during the irrigation season. The change would only be between Deer Creek and the Murdock Diversion.

M&I System CUP Water Delivered from Strawberry Reservoir may result in less water being delivered into the Provo River (up to 85 cfs). The reduction in flows would be between Deer Creek Reservoir and Murdock Diversion but would be within the flow variability of the Provo River. There would be no change to the flows below Murdock Diversion to Utah Lake.

The *M&I System CUP Water Delivered from Strawberry Reservoir* would be constrained by the capacity of the SFPRCP which is 120 cfs. However, 35 cfs of this capacity is dedicated to 207 conserved water flows delivered from Strawberry Reservoir to either Hobble Creek (at the SFPRCP Hobble Creek Valve Station) or the Provo River through the OHPP tail race. Figure 3-2 shows the average releases from Deer Creek Reservoir for the last 13 years during the irrigation season (orange line). It also shows the average releases from Deer Creek but less 85 cfs delivered from Strawberry Reservoir through the ULS for the Proposed Action of *M&I System CUP Water Delivered from Strawberry Reservoir*. This is also based on 13 years of operating data for the PRA.

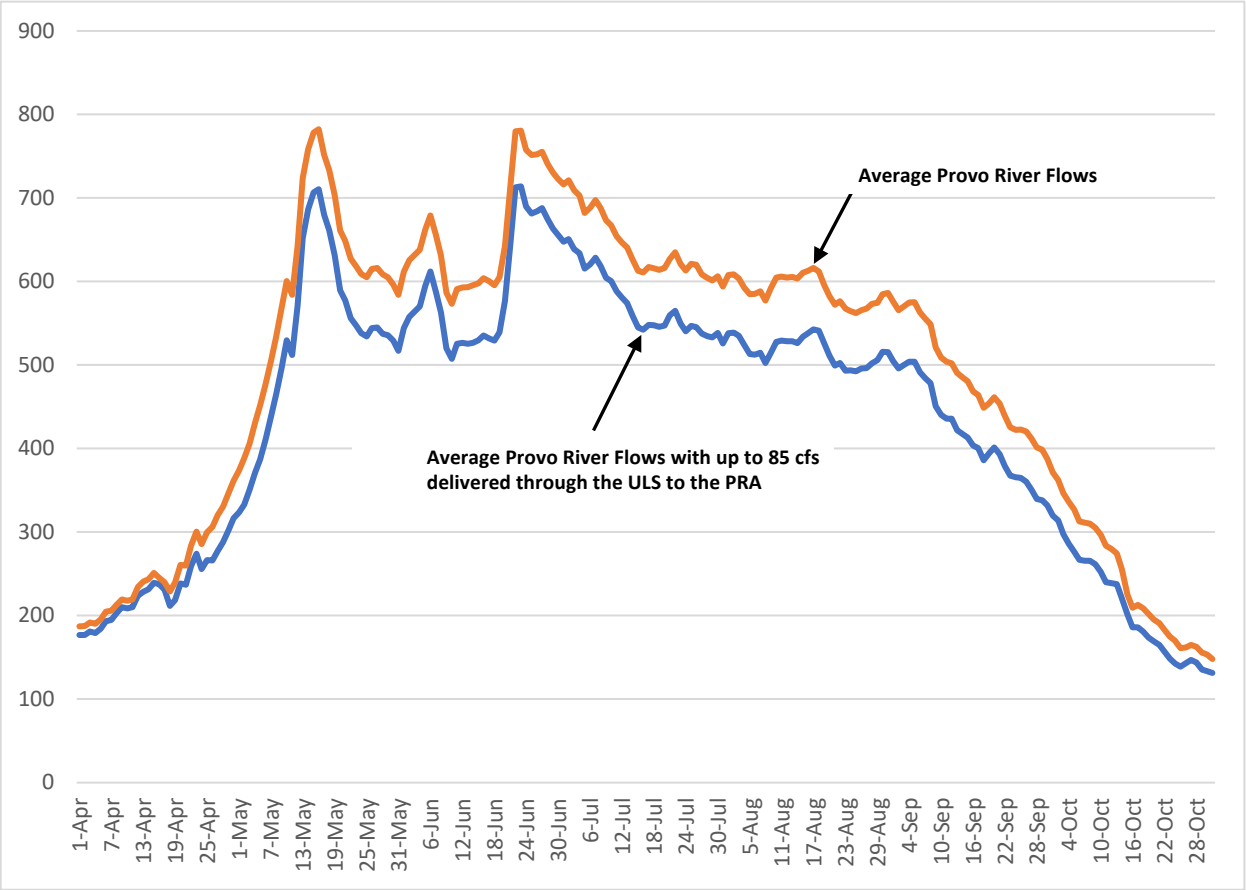

FIGURE 3-2: AVERAGE PROVO RIVER FLOWS BETWEEN DEER CREEK RESERVOIR AND THE MURDOCK DIVERSION

ULS CUP WATER DELIVERED FROM JORDANELLE RESERVOIR

Utah Lake

ULS CUP Water Delivered from Jordanelle Reservoir would have no measurable impact on Utah Lake. Specifically, this Proposed Action would have no impact to storage rights and no measurable impact to water surface elevation and spills to the Jordan River.

Storage Rights

The Proposed Action of *ULS CUP Water Delivered from Jordanelle Reservoir* would have no effect on Utah Lake storage rights. There would be no impact to Utah Lake storage rights from this Proposed Action because the primary and secondary water rights have priority.

Water Surface Elevation Fluctuations

Utah Lake is operated as a water storage reservoir. The lake's water surface elevation fluctuations range annually by up to six feet. Utah Lake's volume and water surface elevation changes depending on the hydrologic conditions in the drainage basin, upstream and downstream demands, and evaporation. The JLAs have determined that *ULS CUP Water Delivered from Jordanelle Reservoir* would not have measurable impact to the water surface elevations of Utah Lake.

Frequency of Spills to the Jordan River

Generally, Utah Lake spills on average about once every 10 years once it reaches the compromise elevation. The Proposed Action of *ULS CUP Water Delivered from Jordanelle Reservoir* would have no measurable and insignificant impact on the number and magnitude of Utah Lake spills because the lake would continue to spill as it has in the past. Utah Lake spills are largely dependent on the hydrologic conditions within the basin.

Based on the above analysis, the JLAs concluded that the Proposed Action of *ULS CUP Water Delivered from Jordanelle Reservoir* would have no significant and no measurable impact on Utah Lake because the storage rights would not be impacted, the lake's water surface elevation would not fluctuate more than it has historically, and the lake would continue to spill as it has historically.

Great Salt Lake

ULS CUP Water Delivered from Jordanelle Reservoir would have no measurable impact on the Great Salt Lake.

Return Flows

The same volume of water would return to Utah Lake and the Great Salt Lake. However, the return flows to Utah Lake from *ULS CUP Water Delivered from Jordanelle Reservoir* would not be accounted for as import water since it doesn't originate from Strawberry. Jordanelle and Strawberry Reservoirs are interconnected water supplies through their conveyance facilities. If *ULS CUP Water Delivered from Jordanelle Reservoir* impacts the Strawberry/Utah Lake/Jordanelle exchange because of insufficient CUP water in Utah Lake, the Jordanelle Reservoir water that is stored in Strawberry Reservoir under the SJWB account would be released to Utah Lake as the Strawberry/Utah Lake/Jordanelle exchange requires.

