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# Conveyance and Storage of Non-Project Water in the Starvation Collection System Draft Environmental Assessment

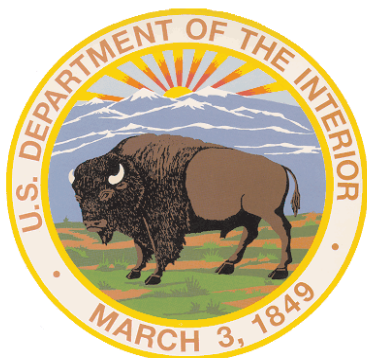
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## PREPARED BY:

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

**Central Utah Water  
Conservancy District**



**November 2018**



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November 2018



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

## **Cooperating Agencies**

U.S. Bureau of Reclamation  
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### 1.1 Introduction

This Draft Environmental Assessment (Draft EA) has been prepared to analyze the conveyance and storage of 11,772 acre-feet (AF) of non-project water<sup>1</sup> in the Starvation Collection System, the project is also known as the Starvation Warren Act. The Joint Lead Agencies for this project are the U.S. Department of the Interior, Central Utah Project Completion Act Office (CUPCA Office) and the Central Utah Water Conservancy District (CUWCD). The U.S. Bureau of Reclamation (Reclamation) and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission), are Cooperating Agencies as defined by 40 Code of Federal Regulations (CFR) §1501.6.

The Draft EA has been prepared pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), as amended; Public Law (PL) 102-575, Central Utah Project Completion Act of 1992 (CUPCA), as amended; the Council on Environmental Quality's (CEQ's) implementing regulations under NEPA (40 CFR §1500 through §1508); and the U.S. Department of the Interior NEPA Implementing Procedures (43 CFR §46). The Draft EA evaluates potential impacts to the environment associated with implementation of the Proposed Action Alternative, as well as providing an analysis of the No-Action Alternative for comparison purposes.

#### Project Study Area

The project study area is the Starvation Collection System, which is located in Duchesne County, Utah. The Starvation Collection System consists of Starvation Reservoir and Dam, Knight Diversion Dam, and Starvation Conduit (pipeline and tunnel). Starvation Reservoir stores Central Utah Project (CUP) water from Strawberry River and water diverted from the Duchesne River at Knight Diversion Dam through the Starvation Conduit. The project study area is shown in Figure 1-1.

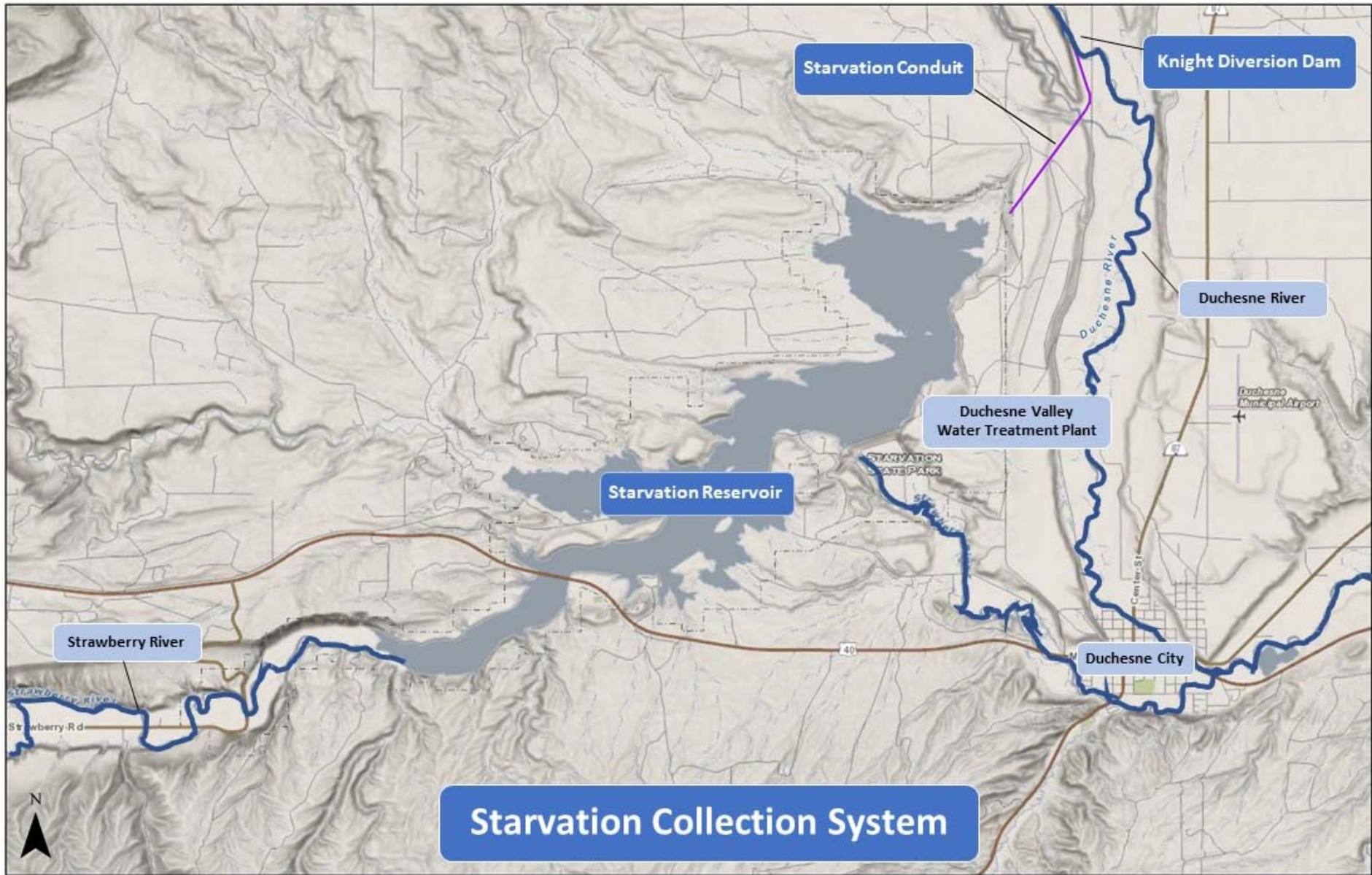
### 1.2 Project Information and Background

#### Warren Act

The United States Congress passed the Warren Act on February 21, 1911 to allow the storage and conveyance of non-project irrigation water in federal facilities when there is excess capacity (43 United States Code (USC) §523; February 21, 1911, Chapter 141, [36 STAT. 925]). In order to utilize the flexibility provided under the Warren Act, entities must enter into a contract(s) with the U.S. Department of the Interior. The Warren Act was amended by PL 103-434 on October 31, 1994, to provide for storage and conveyance of non-project water for “domestic, municipal, fish and wildlife, industrial, and other beneficial purposes” in CUP facilities.

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<sup>1</sup> For definition of non-project water see Section 1.3.