Provo River

At times, *ULS CUP Water Delivered from Jordanelle Reservoir* would increase flows in the Provo River. The ULS CUP water contracts are for 22,000 AF for Salt Lake County, 23,090 AF for South Utah County, and 16,500 AF of 207 conserved water for the Provo River and Hobble Creek. However, any increase in Provo River flows from the Proposed Action would be within the natural variability of the river (see Figure 3-1).

Minimum instream flows have been established by the M&I ES and CUPCA legislation. The minimum instream flows would be maintained in the Provo River and would not be affected by the Proposed Action. Flows between the OHPP tail race to Utah Lake would be maintained according to the JSRIP Hydrograph or minimum streamflow requirements.

Flows in the Provo River vary from year to year. Figure 3-1 and the discussion in the section titled "*Variable Nature of Provo River Flows*" on Page 45 illustrates the unpredictability and fluctuating nature of the Provo River. There are a number of natural inflows that discharge into the Provo River below Deer Creek Reservoir that are not shown on Figure 3-1. Provo River flows released from Jordanelle and Deer Creek Reservoirs are a function of instream flow commitments, water demand from the irrigation companies, federal water development projects, various communities in Wasatch, Utah, and Salt Lake counties, and natural flows such as North and South Fork of the Provo River, Bridal Veil Falls, and Provo Deer Creek. On a daily basis, sales petitioners, PRWUA, and other Provo River water right holders request changes to their water deliveries that are often much larger than any anticipated change in the river flows than what could result from water delivered through the ULS. Combined, the SLA, Olmsted Diversion, and Murdock Diversion can divert 1,245 cfs of Provo River flows according to water rights. During the high demand summer months, Provo River flow rates are typically higher while in the winter months they are lower. Jordanelle Reservoir is also operated for flood control and often releases water to maintain flood storage capacity requirements during the high runoff months depending on hydrological conditions and forecasts. *ULS CUP Water Delivered from Jordanelle Reservoir* would be within the normal variability of the Provo River.

ACCOUNTING OF AND BALANCING CUP WATER DELIVERED FROM UNASSIGNED RESERVOIRS

Balancing CUP Water Owed to Strawberry Reservoir (when M&I System CUP Water Delivered from Strawberry Reservoir)

CUP water supply in Strawberry needs to be made whole when the Proposed Action of *M&I System CUP water Delivered from Strawberry Reservoir* is implemented. The M&I System CUP water is assigned to be delivered from Jordanelle, not Strawberry. There are two potential methods that the District would use to balance the CUP water supply in Strawberry:

- Strawberry Reservoir Fills to Capacity
- ULS CUP water is delivered from Jordanelle Reservoir (a component of the Proposed Action)

Strawberry Reservoir Fills to Capacity (effects to Utah Lake, Great Salt Lake, and Return Flows)

There would be no effect to Utah Lake, the Great Salt Lake, and return flows when Strawberry fills to capacity. Strawberry Reservoir has filled to capacity three times since it was enlarged. When the reservoir fills and needs to spill (as was the case in spring/summer 2024), the District releases water to Utah Lake through the Diamond Fork System and ULS via the Provo River.

ULS CUP Water is Delivered from Jordanelle Reservoir (effects to the Provo River)

There would be no negative effect to the Provo River when ULS CUP water is delivered from Jordanelle as there would be more water in the river. Balancing M&I System CUP water delivered from Strawberry by delivering ULS water from Jordanelle would be within the hydrograph shown in Figure 3-1.

Balancing CUP Water Owed to Jordanelle Reservoir (when ULS CUP Water Delivered from Jordanelle Reservoir)

CUP water supply in Jordanelle needs to be made whole when the Proposed Action of *ULS CUP Water Delivered from Jordanelle Reservoir* is implemented. The ULS CUP water is assigned to be

delivered from Strawberry, not Jordanelle. Therefore, there are three potential methods that the District would use to balance the CUP water supply in Jordanelle:

- Jordanelle Reservoir Fills to Capacity
- M&I System CUP water is delivered from Strawberry Reservoir (a component of the Proposed Action)
- Delivery of non-CUP Provo River water from Strawberry Reservoir

Jordanelle Reservoir Fills to Capacity (effects to Utah Lake, Great Salt Lake, and Return Flows)

There would be no impact to Utah Lake because Jordanelle Reservoir would be spilling excess water into the Provo River. There would be no measurable impact to the Great Salt Lake and return flows when Jordanelle fills to capacity as discussed in the previous sections. The same volume of water would be delivered to sales petitioners regardless of which reservoir the water is released from. There would be no change to the delivery location, timing, or quantity.

M&I System CUP Water is Delivered from Strawberry Reservoir and Delivery of non-CUP Provo River (effects to the Provo River)

M&I System CUP Water Delivered from Strawberry Reservoir and the *Delivery of non-CUP Provo River* water would have the same effect to the Provo River and are discussed together. Minimum instream flows have been established by the M&I ES and CUPCA legislation. The Provo River minimum instream flows would be maintained and would not be affected by the Proposed Action. Flows from the OHPP tail race to Utah Lake would be maintained according to the JSRIP Hydrograph or minimum streamflow requirements.

Flows in the Provo River vary from year to year. Figure 3-1 and the discussion in the section titled "*Variable Nature of Provo River Flows*" on Page 45 illustrates the unpredictability and fluctuating nature of the Provo River. There are many natural inflows that discharge into the Provo River below Deer Creek Reservoir that are not shown on Figure 3-1. Provo River flows released from Jordanelle and Deer Creek Reservoirs are a function of instream flow commitments, water demand from the irrigation companies, federal water development projects, various communities in Wasatch, Utah, and Salt Lake counties, and natural flows such as North and South Fork of the Provo River, Bridal Veil Falls, and Provo Deer Creek. On a daily basis, sales petitioners, PRWUA, and other Provo River water right holders request changes to their water deliveries that are often much larger than any anticipated reduction in the river flows than what could result from water delivered through the ULS. Combined, the SLA, Olmsted Diversion, and Murdock Diversion can divert 1,245 cfs of Provo River flows according to water rights. During the high demand summer months, Provo River flow rates are typically higher while in the winter months they are lower. Jordanelle Reservoir is also operated for flood control and often releases water to maintain flood storage capacity requirements during the high runoff months depending on hydrological conditions and forecasts.

If the Proposed Action was implemented and releases from Deer Creek Reservoir were reduced during irrigation season because the M&I System CUP water was being delivered from Strawberry or non-CUP water to sales petitioners by way of the ULS to the PRA at the PRFCS, the average release from Deer Creek would be reduced by 85 cfs (maximum M&I delivery through the ULS to

the PRA). This change in the flows released from Deer Creek would be small when considered with the large amounts of water in the Provo River at this time of year. The change would only be between Deer Creek and the Murdock Diversion.

M&I System CUP Water Delivered from Strawberry Reservoir and delivery of non-CUP water may result in less water being delivered into the Provo River (up to 85 cfs). The reduction in flows would be between Deer Creek and Murdock Diversion but would be within the flow variability of the Provo River. There would be no change to the flows below Murdock Diversion to Utah Lake.

The *M&I System CUP Water Delivered from Strawberry Reservoir* and delivery of non-CUP water would be constrained by the capacity of the SFPRCP which is 120 cfs. However, 35 cfs of this capacity is dedicated to 207 conserved water flows delivered from Strawberry Reservoir to either Hobble Creek (at the SFPRCP Hobble Creek Valve Station) or the Provo River through the OHPP tail race. Figure 3-2 shows the average releases from Deer Creek Reservoir for the last 13 years during the irrigation season. It also shows delivering up to 85 cfs of water from Strawberry through the ULS for the Proposed Action of *M&I System CUP Water Delivered from Strawberry Reservoir*.