**FIGURE 1-1: PROJECT STUDY AREA**

## Central Utah Project

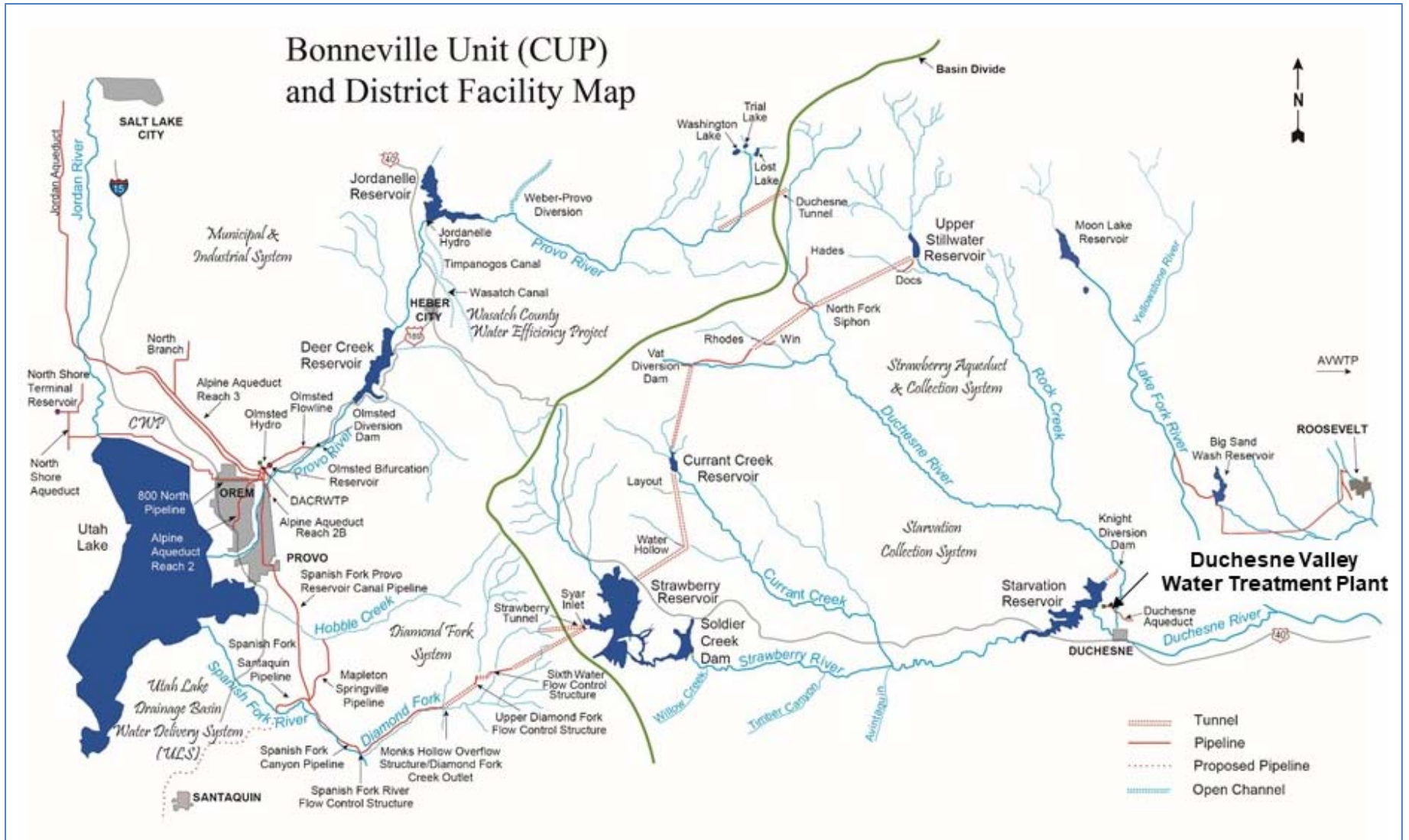
The Central Utah Project is a United States federal water project authorized for construction under the Colorado River Storage Project Act of April 11, 1956 (PL 84-485, 70 Stat. 105), as a participating project of the Colorado River Storage Project. Constructed by Reclamation and CUWCD, the CUP is located in the central, east-central, and northeast part of Utah and is the largest water resources development project in the state. The CUP makes use of a portion of Utah's share of the Colorado River yield as set out in the Colorado River Compact of 1922. Water developed by the CUP is used for municipal, industrial, and agricultural supplies; hydroelectric power; fish and wildlife; and recreation. The CUP also improves flood-control capability and helps control water quality. The CUP was originally divided into six units to facilitate planning and construction: Vernal, Bonneville, Jensen, Upalco, Uintah, and Ute Indian. The Upalco, Uintah, and Ute Indian units were subsequently deauthorized. The Vernal and Jensen units are completed.

### *Bonneville Unit of the Central Utah Project*

The Bonneville Unit collects and diverts water from the Uinta Basin (which is part of the Colorado River Basin) to the Bonneville Basin. The Bonneville Unit is located in central and northeastern Utah and provides water for Salt Lake, Utah, Wasatch, and Duchesne counties; and a portion of Summit County. The Bonneville Unit is divided into seven systems: Starvation Collection System, Strawberry Aqueduct & Collection System, Municipal and Industrial System, Diamond Fork System, Utah Lake Drainage Basin Water Delivery System, Wasatch County Water Efficiency/Daniel Replacement Project, and Uinta Basin Replacement Project. These systems contain a vast network of reservoirs, aqueducts, tunnels, canals, pipelines, pumping plants and other conveyance facilities that develop water for irrigation, municipal, and industrial use; instream flows; and hydropower production. Much of the Bonneville Unit is completed and remaining features are being designed or are currently under construction. The Bonneville Unit is the largest and most complex of the CUP units (see Figure 1-2).

### *Starvation Collection System*

The construction of the Starvation Collection System was completed in the early 1970s as part of the Bonneville Unit of the CUP. The Starvation Collection System is made up of the Knight Diversion Dam, Starvation Conduit, and Starvation Dam and Reservoir. Knight Diversion Dam diverts water from the Duchesne River, into the Starvation Conduit which discharges into Starvation Reservoir. The Starvation Conduit is approximately 1.70 miles long and is 7.0-7.3 feet in diameter with a capacity of 300 cubic feet per second (cfs). Starvation Reservoir has a capacity of 164,118 acre-feet (AF) and stores water from the Strawberry River and the water diverted from the Duchesne River. The proposed conveyance and storage of non-project water would be through the Knight Diversion Dam on the Duchesne River, then through the Starvation Conduit and/or flow directly from the Strawberry River into the reservoir.



**FIGURE 1-2: BONNEVILLE UNIT OF THE CUP**

## Duchesne Valley Water Treatment Plant

The Duchesne Valley Water Treatment Plant (DVWTP) is located northeast of Starvation Dam (see Figure 1-2 and photo inset). The DVWTP, a non-federal facility, is owned and operated by CUWCD to provide culinary water to agency customers within the Duchesne County area. The DVWTP was originally constructed in the early 1980s as a 4.0 million gallon per day (MGD) treatment plant. It was expanded to 8.0 MGD in 2010. The sole source of water for the DVWTP is Starvation Reservoir. The DVWTP delivers a culinary water supply to three agencies<sup>2</sup>:

- Duchesne County Water Conservancy District (DCWCD);
- East Duchesne Culinary Water Improvement District (EDCWID); and
- Duchesne City.



Duchesne Valley Water Treatment Plant

### 1.3 Proposed Action

The Proposed Action would allow for the conveyance and storage of 11,772 AF of non-project water in the Starvation Collection System from the water sources listed in Table 1-1 on a space available basis. Conveyance and storage would be in accordance with the following priorities:

- 1) CUP Water;
- 2) Rediverted Instream Flow Agreement Waters comprised of 44,400 AF described in the amended Stream Flow Agreement of 1990 and 2,900 AF of Daniel Replacement Project water (see section 3.3 for more information); and
- 3) Warren Act Contract(s) (Proposed Action).

The conveyance and storage of non-project water is dependent upon approval of a Warren Act contract(s) and compliance with Utah State water right laws. The conveyance and storage of the 11,772 AF of non-project water would be for Duchesne County Water Conservancy District (DCWCD), East Duchesne Culinary Water Improvement District (EDCWID), and Duchesne City and would be derived from the water rights listed in Table 1-1 and existing lease agreements. All non-project water identified in Table 1-1 (11,772 AF) would require a Warren Act contract(s) with the U.S. Department of the Interior as part of the Proposed Action. Table 1-1, on the following page, lists the non-project water which could be conveyed and/or stored in the Starvation Collection System on a space available basis.

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<sup>2</sup> These agencies have third party contracts with other culinary water supply agencies within Duchesne County (e.g. Johnson Water Improvement District, Roosevelt City) to provide treated water.

**TABLE 1-1: IDENTIFICATION OF NON-PROJECT WATER BY AGENCY**

	Acre-feet	Comments
<b>Duchesne County Water Conservancy District (DCWCD)</b>		
• Pioneer Canal Company Shares	68	CUWCD owns 17 shares at 4 acre-feet per share to be acquired by DCWCD
• Surplus Water Agreement with Duchesne City	2,898*	4 cfs leased from Duchesne City (see discussion below)
• Surplus Water Agreement with Hanna Water and Sewer District	95	
<b>Sub-Total for DCWCD</b>	<b>3,061</b>	
<b>East Duchesne Culinary Water Improvement District (EDCWID)</b>		
• EDCWID water rights	351	
• Surplus Water Agreement with Hanna Water and Sewer District	391	
<b>Sub-Total for EDCWID</b>	<b>742</b>	
<b>Duchesne City</b>		
• Duchesne City water rights	7,969*	Duchesne City has a total of 15 cfs from 3 water rights; 4 cfs has been leased to DCWCD; the volume calculated is from the remaining 11 cfs
<b>TOTAL</b>	<b>11,772</b>	

\* converted from cfs to AF for a year to calculate the volumes

It is recognized that there are additional water rights in the Strawberry and Duchesne Rivers. No additional water rights would be affected by the Proposed Action. Only those water rights listed in Table 1-1 would be considered for conveyance and storage in the Starvation Collection System as part of the proposed project.

Currently, the non-project waters listed above in Table 1-1 are being transported through either the Strawberry River or the Duchesne River. Some of the non-project waters discussed in this Draft EA are being conveyed through the Starvation Collection System, under existing carriage agreements, to the DVWTP. However, they are currently not being stored in Starvation Reservoir.

This NEPA document evaluates the potential for these non-project waters to be conveyed and stored in the Starvation Collection System pending the approval of appropriate Warren Act contract(s) and compliance with Utah State water laws.



## **1.4 Purpose and Need for the Proposed Action**

### **Need for the Proposed Action**

The need for the Proposed Action is to provide a mechanism to allow non-project water to be conveyed and stored in the Starvation Collection System on a space available basis (see above Section 1.3 – Proposed Action) and to update existing water carriage agreements.

### **Purpose for the Proposed Action**

The purpose of the Proposed Action is to utilize the available capacity of the Starvation Collection System to assist with the needs of water users by providing capacity and storage to meet non-project water demands.

## **1.5 Permits, Contracts, and Authorizations**

Implementation of the Proposed Action would require a Warren Act contract(s) with the U.S. Department of the Interior to allow conveyance and storage of non-project water, as described above and shown in Table 1-1, in the Starvation Collection System between the CUPCA Office and CUWCD. The Proposed Action would require compliance with all applicable United State laws, regulations, and Executive Orders. DCWCD, EDCWID, and Duchesne City would be required to adhere to Utah State water law and may require change applications and other approvals.

The non-project waters, as listed and up to the amounts in Table 1-1, would be conveyed and stored for DCWCD, EDWCID, and Duchesne City to be used within their service areas upon the above-mentioned approvals. The non-project water would be conveyed and stored only when there is space available in the Starvation Collection System. The quantity and timing of non-project storage is limited to what can be conveyed and stored without negatively impacting the CUP water rights or the storage of the rediverted 44,400 acre-feet (instream flow water) and Daniel Replacement Water. The conveyance and storage requested for the Warren Act contract(s) and this NEPA document would not exceed 11,772 AF in the Starvation Collection System.

## **1.6 Related Documents**

The Proposed Action has taken into consideration related environmental documents including the Bonneville Unit Final Environmental Statement, the 1980 Stream Flow Agreement, and the 1990 Amendment.

This chapter discusses the No-Action and the Proposed Action alternatives. The impacts of both the No-Action and Proposed Action alternatives are disclosed in Chapter 3 of this document.

### 2.1 No-Action Alternative

Under the No-Action Alternative, the CUPCA Office would not execute a Warren Act contract with CUWCD. Furthermore, CUWCD would not execute third party contracts with DCWCD, EDCWID, and Duchesne City for storage of non-project water in the Starvation Collection System on a space available basis.

### 2.2 Proposed Action Alternative

The Proposed Action Alternative would allow DCWCD, EDCWIP, and Duchesne City to convey and store up to 11,772 AF of non-project water (sum of all non-project water from the three agencies) in the Starvation Collection System.

Only the water rights listed in Table 1-1 are being considered for conveyance and storage in the Starvation Collection System for this Proposed Action Alternative. No additional water rights in the Strawberry or Duchesne Rivers would be affected by the Proposed Action.

#### Description of Non-project Water for Duchesne County Water Conservancy District

The DCWCD has acquired or is in the process of acquiring (i.e. Pioneer Canal Company shares purchased from CUWCD) non-project water from three sources listed in Table 1-1: Pioneer Canal Company shares, surplus water from Duchesne City, and surplus water from Hanna Water and Sewer District.

##### *Pioneer Canal Company Shares*

Currently, CUWCD owns 17 Class A shares in Pioneer Canal Company which equates to 68 AF based on a four acre-feet per share calculation. Class A shares originate from a number of water rights in the Duchesne River basin. The Pioneer Canal diversion is located a little more than four miles upstream of Knights Diversion Dam on the Duchesne River. The Pioneer Canal Company service area is located above the Starvation Collection System. The Pioneer Canal Company shares are for irrigation purposes and are generally given a right to use during the irrigation season (approximately from mid-April to mid-October).

In the future, CUWCD intends to sell its 17 Class A shares (or 68 AF)<sup>3</sup> of Pioneer Canal Company water to DCWCD for use within DCWCD's service area. It's anticipated that DCWCD would have this water treated at DVWTP, requiring a Warren Act contract for use of the Starvation Collection System. This water would require DCWCD to obtain an approved change application through Utah

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<sup>3</sup> This non-project water has been added to this Draft EA in anticipation that DCWCD acquires it from CUWCD and obtains the necessary approvals as part of Utah water law.

Division of Water Rights, which currently requires consent from Pioneer Canal Company as part of state’s water right change application process. The Proposed Action would allow this non-project water to be conveyed and stored, on a space available basis and pending Utah State water right approval, in the Starvation Collection System.

***Surplus Water Agreement with Duchesne City***

DCWCD has entered into an agreement for surplus water owned by Duchesne City on the Duchesne River. The agreement is for a total of four cfs which equates to approximately 2,898 AF per year. Duchesne City has three water rights within the Duchesne River (water right numbers 43-180, 43-203, and 43-11416) which the four cfs of surplus water originates from. This water has been used within Duchesne City’s service area which is adjacent to and below the Starvation Collection System. The diversion point for these three water rights is at Knight Diversion Dam on the Duchesne River. Through existing agreements with CUWCD, this water can be conveyed into Starvation Reservoir and treated for culinary purposes at the DVWTP.<sup>4</sup> The Proposed Action would allow this non-project water to be conveyed and stored, on a space available basis, in the Starvation Collection System.

***Surplus Water Agreement with Hanna Water and Sewer District***

In 2017, DCWCD entered into an agreement with the Hanna Water and Sewer District (HW&SD) to lease approximately 95 AF of surplus water as shown in Table 2-1.

**TABLE 2-1: SUMMARY OF WATER RIGHTS FOR DCWCD SURPLUS WATER AGREEMENT WITH HW&SD**

<b>Water Right Number</b>	<b>CFS*</b>	<b>AF (approximate)</b>
43-11089	0.05	12.6
43-10673	0.14	38.0
43-10967	0.31	44.4
<b>TOTAL</b>	<b>0.50</b>	<b>95</b>

\*cfs was converted to AF for a year to calculate the volume

HW&SD has entered into a 5-year agreement with DCWCD to make this surplus water available to DCWCD annually. This water has historically been used in the HW&SD service area located above the Starvation Collection System (Water right 43-10967 is part of a share for the Pioneer Canal Company which diverts from the Duchesne River above Knight Diversion Dam). The Proposed Action Alternative would convey and store this water, pending a Warren Act contract and Utah State water law approval, through the Starvation Conduit (diverted at Knight Diversion Dam), and into Starvation Reservoir for use by DCWCD.

**Description of Non-project Water for East Duchesne County Water Improvement District**

The EDCWID has acquired non-project water from two sources listed in Table 1-1: EDCWIP water rights and surplus water agreement with Hanna Water and Sewer District.