PROVO RIVER DIRECT FLOW RIGHTS EXCHANGE

The Provo River Direct Flow Rights Exchange for storage in Jordanelle Reservoir would have no effect on the Provo River. For the Proposed Action to be implemented, the direct flow right water would already be in the Provo River, but there would be no demand for it by the water right Owner. At the same time, there would be a North Utah County M&I System CUP demand that could use this water, therefore the water could be diverted and utilized. As a result, the flow rates in the Provo River would not change.

INDIRECT IMPACTS

The Proposed Action Alternative would have no indirect impact on water resources. The same volumes of water would be delivered to sales petitioners.

3.3 Water Rights

3.3.1 Affected Environment

Water rights for the Proposed Action are under the direction of the Utah State Engineer – Division of Water Rights. The ULS CUP water rights are part of a larger water right that is approximately 500,000 AF and encompasses all the diversions on the SACS, the Starvation Collection System, Starvation Reservoir, Strawberry Reservoir, and rediverted storage in Utah Lake. The distribution and yield of this water right is based off the priority distribution of this junior water right on the Duchesne River system as determined by the Duchesne River Commissioner. This water right has been perfected as defined by State law through a certificate issued in 2019 and can be used for M&I purposes within the District boundaries. Water delivered to Utah Lake is exchanged for Provo River water stored in Jordanelle Reservoir when Utah Lake has not reached certain levels as defined in the Distribution Plan, which is a policy document drafted by the Utah State Division of Water Rights that outlines when upstream reservoirs can store water in priority with respect to Utah Lake in addition to other Utah Lake distribution policies.

The M&I System CUP water right is held in Jordanelle Reservoir and is part of a larger water right that is 300,000 AF. It has been approved for use on the Provo River and is connected to the Distribution Plan (see

section titled *Utah Lake Interim Water Distribution Plan* Page 15 for more information). When Utah Lake has reached certain elevations as defined in the Distribution Plan, Jordanelle is allowed to store water upstream under this water right. In addition to the priority distribution of this water right with Utah Lake, the ability to store water on the Provo River is based on priority distribution within the Provo River system as determined by the Provo River Commissioner. This water right has yet to be perfected but is an approved application to appropriate that can be used for M&I purposes within the District boundaries.

There are multiple water rights that encompass the direct flow rights for the Provo River direct flow exchange. The water rights being considered for the direct flow exchange are a part of the Class A Water rights in the Provo Division of the Provo River and are associated with water available below Deer Creek Dam. These water rights are available at the direction of the Provo River Commissioner according to their respective priority. Typically, at some point in each irrigation season, water deliveries are cut to only allow Class A water rights and in drier years those Class A water rights are cut proportionately amongst each other. The approved uses for these water rights vary as well as the place of use and points of diversion.

3.3.2 Environmental Consequences

No Action Alternative

The No Action Alternative would require no additional water right approvals.

Proposed Action Alternative

M&I System CUP Water Delivered from Strawberry Reservoir

M&I System CUP Water Delivered from Strawberry Reservoir would require no additional water right approvals. This CUP water can be used within District boundaries. Because the water right associated with the ULS CUP water in Strawberry has already been certificated for these uses and is subject to priority distribution there would be no effect on other water rights.

ULS CUP Water Delivered from Jordanelle Reservoir

ULS CUP Water Delivered from Jordanelle Reservoir would require no additional water right approvals. The ULS CUP water delivered from Jordanelle would be used as allowed for M&I purposes within the District boundaries. Because water rights associated with the M&I System have already been approved for these uses and are subject to priority distribution there would be no effect on other water rights.

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs would require no additional water right approvals.

Provo River Direct Flow Rights Exchange

The Provo River Direct Flow Rights Exchange for storage in Jordanelle Reservoir would require additional approvals from the Utah Division of Water Rights. The entity requesting their water to be used as part of this Proposed Action would be required to file the necessary water right applications and obtain approval from Utah Division of Water Rights prior to its implementation.

Indirect Impacts

The Proposed Action Alternative would have no indirect impact on water rights.

3.4 Water Quality

This section describes the water quality of both the Provo River and Strawberry Reservoir. These are the sources of water for the M&I System and ULS which are being evaluated as part of the Proposed Action. Both the Provo River and Strawberry Reservoir are or will be the source of water for several water treatment plants in Utah and Salt Lake Counties. Each treatment plant must receive approval from the state for all sources. The Salt Lake County entities have contracted with the District for CUP water from the M&I System and ULS which are being treated for culinary uses. The M&I System CUP water is assigned to be delivered from Jordanelle Reservoir and the ULS CUP water is assigned to be delivered from Strawberry.

3.4.1 Affected Environment

Provo River Water Quality

The M&I System CUP water is delivered from Jordanelle and Deer Creek Reservoirs to the Provo River and into conveyance pipelines to sales petitioners in North Utah County, Salt Lake County, and for instream flows in the Provo River, in addition to other deliveries not considered under the Proposed Action. In addition to the natural inflow of water to the Provo River, water is also diverted into the Provo River system from the Duchesne River and Weber River Basins. These are considered transbasin diversions or import water. The Provo River is a major source of water for more than 1.6 million people in Utah and Salt Lake Counties. The Provo River historical water quality is shown in Table 3-2.

TABLE 3-2: SUMMARY OF PROVO RIVER WATER QUALITY MEASURED AT THE OLMSTED DIVERSION

Water Quality Parameter	Unit	Min	5%	Average	95%	Max
Turbidity	NTU	0.8	1.1	3.3	6.9	97
pH		7.18	7.4	7.9	8.3	8.5
Alkalinity	mg/L as $CaCO_3$	94	110	137	156	176
Temperature	C	2.8	4.2	11	18.8	22
Hardness	mg/L as $CaCO_3$	99	119	160	212	279
Conductivity	µmhos	320	331	401	472	550
Total Dissolved Solids	mg/L	212	225	282	340	388
Total Organic Carbon	mg/L	1.5	1.7	2.5	3.4	5
Color	Color Units	0	5	12	26	81
Threshold odor	TON	0	2	3	4	5

Source: UVWTP PIP, TM Memorandum No. 1: South Water, Regulatory Requirements and Historical Plant Performance, May 2012

Strawberry Reservoir Water Quality

The ULS CUP water is and is planned to be delivered from Strawberry into conveyance pipelines to South Utah County, Salt Lake County and for instream flows in Hobble Creek, and the Provo River. Most of the water in Strawberry is delivered to the reservoir through the SACS. The Strawberry historical water quality is shown in Table 3-3.

TABLE 3-3: SUMMARY OF STRAWBERRY RESERVOIR WATER QUALITY

Water Quality Parameter	Unit	Min	5%	Average	95%	Max
Turbidity	NTU	0.8	1.4	2	3.6	4
pH		7.22	7.4	7.9	8.5	8.6
Alkalinity	mg/L as CaCO3	112	115	123	134	151
Temperature	C	3.24	6.81	11.4	13.7	14
Hardness	mg/L as CaCO3	88	90	119	135	135
Conductivity	µmhos	247	250	258	267	273
Total Dissolved Solids	mg/L	96	117	144	173	178
Total Organic Carbon	mg/L	1.7	2.7	3.9	4.7	5.8
Color	Color Units	0	0	4	11	15
Threshold odor	TON	0	0	0	2	4

Source: UVWTP PIP, TM Memorandum No. 1: South Water, Regulatory Requirements and Historical Plant Performance, May 2012

Water Source Comparison between Provo River and Strawberry Reservoir

Water quality in the Provo River and Strawberry Reservoir is similar as shown in tables 3-2 and 3-3. Table 3-4 shows a comparison of the average values for water quality parameters in the Provo River and Strawberry Reservoir.

TABLE 3-4: COMPARISON OF WATER QUALITY PARAMETERS OF THE PROVO RIVER AND STRAWBERRY RESERVOIR

Water Quality Parameter	Unit	Provo River Average	Strawberry Reservoir Average	Difference
Turbidity	NTU	3.3	2	-1.3
pH		7.9	7.9	0
Alkalinity	mg/L as $CaCO_3$	137	123	-14

Water Quality Parameter	Unit	Provo River Average	Strawberry Reservoir Average	Difference
Temperature	C	11	11.4	0.4
Hardness	mg/L as $CaCO_3$	160	119	-41
Conductivity	µmhos	401	258	-143
Total Dissolved Solids	mg/L	282	144	-138
Total Organic Carbon	mg/L	2.5	3.9	1.4
Color	Color Units	12	4	-8
Threshold odor	TON	3	0	-3

On average, Strawberry Reservoir has a higher total organic carbon concentration, lower turbidity, hardness, conductivity, total dissolved solids, color, and threshold odor than the Provo River. Regarding water corrosivity, both the Provo River and Strawberry are slightly scaling on average, however, the water treatment process can significantly affect corrosivity of the water and it is the responsibility of individual water systems to mitigate corrosion in their systems.

Water from Strawberry would be delivered directly from a reservoir and is less susceptible than the Provo River to turbidity events and other issues associated with large rain events and high runoff. In addition, the Utah Division of Water Quality has designated the Provo River and Strawberry Reservoir as a class 1C water that is protected as a municipal drinking water source. Both the Provo River Basin and Strawberry drainage are included in approved source water protection plans prepared by a Watershed Protection Coalition comprised of the District, JVWCD, and MWDSLS (agencies planning to treat Strawberry Reservoir water for culinary uses). It should be noted that it is the responsibility of the agencies who operate water systems to obtain approval from the Utah Division of Drinking Water for the use of any source waters at their water treatment facilities.

3.4.2 Environmental Consequences

No Action Alternative

The No Action Alternative would have no effect to the Provo River or Strawberry Reservoir water quality. Approval would need to be obtained for the use of water from Strawberry under the No Action and Proposed Action Alternative.

Proposed Action Alternative

M&I System CUP Water Delivered from Strawberry Reservoir

Based on the water quality comparison shown in Table 3-4, there are no significant water quality differences between the Provo River (assigned source for the M&I System) and the Strawberry Reservoir (assigned source for the ULS) that would be expected to impact conventional water

treatment processes. However, the agencies responsible for treating water for indoor use would need to coordinate with the Utah Division of Drinking Water to obtain approval to treat Strawberry water and to ensure all drinking water regulations are met. The Salt Lake County entities that have contracted with the District are aware that treating Strawberry Reservoir water would require additional approvals. Per their water petitions, these agencies are required to obtain any necessary approvals to treat Strawberry water.

As noted above, Strawberry has been designated by the Utah Division of Water Quality as a source for drinking water and is already protected by approved source water protection plans. Therefore, the Proposed Action of M&I System CUP Water Delivered from Strawberry Reservoir would have minimal effects on water quality and would require coordination with regulatory agencies that has already been planned for.

ULS CUP Water Delivered from Jordanelle Reservoir

The *ULS CUP Water Delivered from Jordanelle Reservoir* would have no effect on water quality or treatment plant operations. Currently, the treatment plants that use Provo River water have been approved by the Utah Division of Drinking Water.

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs would have no effect on water quality or treatment plant operations.

Provo River Direct Flow Rights Exchange

The Provo River Direct Flow Rights Exchange for Storage would have no effect on water quality or treatment plant operations. Currently, the treatment plants that use Provo River water have been approved by the Utah Division of Drinking Water.

Indirect Impacts

The Proposed Action Alternative would have no indirect impact on water quality. The same volumes of water would be delivered to sales petitioners.

3.5 Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States for federally recognized Indian tribes or individuals. Assets can be real property, physical assets, or intangible property rights, such as lands, minerals, hunting and fishing rights, and water rights. The U.S. Department of the Interior's policy is to recognize and fulfill its legal obligations to identify, protect and conserve the trust resources of federally recognized Indian tribes and tribal members, and to consult with the tribes on a government-to-government basis whenever plans or actions affect tribal trust resources, trust assets, or tribal safety. Under this policy, the federal government is committed to carrying out its activities in a manner that avoids adverse impacts to ITAs when possible, and to mitigate or compensate for such impacts when it cannot. All impacts to ITAs, even those considered insignificant, must be discussed in the trust analyses in NEPA compliance documents and appropriate compensation or mitigation must be implemented. The implementation of the Proposed Action would have no foreseeable impacts on Indian Trust Assets.

3.5.1 Affected Environment

Interior sent letters to all Indian Tribes that may have an interest in the Water Management Optimization Project requesting information regarding ITAs that may be impacted by the Proposed Action. The Hinon'einio' Northern Arapaho Tribe responded during the scoping process and requested that they be notified if any traditional cultural properties are encountered during ground-disturbing activities (see Chapter 4 for more information).

3.5.2 Environmental Consequences

There are no known ITAs within or near that may be impacted by the Proposed Action.

No Action Alternative

Since no ITA's have been identified, the No Action Alternative would have no effect.

Proposed Action Alternative

M&I System CUP Water Delivered from Strawberry Reservoir

M&I System CUP Water Delivered from Strawberry Reservoir would not have any ground-disturbing activities and therefore, it would have no effect.

ULS CUP Water Delivered from Jordanelle Reservoir

ULS CUP water from Jordanelle Reservoir would not have any ground-disturbing activities and therefore, it would have no effect.

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs would not have any ground-disturbing activities and therefore, it would have no effect.

Provo River Direct Flow Rights Exchange

Provo River Direct Flow Rights Exchange for storage in Jordanelle Reservoir would not have any ground-disturbing activities and therefore, it would have no effect.

Indirect Impacts

The Proposed Action Alternative would have no indirect impact on ITAs.

3.6 Climate Change

Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (as amended by Executive Order 13693, Planning for Federal Sustainability in the Next Decade) established an integrated strategy towards sustainability in the Federal Government and made the reduction of greenhouse gas emissions a priority for federal agencies. Greenhouse gas emissions caused by human activities represent the largest driver of climate change and are chemical compounds found in the earth's atmosphere that absorb and trap infrared radiation or heat in the lower part of the atmosphere. Carbon dioxide (CO_2) makes up the largest component of greenhouse gas emissions. Chapter 1 discusses the benefits of the Proposed Action which would create a more resilient water system for Utah and Salt Lake Counties.

3.6.1 Affected Environment

The EPA defines climate change as any substantial change in measures of climate lasting for an extended period of time. The principal greenhouse gases emitted into the atmosphere through human activities are CO_2, methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. Of these four gases, CO_2 is the major greenhouse gas emitted.

3.6.2 Environmental Consequences

The Proposed Action (*M&I System CUP water Delivered from Strawberry Reservoir*, *ULS CUP water Delivered from Jordanelle Reservoir*, *Accounting of and Balancing CUP water Delivered from Unassigned Reservoirs*, and the *Provo River Direct Flow Water Exchange* for storage in Jordanelle Reservoir) would not cause an increase in CO_2 or other greenhouse gas emissions. Implementation of these Proposed Actions would be consistent with Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance.