<sup>4</sup> DCWCD has been allocated 4.0 million gallons per day (7.4 cfs) capacity at the DVWTP.

### *East Duchesne Culinary Water Improvement District Water Rights*

EDCWID currently has three water rights on the Duchesne and Strawberry Rivers that are used at the DVWTP.<sup>5</sup> These water rights are considered non-project and are summarized in Table 2-2.

**TABLE 2-2: SUMMARY OF EDCWID WATER RIGHTS**

<b>Water Right Number</b>	<b>CFS</b>	<b>AF (approximate)</b>
43-10916	0.029	4.7
43-11555	1.08	148.7
43-8342	0.81	197.6
<b>TOTAL</b>	<b>1.92</b>	<b>351</b>

### *Surplus Water Agreement with Hanna Water and Sewer District*

In 2015, EDCWID entered into an agreement with the Hanna Water and Sewer District (HW&SD) to lease approximately 391 AF of surplus water as shown in Table 2-3.

**TABLE 2-3: SUMMARY OF WATER RIGHTS FOR EDCWID SURPLUS WATER AGREEMENT WITH HW&SD**

<b>Water Right Number</b>	<b>CFS</b>	<b>AF (approximate)</b>
43-10968	1.26	290.5
43-10969	0.29	74.4
43-1985	0.03	11.0
43-12338	0.02	13.5
43-10885	0.002	1.6
<b>TOTAL</b>	<b>1.602</b>	<b>391</b>

HW&SD has entered into a 5-year agreement with EDCWID to make this surplus water available to EDCWID annually. This water has historically been used in the HW&SD service area located above the Starvation Collection System. The Proposed Action Alternative would convey and store this water, pending a Warren Act contract(s) and Utah State water law approval, into the Starvation Conduit (diverted at Knight Diversion Dam), and into Starvation Reservoir for use by EDWID.

### **Description of Non-project Water for Duchesne City**

Duchesne City has a 15 cfs water right on the Duchesne River (from three water rights numbers 43-180, 43-203, and 43-11416). Four cfs has been leased to DCWCD as part of the surplus water agreement which is discussed above. This leaves a total of 11 cfs of non-project water that Duchesne City has identified for the proposed conveyance and storage in the Starvation Collection System under a Warren Act contract.

<sup>5</sup> EDCWID has been allocated 0.6 million gallons per day (1 cfs) capacity at the DVWTP.

Eleven cfs is approximately 7,969 AF per year. These three water rights have a diversion point on the Duchesne River at Knight Diversion Dam. In addition, Duchesne City has entered into an agreement with CUWCD to treat five cfs of this water for municipal and industrial purposes through the DVWTP.<sup>6</sup> The Proposed Action would allow this non-project water to be conveyed and stored, on a space available basis, in the Starvation Collection System.

### **2.3 Other Non-Project Water not Evaluated in this Document**

A NEPA compliance process along with a Warren Act contract would be required to store other non-project water not addressed in this document. Also, contract(s) must be entered into and executed between the CUPCA Office, CUWCD, and the entities that are requesting storage of their non-project water in the Starvation Collection System.

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<sup>6</sup> Duchesne City has been allocated 3.2 million gallons per day (5 cfs) capacity at the DVWTP.

## CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

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### 3.1 Introduction

In accordance with the NEPA regulations codified in 40 CFR §1502.14, this chapter discusses the existing environmental conditions and the environmental consequences that may occur by implementing the Proposed Action in comparison to the No-Action. The Proposed Action would not require the construction of new water delivery facilities or result any ground-disturbing activities and would not require any changes to existing facilities. The Proposed Action would not adversely impact any federal water development project or facilities including the CUP (Starvation Collection System is a component of the Bonneville Unit of the CUP). There would be no effect to the conveyance and storage of CUP water in the Starvation Collection System.

#### Affected Environment

The Affected Environment or the existing conditions were identified based on prior experience and knowledge of the Starvation Collection System, the Strawberry and Duchesne River systems, and coordination with federal, state, and local agencies.

#### Environmental Consequences

NEPA requires consideration of direct, indirect, and cumulative impacts, plus identification of measures to avoid, minimize, and mitigate impacts (if any). The description of impacts are as follows:

- Direct impacts are those caused by the action and occur at the same time and place as the action (40 CFR §1508.8). Those resources with the potential to be impacted are discussed in this chapter.
- Indirect impacts are those caused by the action and occur later in time or are farther removed in distance, but are still reasonably foreseeable (40 CFR §1508.8).
- Cumulative impacts are those impacts to the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (40 CFR §1508.7). Cumulative impacts are discussed in Section 3.10 in this chapter.

#### Resources Considered but Eliminated from Further Analysis

Resources considered but eliminated from analysis are those that may not be present within or near the Starvation Collection System and/or would not be impacted by the No-Action or Proposed Action alternatives. The resources considered for inclusion but eliminated are:

- Air Quality;
- Soils and Geotechnical;
- Prime, Unique, and Statewide Important Farmland;
- Wild and Scenic Rivers (the Strawberry and Duchesne Rivers have not been designated as a Wild and Scenic Rivers in accordance with PL 90-542; 16 USC §1271);
- Wilderness;
- Wildlife;
- Cultural Resources - the Joint Lead Agencies follow Reclamation policy for cultural resources for carriage contracts (including Warren Act contracts). Reclamation and the Utah State Historic Preservation Office

(SHPO) have determined that carriage contracts (including Warren Act contracts), where existing facilities would be used, and no modifications or land use changes are proposed, are determined to cause no adverse effect to historic properties and formal consultation with SHPO is not required in these cases (under the statewide programmatic agreement between Reclamation and SHPO signed in 2017). No additional cultural investigation is warranted.

- Floodplains and Wetlands;
- Vegetation and Invasive Species;
- Noise and Vibration;
- Energy;
- Socioeconomics;
- Transportation;
- Hazardous Waste;
- Groundwater;
- Land Use Plans and Policies; and
- Public Health and Safety.