No Action Alternative

The No Action Alternative would have no effect on climate change, nor would it create vulnerability to climate change impacts.

Proposed Action Alternative

The Proposed Action Alternative would have no ground-disturbing activities and would not require any construction.

M&I System CUP Water Delivered from Strawberry Reservoir

M&I System CUP Water Delivered from Strawberry Reservoir would have no effect on climate change, nor would it create vulnerability to climate change impacts. Section 1.4 titled "Benefits of the Water Management Optimization Project" on Page 28 discusses the benefits of the Proposed Action which would create a more resilient water system for Utah and Salt Lake Counties. The Proposed Action is consistent with federal and local climate change regulations and policies.

ULS CUP Water Delivered from Jordanelle Reservoir

ULS CUP Water Delivered from Jordanelle Reservoir would have no effect on climate change, nor would it create vulnerability to climate change impacts. The Proposed Action is consistent with federal and local climate change regulations and policies.

ACCOUNTING OF AND BALANCING CUP WATER DELIVERED FROM UNASSIGNED RESERVOIRS

Accounting of and Balancing CUP Water Delivered from Unassigned Reservoirs would have no effect on climate change, nor would it create vulnerability to climate change impacts. The Proposed Action is consistent with federal and local climate change regulations and policies.

PROVO RIVER DIRECT FLOW RIGHTS EXCHANGE

This Proposed Action would have no effect on climate change, nor would it create vulnerability to climate change impacts. The Proposed Action Alternative is consistent with federal and local climate change regulations and policies.

INDIRECT IMPACTS

The Proposed Action Alternative would have no indirect impact on climate change. The same volumes of water would be delivered to sales petitioners.

3.7 Cumulative Impacts

The JLAs analyzed the potential for cumulative impacts to resources affected by the Proposed Action and by other past, present, and reasonably foreseeable actions. These resources include water resources, water rights, and water quality.

Cumulative impacts are the incremental impacts to the environment of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR §1508.7). Cumulative impact analysis is focused on the sustainability of the environmental resource in light of all the forces acting upon it and can result from individually minor but collectively significant actions taking place over time. The regulation focuses on whether the Proposed Action, considered together with any known or reasonably foreseeable actions by the JLAs, other federal or state agencies, or some other entity, combined to cause an effect. For the cumulative impact analysis, the JLAs evaluated the Provo River.

3.7.1 Past Undertakings that have Affected Provo River

History

The headwaters of Provo River are Trial, Washington, and Lost Lake Reservoirs located on the southwest slopes of the Uinta Mountains. The river flows through Wasatch and Utah Counties before discharging into Utah Lake. It is also the boundary between Summit and Wasatch Counties. There are two large reservoirs constructed on the Provo River – Deer Creek Reservoir constructed as part of the PRP and Jordanelle Reservoir constructed as part of the M&I System of the CUP Bonneville Unit. There are a number of creeks and rivers that discharge into Provo River including North Fork of the Provo River, South Fork of the Provo River, and Little Deer Creek. In addition, the Weber-Provo River Canal and the Duchesne Tunnel bring import water from other basins and convey that water through the Provo River. These features were constructed as part of the PRP. The river is a major source of water for about 50 percent of the population of Utah.

The Provo River is heavily used for outdoor recreation. Fishing is a popular activity along the entire river. There are several trails that run alongside segments of the Provo River. Running and biking are common on the Provo River Parkway which is a 15-mile trail from Utah Lake to Vivian Park in Provo Canyon. The

Provo River is popular for floating and viewing nature. A popular spot is Bridal Veil Falls located in Provo Canyon.

Pre-Settlement

The Timpanogos is a Native American tribe that inhabited a large part of central Utah between Utah Lake on the west and the Uinta Mountains to the east. The Timpanogos were hunter-gatherers and mainly lived off fish and wild game. The Provo River was named Timpanoquint by the Native Americans which translates to “water running over rocks”. Native American tribes would often use the Provo River for fishing and as a water supply.

Settlement

Mormon pioneers were sent south from Salt Lake City in 1849 and settled what is now Provo. The pioneers used the fish from Utah Lake and the Provo River as a main food supply. Soon other communities such as American Fork, Alpine, and Springville began to appear along creeks and rivers that fed the lake. The area started to become more populated as roads and the railroad connected it to the larger communities to the north (Salt Lake and Ogden). The valley continued to grow in population and used the Utah Lake and the Provo River for recreation, fishing as part of their food supply, water for crops, and a place to discharge wastewater.

Water Development

The Provo River discharges into Utah Lake which supplies farmlands in both Utah and Salt Lake Counties. The pioneers early on constructed diversions and canals that redirected water from the Provo River. Some of Utah’s oldest water rights are held in Utah Lake and on the Provo River. As the area’s population has grown, so has its need for water. Much of the water needs have been supplied through groundwater development while some has come from surface water from the Provo River. This water is currently treated at the DACRWTP located in Orem.

Federal water development projects also affected the Provo River. Construction for the PRP began in 1938 but was delayed during World War II. After the war, construction resumed and the PRP was completed in 1951. The PRP includes Deer Creek Dam and Reservoir and hydroelectric powerplant at the base of the dam, the 42-mile Salt Lake Aqueduct, the Weber-Provo River Canal and Diversion (on the Weber River), Duchesne Tunnel, Murdock Diversion Dam, and improvements to the Murdock Canal (now called the Provo River Aqueduct after enclosure). The PRP develops water on the Provo River as well as transbasin water delivered from the Colorado River Basin through the Duchesne Tunnel and water diverted from the Weber River through the Weber-Provo River Canal. It provides a water supply for farmlands in Utah, Salt Lake, and Wasatch Counties, as well as a M&I supply for Salt Lake Valley and north Utah County.

The largest federal water development project in the State of Utah is the Central Utah Project. The Bonneville Unit of the CUP diverts water from the Colorado River Basin for use in the Bonneville Basin. Return flows to Utah Lake, the Strawberry/Utah Lake/Jordanelle Exchange, and conservation projects are key to the development of the Bonneville Unit water supply. In addition, augmented instream flows in the Provo River and Hobble Creek provide water for the threatened June sucker.

Provo River Decree (1921)

The Provo Reservoir Company sued several users on the Provo River to determine their rights. The subsequent court decree from this civil case became known as the Morse Decree named after the

presiding judge (C.W. Morse). The decree allocated the available water in the Provo River to legitimate water rights based on priority and settled previous water right disputes on the river. The decree divided the Provo River into two subdivisions – Wasatch Division and Provo Division. The Provo Division, which is the stretch of river below Deer Creek Dam, assigned water right classes A through J according to their date of appropriation. The decree is still used today in determining changes to Provo River water rights.

3.7.2 Present and Future Development

Presently, Utah County and Salt Lake County are experiencing rapid growth. These communities are growing at a fast pace resulting in large residential, commercial, and industrial areas along with associated infrastructures. Agricultural lands are being converted to commercial and residential uses in response to the rapid growth of the area. This trend is expected to continue for the foreseeable future. As farmlands are developed for other uses, it is anticipated that water used to irrigate these areas would need to be converted to M&I uses.