### Resources Evaluated Further

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

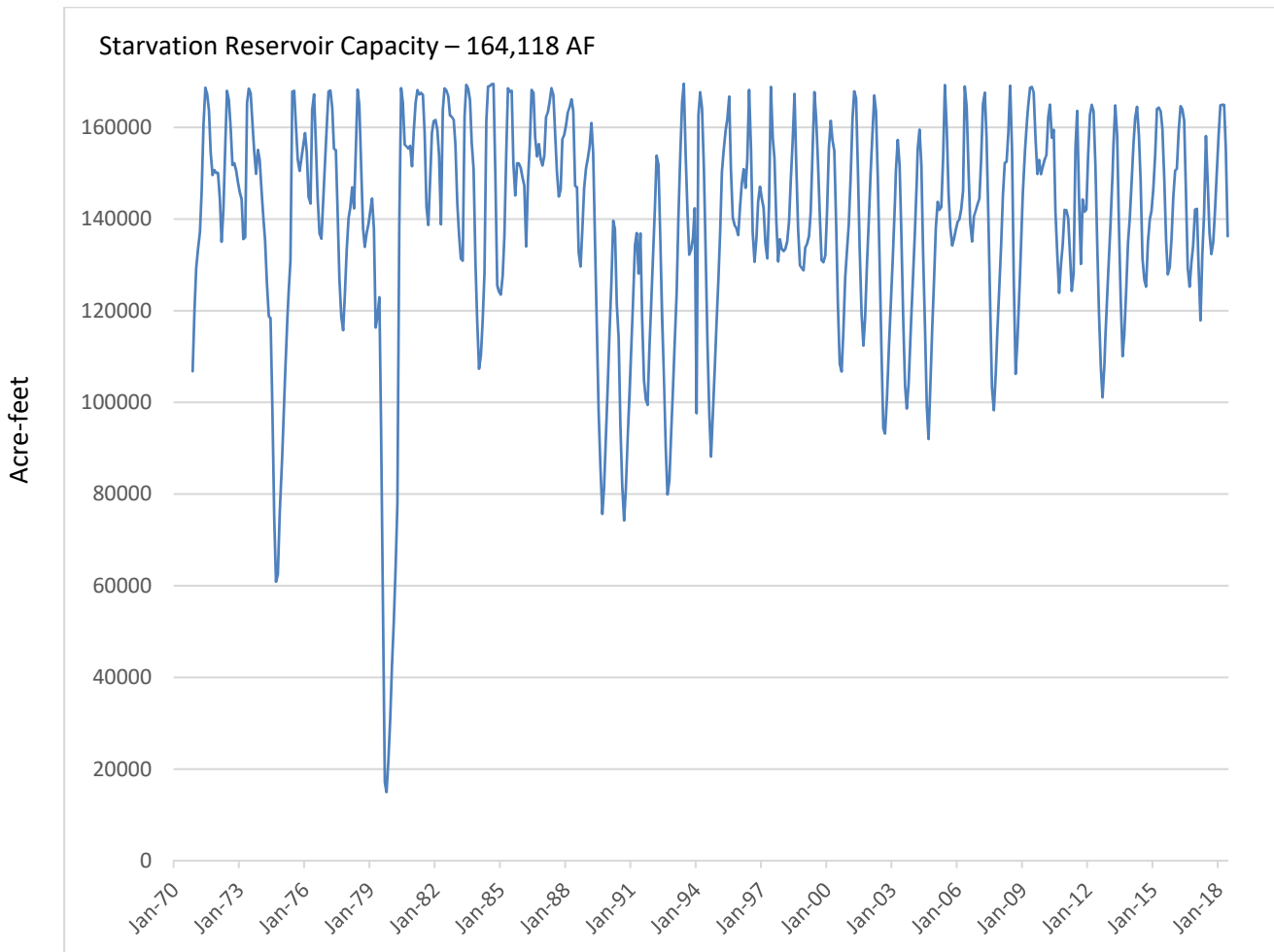
- Starvation Collection System;
- Strawberry River, Duchesne River, and Rediverted Instream Flow Agreement Waters;
- Endangered Species Act and State Listed Sensitive Species;
- Recreation;
- Water Quality;
- Environmental Justice;
- Indian Trust Assets;
- Climate Change; and
- Cumulative Impacts.

## 3.2 Starvation Collection System

The Starvation Collection System is part of the Bonneville Unit of the Central Utah Project. The conveyance and storage of non-project water in the Starvation Collection System would be added to the existing CUP water for which the system was constructed. The non-project water cannot and would not interfere with the conveyance, storage, and delivery of CUP water and is subject to approval of any required change application(s) under Utah State water law. The non-project water identified in Chapters 1 and 2 (see Table 1-1) would be allowed conveyance and storage in the Starvation Collection System during times when unused capacity would be available. Conveyance and storage would be in accordance with the following priorities:

- 1) CUP Water;
- 2) Rediverted Instream Flow Agreement Waters comprised of 44,400 AF described in the amended Stream Flow Agreement of 1990 and 2,900 AF of Daniel Replacement Project water; and
- 3) Warren Act Contract(s) (Proposed Action).

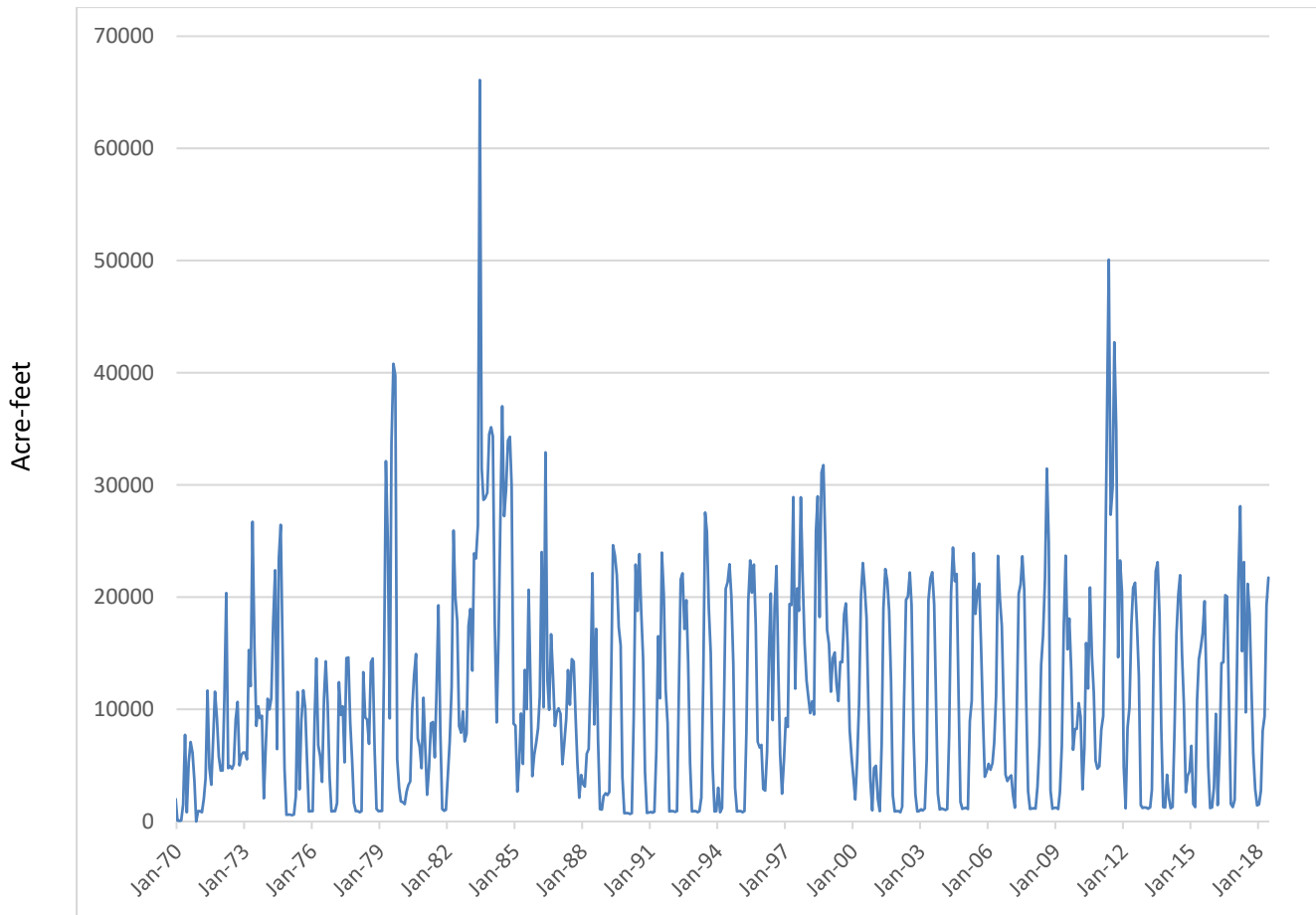
**Starvation Dam and Reservoir** – The dam is a zoned earth-filled dam that is 200 feet high and 3,070 feet in length. Water is released at the outlet works located on the eastern side of the dam with a capacity of over 2,300 cfs. The spillway is located on the western side of the dam and is an uncontrolled ogee bathtub type with a capacity of 16,600 cfs. Starvation Dam impounds water from the Strawberry and Duchesne<sup>7</sup> Rivers making Starvation Reservoir. The reservoir has a capacity of 164,118 AF and a surface area of 3,296 acres. Inflow forecasts for the Starvation Collection System are estimated by CUWCD and utilized for reservoir planning and project operations prior to and during the flood season, and optimization and coordination of the water supply for downstream users. Starvation Reservoir is also used for flood control based on projected runoff rates. Water is released from Starvation Reservoir when the forecasted flows exceed the storage space. Figure 3-1 shows the historic Starvation Reservoir volumes between 1970 and June 2018. Figure 3-2 shows release to the Strawberry River and to the DVWTP from Starvation Reservoir since its initial filling.



**FIGURE 3-1: STARVATION RESERVOIR VOLUMES SINCE 1970**

<sup>7</sup> A portion of the Duchesne River can be diverted at Knights Diversion Dam and into the Starvation Conduit and Reservoir.