The District is currently working on the "Southern Utah and Juab County Water Supply and Infrastructure Plan Formulation Project" (PFP). The PFP is evaluating infrastructure and operational concepts for identifying and delivering a water supply to the rapidly growing areas of Southern Utah and Juab Counties within the District's service area. It is a collaborative effort with other agencies including Juab County, East Juab County Water Conservancy District, South Utah Valley Municipal Water Association, Mt. Nebo Water Agency, and Goshen Valley Local District and other municipalities in the area. The PFP is evaluating the need for a regional water treatment plant to supply M&I water to the region as well as Managed Aquifer Recharge. Previous NEPA documents anticipated and analyzed that the CUP import water would be exchanged out of Utah Lake for the operation of the Bonneville Unit M&I System.

Another project includes the Environmental Assessment for the Strawberry Valley Project 1920 Act Conversion being prepared by Reclamation. This EA assess the potential consequences of conversion of Bonneville Unit water delivered through Bonneville Unit facilities to fulfill Strawberry Vally Project contracts from irrigation to miscellaneous purposes, including municipal and industrial uses.

3.7.3 Conclusion

Based on the review of the Proposed Action, in conjunction with the past, present, and reasonably foreseeable future impacts, the JLAs have determined that the Proposed Action would have a negligible and insignificant effect, including cumulative impacts, on the Provo River, water rights, water quality, and other natural resources.

Chapter 4: COORDINATION

4.1 Public and Agency Scoping Process

As part of the EA process, the JLAs conducted public and agency scoping. Scoping is a process where Proposed Action proponents present the Proposed Action, provide contact information, present the Proposed Action purpose and need, and solicit comments from the public and from resource and regulatory agencies. The scoping process occurs during the initial phase of the EA process and comments received are then addressed and used to assist in the preparation of the EA.

4.1.1 Stakeholder Involvement

The JLAs met with agencies and other interested parties prior to scoping and as part of the involvement plan. The JLAs presented the Proposed Action and asked that each agency or interested party submit comments or concerns. The JLAs met with the following agencies:

- Mt Nebo Water Agency Technical Committee
- Mt Nebo Water Agency
- Utah Lake Water Users Association
- MWDSLS
- Provo City
- Utah Division of Water Rights
- JVWCD
- PRWUA
- Mapleton/Springville Irrigation District
- June Sucker Administration Committee
- Weber Basin Water Conservancy District
- Mapleton City

4.1.2 Scoping

The scoping period extended from Friday, January 19 through Friday, March 22, 2024, in which the public and agencies were invited to review Proposed Action information and to submit comments. Information disseminated through scoping consisted of:

- Listing Proposed Action proponents – Central Utah Water Conservancy District, the Department of the Interior-CUPCA Office, and the Utah Reclamation Mitigation and Conservation Commission
- Proposed Action background
- Stating that the NEPA process had been initiated
- Describing the Proposed Action
- Soliciting comments and concerns and how to submit them

- Providing contact information including telephone numbers, email, and Water Management Optimization Project web site address

The JLAs used the following to notify the public and agencies about the Proposed Action and to solicit comments:

- Mailed a scoping document to interested parties and to local, state, and federal agencies
- Development of a Water Management Optimization Project webpage with the scoping newsletter, project contact information, and a means to provide comments on the Proposed Action
- Conducted stakeholder meetings prior to scoping
- Native American Consultation letters with an attached scoping newsletter (sent by Interior)

4.2 Scoping Comments and Responses

A total of eight agencies submitted comments during the scoping period including:

- MWDSLS
- PRWUA
- Strawberry Water Users Association
- Mapleton City
- Weber Basin Water Conservancy District
- Hinon'einino' Northern Arapaho Tribe
- Utah Department of Natural Resources, Public Lands Policy Coordinating Office
- Utah Division of Emergency Management

The comments and JLA responses are shown in Table 4-1.

TABLE 4-1: SCOPING COMMENTS AND RESPONSES

Comment #	Comments	Responses
	Metropolitan Water District of Salt Lake & Sandy	
1A	MWDSLS's largest source of water is the PRP. In a normal allotment year, MWDSLS is entitled to an allotment of 61,900 AF. As you know, MWDSLS has a 1985 petition for 20,000 acre-feet (AF) annually of Municipal & Industrial (M&I) System water and a 2005 petition for 5,700 AF annually of ULS water. MWDSLS is currently taking and paying for 3,200 AF of ULS water. As reflected in the January 19, 2024, Notice, petitioners' rights to utilize CUP water are governed by written contracts. On page ten of the scoping document under the heading "Project Need and Purposes," the scoping document refers to "adjustment of contracts." MWDSLS suggests the Statement of Purpose and Need should be clear that the Proposed Action would not contemplate any attempted unilateral adjustment of contracts. This includes that no petitioner's rights with respect to CUP water will be affected without their written consent.	MWDSLS petitioned and has been allotted 5,600 AF of the ULS CUP water from Strawberry Reservoir as part of Block Notice 7A-2 issued to the District by the United States. MWDSLS has deferred the use of 2,500 AF and is currently taking and paying for 3,100 AF of the ULS water per agreements (the MWDSLS comment letter incorrectly states the petition and current use volumes). The Proposed Action will not change any volume or quantity of water as defined in both MWDSLS's M&I water petition dated May 16, 1986, and the ULS water petition dated March 15, 2005. Section 2 of the M&I System water petition states *"The District, subject to the terms hereof, hereby allocates in perpetuity 20,000 acre-feet annually of municipal and industrial Project Water to MWD…"*. Paragraph 4 of the ULS water petition states *"The ULS Water allotment is made in perpetuity from the time it is committed to MWDSLS under Allotment Notice(s) pursuant to the Block Notice(s)."* For the District to deliver MWDSLS ULS water from Jordanelle Reservoir, the 2005 petition must be modified and agreed to by all the signatories. No contractual changes or modifications can be made without the permission of all signatories which include the District, MWDSLS, and the United States (for both petitions). The Proposed Project purpose and need has been changed and now states that any amendments to contracts, agreements, or petitions will be coordinated with all signatories. The delivery of ULS Project Water from Jordanelle Reservoir benefits MWDSLS since it can be delivered through the Jordan Aqueduct, Provo River Aqueduct, and Salt Lake Aqueduct, pending operational and capacity considerations, without pumping.
1B	This includes petitioners' rights to receive CUP water on call from the respective sources contemplated by the 1985 M&I System petition and 2005 ULS petition. Sources of CUP Bonneville Unit can matter very much to MWDSLS depending on the season and MWDSLS operations. While MWDSLS is conditionally supportive of increased CUP Bonneville Unit operational flexibility MWDSLS has a limited ability to take M&I System water from the Enlarged Strawberry Reservoir. MWDSLS cannot treat water from the Enlarged Strawberry Reservoir at LCWTP, which is the plant where a very large majority of MWDSLS's water must be treated. MWDSLS can treat water from the Enlarged Strawberry Reservoir at POMWTP, but that much smaller plant typically operates only in the summer as a peaking facility at significantly more expense per AF. Most of MWDSLS' water must be delivered via the finished water portion of the SLA. Treatment of water at POMWTP for delivery through the finished water portion of the SLA requires expensive pumping.	The Proposed Action would not change or prevent MWDSLS from calling on their individual CUP Bonneville Unit water sources. However, the MWDSLS ULS Project Water is to be delivered from Strawberry Reservoir per the agreed upon and signed petition. Paragraph 3(a) states *"ULS Project Water allotted herein is to be made available to MWDSLS from Strawberry Reservoir at delivery points located at turnouts along the ULS pipeline to the Jordan Aqueduct, Provo Reservoir Canal, and such other points of delivery as may be agreed upon between CUWCD and MWDSLS. MWDSLS has the right pursuant to a Warren Act Carriage Agreement Contract 04-WC-40-220, to deliver non-Provo River Project Water through the Provo Reservoir Canal. Once CUWCD delivers the water to the Jordan Aqueduct and/or the Provo Reservoir Canal, or such other locations as the parties agree to, it shall be the responsibility of MWDSLS to make any other necessary arrangements to deliver this water to its distribution system."* Furthermore, paragraph 5(c) states, *"It shall be MWDSLS's responsibility to provide the works and make the necessary arrangements, including any carriage agreements, or approval of any change or exchange applications from the Division of Water Rights, to convey MWDSLS's ULS Project Water from the points of delivery as described herein to places of delivery to MWDSLS's customers. MWDSLS shall construct, operate, maintain and replace, without cost to CUWCD or the United States, any works or facilities used for exchange, and any water treatment facilities, storage facilities and water distribution systems…".* Currently, no contracts or agreements have been entered into that allow MWDSLS to call for their ULS Project Water to be delivered from Jordanelle Reservoir. The Proposed Action provides the District the flexibility to deliver MWDSLS's ULS Project Water from Jordanelle Reservoir to the delivery points agreed to in the petition. The delivery of ULS Project Water from Jordanelle Reservoir benefits MWDSLS since it can be delivered through the Jordan Aqueduct, Provo River Aqueduct, and Salt Lake Aqueduct, pending operational and capacity considerations, without pumping. The District will coordinate the delivery of CUP water from Strawberry Reservoir to MWDSLS facilities to prevent any negative impacts.

Comment #	Comments	Responses
1C	On page one of the scoping document, the second introductory paragraph provides, "The Project would also continue the use of partner facilities including the Salt Lake Aqueduct (SLA) – owned and operated by Metropolitan Water District of Salt Lake [&] Sandy," Provo River Aqueduct (PRA) – owned and operated by Provo River Water Users Association, and the Jordan Aqueduct (JA) – construction as part of the BU M&I System and operated by Jordan Valley Water Conservancy District." In Section 1, the description of the Proposed Action includes the following: "The CUP water would be conveyed through existing BU pipelines, aqueducts, and facilities, as well as partner facilities currently utilized for deliveries." As MWDSLS understands it, the named conveyance facilities are used by CUP Bonneville Unit petitioners to carry CUP Bonneville Unit water delivered to the petitioners, and other waters. The PRA and SLA are not used by the CUP Bonneville Unit as such. These facilities will not be used by the Central Utah Project Water Management Optimization Project as such. The SLA has been available to Jordan Valley Water Conservancy District and others on a space available basis on terms set by the MWDSLS Board of Trustees annually. We expect that to continue. Under the Master Agreement, CUWCD has a PRA capacity right to carry certain waters. We understand this capacity belongs to CUWCD and is not a CUP Bonneville Unit asset. To avoid any potential confusion that the Proposed Action includes CUP Bonneville Unit or Central Utah Project Water Management Optimization Project use of the named non-CUP facilities, as compared to petitioner use of such facilities to carry CUP Bonneville Unit water, PRWUA suggests the discussion of "partner facilities" be clarified.	See response to comment 1B Central Utah Water Conservancy District does not operate any Bonneville Unit delivery pipelines or aqueducts that convey CUP waters directly into Salt Lake County. However, both the M&I System and ULS water, through the use of the Provo River or direct connections to other Bonneville Unit facilities operated by the District, can be delivered to the Jordan Aqueduct (operated by JVWCD), Provo River Aqueduct (owned and operated by PRWUA), and the Salt Lake Aqueduct (owned and operated by MWDSLS). The Proposed Action has been changed to state that the District's responsibility to deliver CUP waters is to the *"intake of the Jordan Aqueduct Reach 4"* at the DACRWTP (per the MWDSLS and JVWCD M&I System petition). Also, MWDSLS's ULS petition states *"ULS Project Water allotted herein is to be made to MWDSLS from Strawberry Reservoir at delivery points located at turnouts along the ULS pipeline to the Jordan Aqueduct, Provo Reservoir Canal…Once CUWCD delivers the water to the Jordan Aqueduct and/or Provo Reservoir Canal, or such other locations as the parties agree to, it shall be the responsibility of MWDSLS to make any other necessary arrangements to deliver this water to its distribution system."* Paragraph 5(a) of the ULS water petition states *"MWDSLS shall use the ULS Project Water available to MWDSLS under Allotment Notice(s) for M&I purposes in accordance with the ULS FEIS, the 2004 DPR and this Petition, unless otherwise agreed to by the United States and CUWCD."* The ULS FEIS section 1.4.10.2.1 (page 1-83) first bullet *"30,000 acre-feet of ULS M&I water would be conveyed through the Spanish Fork-Provo Reservoir Canal Pipeline to the Provo Reservoir Canal (or enclosure) and the Jordan Aqueduct to Salt Lake County water treatment plants as a culinary supply."* Therefore, both the 70,000 AF of M&I System water and 22,000 AF ULS water, from Jordanelle Reservoir and Strawberry Reservoir, respectively, into Salt Lake County require the use of non-District operated aqueducts. The Water Management Optimization Project Environmental Assessment includes a discussion on partner agency conveyance facilities and clearly identifies that the Jordan Aqueduct, Provo River Aqueduct, and the Salt Lake Aqueduct are operated, and in the case of the Provo River Aqueduct and Salt Lake Aqueduct owned, by the JVWCD, PRWUA, and MWDSLS respectively. The conveyance of CUP water within partner facilities has been and will be in accordance with existing contracts.
	Provo River Water Users Association	
2A	The Association generally and conditionally supports the operational flexibility CUWCD seeks through the Proposed Action. Based on the scoping document, The Association understands the intent of the Proposed Action is to obtain operational flexibility while complying with the 1994 Deer Creek/Jordanelle Reservoir Operating Agreement. The Association believes it is essential that the Statement of Purpose and Need expressly provide that the Proposed Action is subject to that agreement.	See response to comment 1A Section 1.5 includes a discussion that the Proposed Action is consistent with and would not require any alteration of the 1994 Deer Creek/Jordanelle Reservoir Operating Agreement and that the Proposed Action will operate within the conditions set forth in the agreement. The Proposed Action would have no effect on the 1994 Deer Creek/Jordanelle Reservoir Operating Agreement.
2B	On page ten of the scoping document under the heading "Project Need and Purposes," the scoping document refers to "adjustment of contracts." The Association suggests the Statement of Purpose and Need should be clear that the Proposed Action would not contemplate any attempted unilateral adjustment of contracts. While it likely goes without saying that the written contracts at issue may be effectively modified only with the written consent of all parties, The Association suggests greater clarity.	The Purpose and Need in the environmental assessment have been updated to provide greater clarity. Contracts and agreements are between two or more parties and in order to modify or change a contract, all signatory parties to the contract or agreement must agree prior to any modification. The District cannot and will not "unilaterally" adjust contracts as suggested without the consent of all involved parties.