**FIGURE 3-2: STARVATION RESERVOIR RELEASES TO STRAWBERRY RIVER AND TO THE DVWTP**

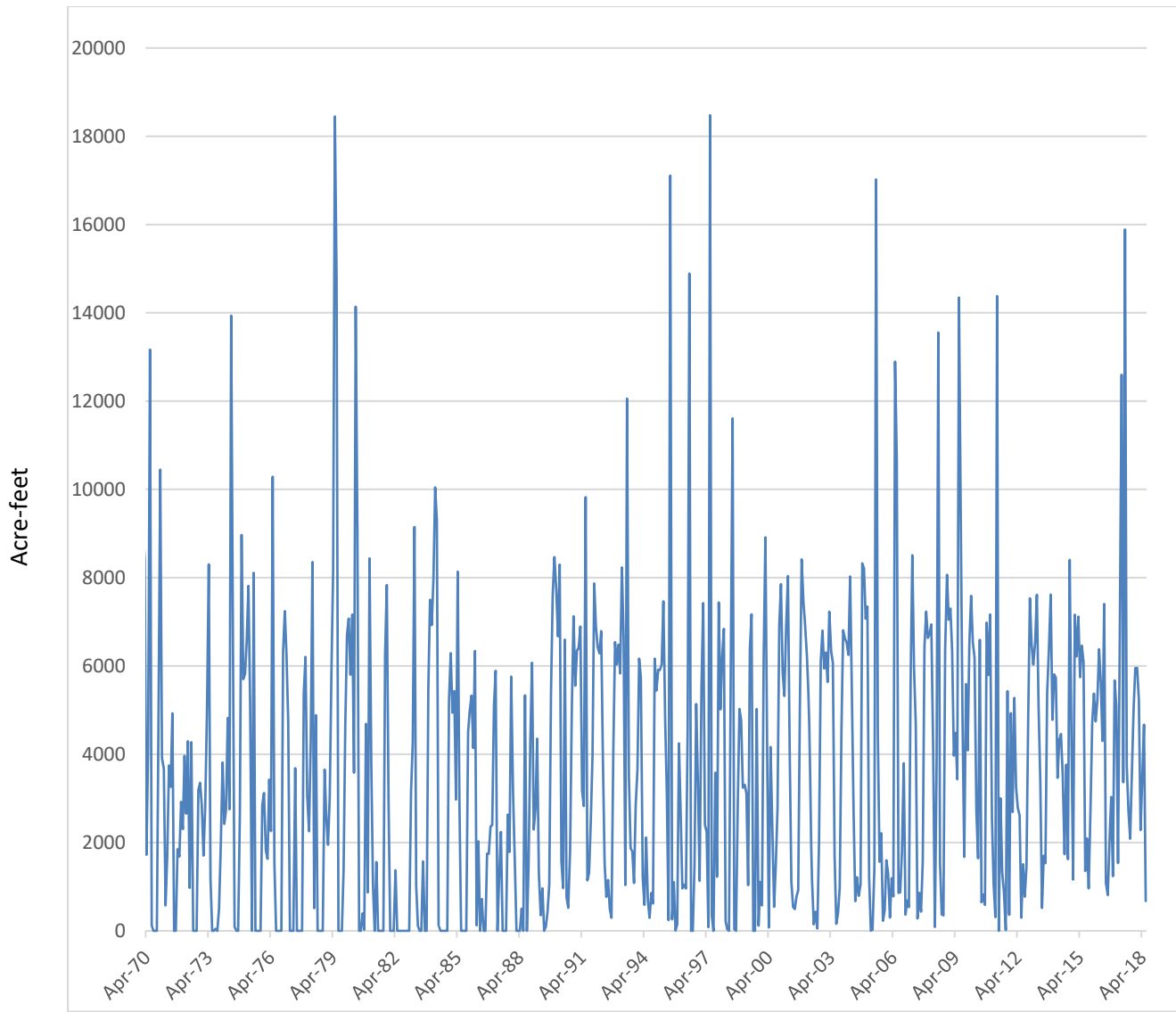
**Starvation Conduit and Knight Diversion Dam** – The Starvation Conduit and Knight Diversion Dam are located on the Duchesne River. These features divert and carry Duchesne River water into Starvation Reservoir. They were constructed during the same period as the Starvation Dam. Starvation Conduit is 7.0 to 7.3 feet in diameter and approximately 1.70 miles in length. It has a capacity of 300 cfs. Knight Diversion Dam is about 12 feet high with a crest length of 1,000 feet. Figure 3-3 shows the volume of water diverted from the Duchesne River at Knight Diversion Dam into Starvation Reservoir.

### No-Action Alternative

The No-Action Alternative would not alter or change the Starvation Collection System or its operation.

### Proposed Action Alternative

The conveyance and storage requirements of the non-project water described in the Proposed Action are minor compared to the overall capacity of the Starvation Collection System. The reservoir has a capacity of 164,118 AF with a surface area of 3,296 acres. In addition, the reservoir is used for flood control. The non-project water described in this document would be the first water released for flood control space as described above in the Starvation Dam and Reservoir discussion above in this section.



**FIGURE 3-3: KNIGHT DIVERSION DAM DIVERSIONS INTO STARVATION RESERVOIR SINCE 1970**

The Proposed Action Alternative would have no effect to the operations of the Starvation Collection System. The reservoir volumes and surface water elevation fluctuate depending on the amount of snowpack and precipitation patterns received in and above the reservoir and downstream water use demand. The non-project water would be conveyed and stored on a space available basis and within or below the normal full operating elevation. Any reservoir elevation increase resulting from the non-project water storage would be within the maximum historic reservoir operational elevation. Flood control space within the reservoir would not be impacted in any way from the Proposed Action. The Proposed Action would not affect or interfere with CUP operation and other water rights.

### **3.3 Strawberry River, Duchesne River, and Rediverted Instream Flow Agreement Waters**

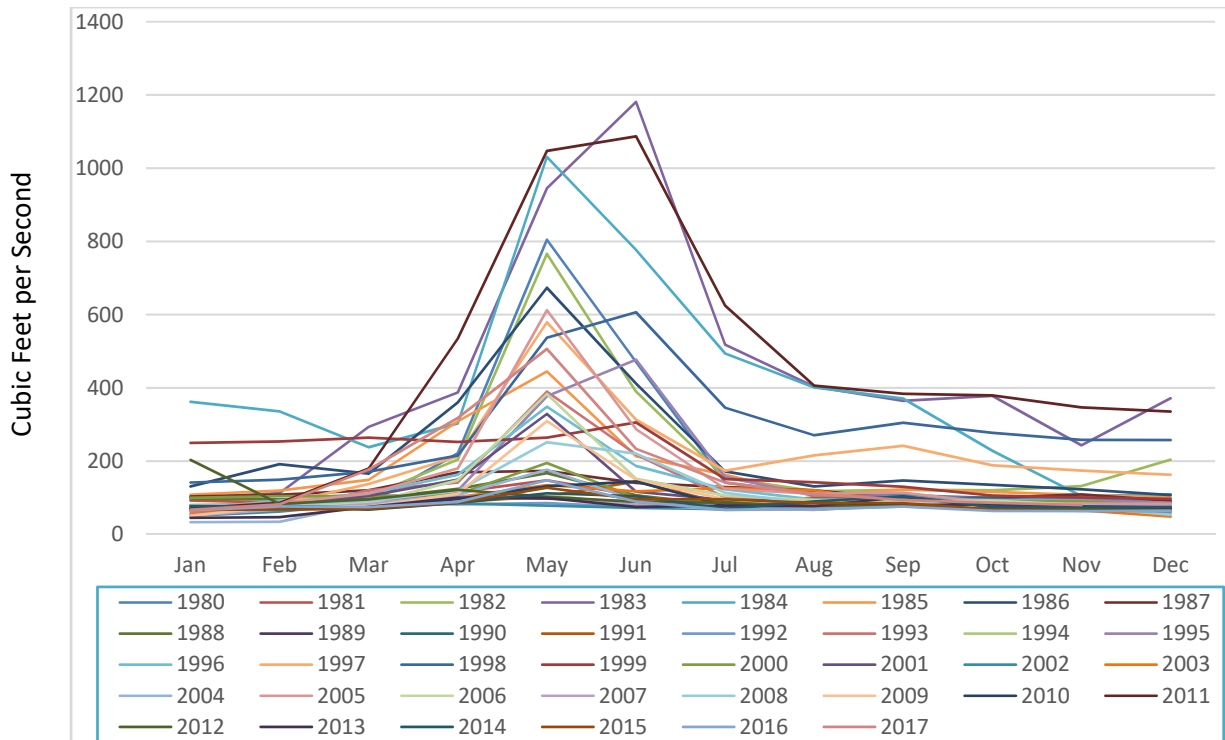
This section describes the Strawberry and Duchesne River systems and the Instream Flow Agreement Waters. There would be no effect to these rivers or the Instream Flow Agreement Waters from implementation of the Proposed Action Alternative.