Comment #	Comments	Responses
2C	As The Association understands it, the named conveyance facilities are used by CUP Bonneville Unit petitioners to carry CUP Bonneville Unit water delivered to the petitioners, and other waters. The PRA and SLA are not used by the CUP Bonneville Unit as such. These facilities will not be used by the Central Utah Project Water Management Optimization Project as such. Under the Master Agreement, CUWCD has a PRA capacity right to carry certain waters. We understand this capacity belongs to CUWCD and is not a CUP Bonneville Unit asset. To avoid any potential confusion that the Proposed Action includes CUP Bonneville Unit or Central Utah Project Water Management Optimization Project use of the named non-CUP facilities, as compared to petitioner use of such facilities to carry CUP Bonneville Unit water, The Association suggests the discussion of "partner facilities" be clarified.	See responses to comments 1B and 1C In addition, PRWUA must convey Bonneville Unit CUP water per the Provo River Project Transfer Act (P.L. 108-382) as shown below and per the Master Agreement. Section 4(c) of the Provo River Project Transfer Act authorizes the use of the Provo River Aqueduct (and the Salt Lake Aqueduct) for CUP Water deliveries. (c) USE OF CENTRAL UTAH PROJECT WATER.— (1) IN GENERAL.—Subject to paragraph (2), any entity with contractual Provo Reservoir Canal or Salt Lake Aqueduct capacity rights in existence on the date of enactment of this Act may, in addition to the uses described in the existing contracts, use the capacity rights, without additional charge or further approval from the Secretary, to transport Central Utah Project water on behalf of the entity or others. (2) LIMITATIONS.—An entity shall not use the capacity rights to transport Central Utah Project water under paragraph (1) unless— (A) the transport of the water is expressly authorized by the Central Utah Water Conservancy District; (B) the use of the water facility to transport the Central Utah Project water is expressly authorized by the entity responsible for operation and maintenance of the facility; and (C) carrying Central Utah Project water through Provo River Project facilities would not— (i) materially impair the ability of the Central Utah Water Conservancy District or the Secretary to meet existing express environmental commitments for the Bonneville Unit; or (ii) require the release of additional Central Utah Project water to meet those environmental commitments.
	Strawberry Water Users Association	
3A	SWUA generally and conditionally supports the operational flexibility CUWCD seeks through the Proposed Action. Based on the scoping document, SWUA understands the intent of the Proposed Action is to obtain operational flexibility while complying with the 1991 Operating Agreement. SWUA believes it is essential that the Statement of Purpose and Need expressly provide that the Proposed Action is subject to that agreement.	Section 1.5 includes a discussion that the Proposed Action is consistent with and would not require any altercation of the 1991 Operating Agreement between SWUA and that the Proposed Project will operate within the conditions set forth in the agreement. The Proposed Action would have no effect on the 1991 Operating Agreement.
3B	On page ten of the scoping document under the heading "Project Need and Purposes," the scoping document refers to "adjustment of contracts." SWUA suggests the Statement of Purpose and Need should be clear that the Proposed Action would not contemplate any attempted unilateral adjustment of contracts. While it likely goes without saying that the written contracts at issue may be effectively modified only with the written consent of all parties, SWUA suggests greater clarity.	The Purpose and Need in the environmental assessment have been updated to provide greater clarity. Contracts and agreements are between two or more parties and in order to modify or change a contract, all signatory parties to the contract or agreement must agree prior to any modification. The District cannot and will not "unilaterally" adjust contracts as suggested without the consent of all involved parties.

Comment #	Comments	Responses
	Mapleton City	
4A	Would ULS water delivered to the Mapleton and Springville Area from Jordanelle be delivered at the same hydraulic grade line (HGL) as it is from Strawberry? This last year Mapleton permitted and constructed two direct connections to the MSP for Mapleton's pressurized irrigation system, and has two additional direct connections currently in permitting planned to be constructed this year. We also recently coordinated with CUWCD on a direct connection to a new high pressure turnout on the SFSP set to be constructed within the next two years. These recently completed and upcoming projects are put into jeopardy if the HGL delivered via Jordanelle is significantly different from Strawberry.	The District met with representatives from Mapleton City regarding their comment. The District would deliver water to the Mapleton High Pressure Turnout when needed and requested by the city. The Proposed Action of delivering ULS water to South Utah County entities from Jordanelle Reservoir may be implemented at times when the city is not using their high-pressure turnout. In addition, the Proposed Action could deliver CUP 207 conserved water to Hobble Creek at the Hobble Creek Valve Station through the SFPRCP from the M&I System while isolating from the Mapleton City High Pressure Turnout (water could be delivered to the turnout from Strawberry Reservoir). The District will continue to coordinate with Mapleton City regarding the Proposed Action.
	Weber Basin Water Conservancy District	
5A	WBWCD is sensitive to and concerned with any proposed modifications to how water is conveyed in this complex system. Potential impacts these changes may have to WBWCD's ability to meet its mission statement, contract water deliveries, and overall health of the Weber Drainage necessitate a robust evaluation, understanding and mitigation of these impacts. Consequently, WBWCD requests that the proposed changes to the operations of Jordanelle and Strawberry reservoirs including the impacts to the operations of ancillary facilities (Weber-Provo diversion, Deer Creek, and Utah Lake) be analyzed to assure that no detrimental impacts to WBWCD's operations result and WBWCD be a party to these evaluations. Should impacts be identified, WBWCD requests that the project include operational constraints and assurances to mitigate noted impacts.	An analysis of the Jordanelle and Strawberry Reservoir operations is included the Chapter 3. As noted, the Proposed Action would have no effect to these reservoirs, or the other facilities mentioned in this comment. The Proposed Project Action would have no effect on WBWCD operations and would not include an increase in the volume of water being delivered from the Weber Basin into the Provo River Basin.

Comment #	Comments	Responses
	Hinon'einino' Northern Arapaho Tribe	
6A	If traditional cultural properties, rock features, or human remains are found during excavation with any new ground disturbance, we request to be contacted and a report provided.	The Proposed Action does not include any surface disturbance or construction.
	Utah Department of Natural Resources, Public Lands Policy Coordinating Office	
7A	The State of Utah supports this Proposed Action. As a semi-arid state, Utah continues to face unprecedented challenges in water management. It is vital that our local water management agencies and districts be given the flexibility and the necessary tools to adjust techniques as issues arise. This Project assists local agencies to ensure the reliability and resiliency of water supply for future generations of Utahns. The State also encourages Interior and URMCC to explore additional avenues allowing state, quasi-state, and local agencies and districts to assume more management authority over natural resources within their borders. State and local-level agencies and districts are in the best position to make management decisions as it relates to water within the state. This is due to their proximity to and persistent work in the waters within the state's borders. Nobody understands the water situation in Utah better than local employees tasked with managing the resource.	The JLAs appreciate the support of the Public Lands Policy Coordinating Office.
	Utah Division of Emergency Management	
8A	The Applicant must verify if a floodplain development permit is required from the local Floodplain Administrator (FPA) in the community where the Applicant is doing the work. The Applicant needs to comply with the National Flood Insurance Program (NFIP) and the local floodplain regulations by contacting the community FPA.	The Proposed Action does not include any surface disturbance or construction and would have no impact to floodplains.

Chapter 5: LIST OF PREPARERS

Name	Title and Project Role	Agency
W. Russ Findlay	CUPCA Program Coordinator NEPA Oversight/Document Review	CUPCA Office
Wes James	CUPCA Program Coordinator Project Oversight	CUPCA Office
Paul Abate	Project Coordinator NEPA Oversight/Document Review	Mitigation Commission
Will Garner	Project Engineer II Project Oversight/Document Review	District
Sarah Sutherland	Environmental Programs Manager NEPA Manager	District
Devin McKrola	Bonneville Operations and Maintenance Area Manager Project Oversight	District
Chris Elison	NEPA Coordinator/Engineering Manager I Lead NEPA Author	District
Rachel Musil	Water Supply Manager Water Rights/Modeling/Document Review	District