#### **Strawberry River**

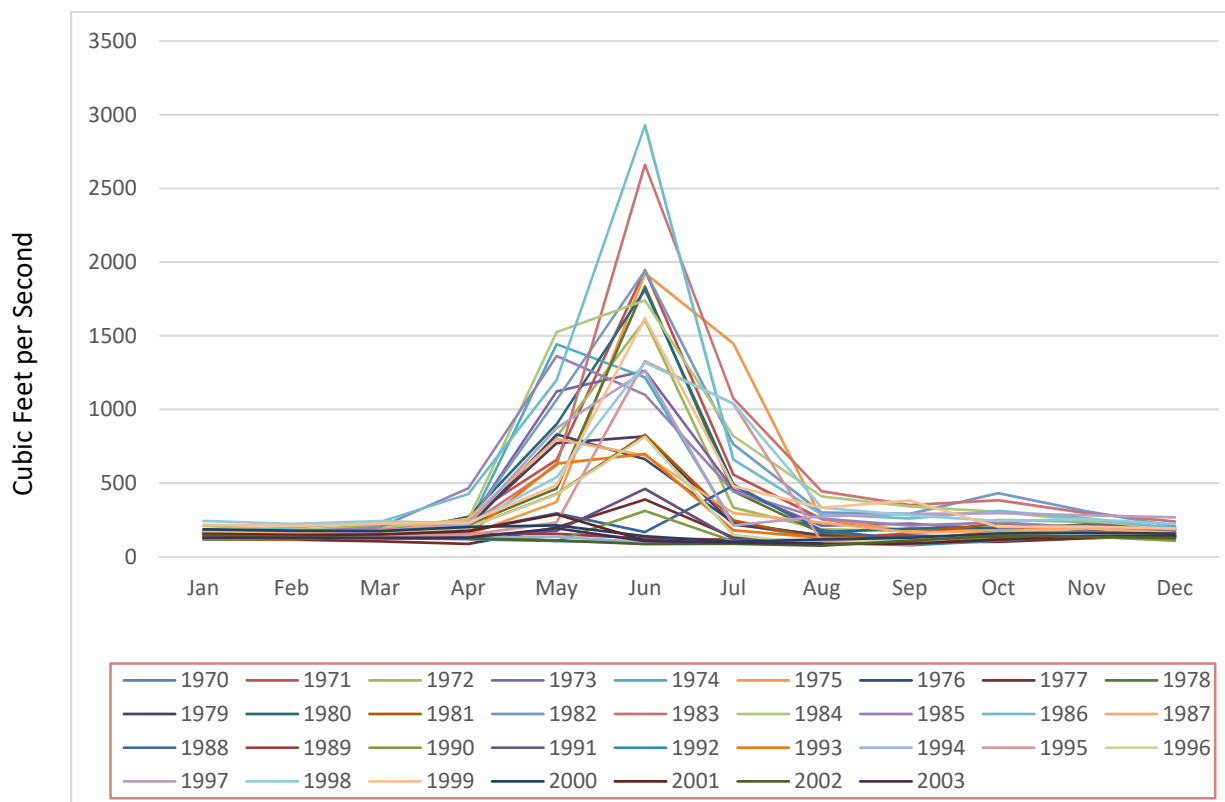
The headwaters of the Strawberry River are in the Wasatch Mountains of the western Uinta Basin in Wasatch County. This 18-mile long river flows south into Strawberry Reservoir and then out through Soldier Creek Dam outlet works. The river is known as a productive trout fishery and many parts can only be accessed by trail. Major tributaries of the Strawberry River consist of Avintaquin Creek and Red Creek (Current Creek flows into Red Creek before its confluence with the Strawberry River). As discussed in this Draft EA, the Strawberry River flows into Starvation Reservoir. The river then flows out of the reservoir and joins the Duchesne River near the town of Duchesne. Figure 3-4 shows the historic flow rates of the Strawberry River near where it enters Starvation Reservoir.

#### **Duchesne River**

The Duchesne River is located in the Uinta Basin and is a tributary of the Green River. It is approximately 115 miles long, drains a total land area of 3,790 square miles, and begins in the Uinta Mountains. Duchesne River's major tributaries are Rock Creek, Strawberry River (see discussion above), Lake Fork River (Yellowstone River is a major tributary of Lake Fork River), and Uinta River (White Rocks River is a major Tributary to the Uinta River) before discharging into the Green River. The Duchesne River flows through Duchesne and Uintah counties in eastern part of Utah. A portion of the Duchesne River is diverted at Knight Diversion Dam into Starvation Reservoir. Figure 3-5 shows the monthly mean flow rate of the Duchesne River at Knight Diversion Dam from 1970 to 2003.



**FIGURE 3-4: STRAWBERRY RIVER BEFORE ENTERING STARVATION RESERVOIR MONTHLY MEAN FLOW 1980 -2017**



**FIGURE 3-5: DUCHESNE RIVER AT KNIGHT DIVERSION DAM MONTHLY MEAN FLOW 1970-2003**

## Rediverted Instream Flow Agreement Waters

This section discusses the instream flow agreements that are relevant to the Proposed Action: 44,400 AF Stream Flow Agreement and the 2,900 AF Daniel Replacement Project.

### *44,400 AF Stream Flow Agreement*

Section 303(a) of the Central Utah Project Completion Act<sup>8</sup> (CUPCA) requires CUWCD to provide, from project water if necessary, the amounts of water sufficient to sustain the minimum stream flows established pursuant to the stream flow agreement.<sup>9</sup> The stream agreement was entered into on February 27, 1980 by the U.S. Department of the Interior, the State of Utah, CUWCD, the U.S. Fish and Wildlife Service, and the U.S. Forest Service. This agreement was amended on September 13, 1990. The agreement establishes minimum flows, subject to shortages, for the Strawberry River, Rock Creek (tributary of the Duchesne River), West Fork of the Duchesne River, and Current Creek (flows into Red Creek which is a tributary of the Strawberry River). Table 3-1 lists the agreed upon flow regimens for each of these systems.

**TABLE 3-1: 44,400 AF STREAM FLOW AGREEMENT REGIMENS**

	October thru March (cfs)	April thru September (cfs)	Comment
Strawberry River	13	26	Released from Soldier Creek Dam
Rock Creek	23-29	23-29	Released from Upper Stillwater Dam
West Fork of the Duchesne River	6.5-9.5	12-24	Released from Vat Diversion Dam
Current Creek	9	23-24	Released from Current Creek Dam

The Interagency Biological Assessment Team (IBAT) can make recommendations to change these flow agreement regimens.

Some of these waters flow into the Starvation Collection System either via the Strawberry River or are diverted at Knight Diversion Dam into Starvation Reservoir. In addition, a minimum of 15 cfs is released from Starvation Dam and 15 cfs from Knight Diversion Dam.

### *2,900 AF Daniel Replacement Project*

Historically, the Daniel Irrigation Company diverted waters through a transbasin tunnel from the upper reaches on the Strawberry River and delivered it into Daniels Creek for irrigation purposes in the Heber Valley. This transbasin diversion dewatered the upper Strawberry River above Strawberry Reservoir and several of its tributaries. The Daniel Replacement Project removed this transbasin diversion leaving an average of 2,900 AF in the Strawberry River and its tributaries above Strawberry Reservoir. Replacement water was then provided to the Daniel Irrigation

<sup>8</sup> Public Law 102-575

<sup>9</sup> See Water Supply Appendix (Volume 3) of the Utah Lake Drainage Basin Water Delivery System Supplement to the Bonneville Unit Definite Plan Report, page 2-5 section titled "The 44,400 Acre-Foot Fishery Flow Provision"

Company from Jordanelle Reservoir per Section 303 of the CUPCA legislation.<sup>10</sup> The 2,900 AF of Daniel Replacement Water is then exchanged from Strawberry Reservoir to Starvation Reservoir for use to maintain the lower Duchesne River target flows.

### **No-Action Alternative**

The No-Action Alternative would have no effect on the Strawberry River, Duchesne River, or the Instream Flow Agreement Waters.

### **Proposed Action Alternative**

The Proposed Action Alternative is to convey and store 11,772 AF of non-project water as defined in Table 1-1 in the Starvation Collection System. The non-project water proposed for conveyance and storage would be used to help meet the operational and contractual demands of DCWCD, EDCWID, and Duchesne City. The hydrographs in Figures 3-4 and 3-5 illustrate the variable nature of the Strawberry and Duchesne River systems. This variability is a function of several factors:

- snowpack and precipitation patterns;
- reservoir elevation (Strawberry and Starvation Reservoirs);
- unpredictable nature of water demand and timing; and
- water users calling for their different water supplies.

The Strawberry River monthly mean flows rate (between 1980 and 2018) ranges from a low of 85 cfs in January to 357 cfs in May as measured by the U.S. Geological Survey (USGS) near where the river enters the Starvation Reservoir. CUWCD operates and maintains the Soldier Creek Dam and Current Creek Dam which both contribute to the flow of Strawberry River. The Duchesne River monthly mean flow rate (between 1970 and 2003) at Knight Diversion Dam, as measured by the USGS, ranges from a low of 150 cfs in February to over 1,000 cfs in June. The Proposed Action Alternative would not increase the flow rates above both the Strawberry and Duchesne Rivers historical flow rates.

The conveyance and storage of non-project water would allow the DCWCD, EDCWID, and Duchesne City greater operational flexibility in determining which water source would be used and delivered to their respective customers. However, the Proposed Action would not affect the flow rate released from Starvation Reservoir to the Strawberry River or the water bypassed at Knight Diversion Dam to the Duchesne River. The Strawberry and Duchesne River flow rates would fall within the variability of their hydrographs. The Joint Lead Agencies are committed to maintaining the streamflow agreements for the Strawberry and Duchesne Rivers.

The water sources (see Table 1-1) would be conveyed and stored in the Starvation Collection System, on space available basis, and used by DCWCD, EDWCID, and Duchesne City when needed by the users. The Proposed Action would allow these agencies to more flexibly manage water deliveries. Each water source has use and delivery conditions as part of their respective water right.

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<sup>10</sup> See Utah Lake Drainage Basin Water Delivery System Final Environmental Impact Statement, section 1.1.2.3.1 - Wasatch County Water Efficiency Project and Daniel Replacement Project on page 1-11.

The Proposed Action Alternative would allow DCWCD, EDCWID, and Duchesne City the ability to use their stored water in the reservoir when there is a water quality issue on the Duchesne River. Often during heavy rain and spring runoff events, the water in the Duchesne River can become highly turbid. If Duchesne River water has to be diverted into the reservoir to be treated at the DVWTP to meet water delivery obligation of the agencies during times of high turbidity it can cause operational concerns and increased costs. The Proposed Action would allow these agencies to convey and store their non-project water (on a space available basis) in the Starvation Collection System so the water is available for use it at the DVWTP when Knight Diversion Dam has been shut down because of high turbidity or other issues on the Duchesne River.

The Proposed Action Alternative would have no effect on the Strawberry River, Duchesne River, and the Rediverted Instream Flow Agreement Waters. The hydrographs shown in Figures 3-2 and 3-3 and Table 3-1 demonstrate the variability of the flow patterns from year to year in these systems. The overall flow rates of the Proposed Action would fall within the variability of the hydrographs. The sources listed in Tables 1-1, 2-1, 2-2, and 2-3 as part of the Proposed Action currently flow in the Strawberry and Duchesne Rivers without being stored under a Warren Act contract; no new water sources would be added to the Strawberry River or Duchesne River. However, the leased water from Hanna Water and Sewer District (a total of 486 AF – 95 for DCWCD and 391 for EDCWID) and the 68 AF of irrigation water from Pioneer Canal Company (see Table 1-1) would flow further down the Duchesne River from their current respective diversions and into Starvation Reservoir at Knight Diversion Dam.

### 3.4 Endangered Species Act and State Listed Sensitive Species

#### Endangered Species Act

Section 7 of the Endangered Species Act (ESA) of 1973 (7 USC §136, 16 USC §1531 et seq.), as amended, requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) if listed species or designated critical habitat may be affected by a proposed federal project.

Table 3-2 lists the federally-listed ESA species that are known to occur within or near the Starvation Collection System. The Joint Lead Agencies used USFWS IPaC which provided the listed endangered and threatened species within the project area.

TABLE 3-2: ENDANGERED SPECIES LIST IN PROJECT STUDY AREA		
Species	Status	Occurrence in the Study Area
Yellow-Billed Cuckoo ( <i>Coccyzus americanus</i> )	Threatened	The project study area contains no critical habitat.
Ute ladies'-tresses ( <i>Spiranthes diluvialis</i> )	Threatened	No impact to suitable habitat.
Barneby Ridge-cress ( <i>Lepidium barnebyanum</i> )	Endangered	No impact to suitable habitat.
Canada Lynx ( <i>Lynx canadensis</i> )	Threatened	The project study area contains no critical habitat.
Bonytail Chub ( <i>Gila elegans</i> )	Endangered	The project study area contains no critical habitat.

<b>Species</b>	<b>Status</b>	<b>Occurrence in the Study Area</b>
Colorado Pikeminnow ( <i>Ptychocheilus lucius</i> )	Endangered	The project study area contains no critical habitat.
Humpback Chub ( <i>Gila cypha</i> )	Endangered	The project study area contains no critical habitat.
Razorback Sucker ( <i>Xyrauchen texanus</i> )	Endangered	The project study area contains no critical habitat.

Source: <https://ecos.fws.gov/ipac/>

### Utah Sensitive Species

The Utah Sensitive Species List identifies several conservation agreement or sensitive species in addition to federally-listed threatened and endangered species shown above. Of those, six have been documented to occur near the Starvation Collection System and are listed in Table 3-3.

<b>Species</b>	<b>Status</b>
Bluehead Sucker ( <i>Catostomus discobolus</i> )	Conservation Agreement
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	State Sensitive
Flannelmouth Sucker ( <i>Catostomus latipinnis</i> )	Conservation Agreement
Roundtail Chub ( <i>Gila robusta</i> )	Conservation Agreement
White-tailed Prairie Dog ( <i>Cynomys leucurus</i> )	State Sensitive
Greater sage-grouse ( <i>Centrocercus urophasianus</i> )	Conservation Agreement

Source: Utah Conservation Data Center and UNHP Data

### No-Action Alternative

The No-Action Alternative would have no effect on any listed threatened, endangered, or candidate species and would have no effect on any state sensitive or conservation agreement species.

### Proposed Action Alternative

The Proposed Action would have no effect on populations of listed threatened, endangered, candidate, or state sensitive species. The Proposed Action would not require any construction or ground disturbing activities. The volume and timing of the non-project water in the Strawberry River and Duchesne River would be minor and within the historical flow rates. The Proposed Action Alternative would not result in any change in function of the existing Starvation Collection System and aquatic or riverine habitat along the Strawberry River and Duchesne River.



### 3.5 Recreation

Starvation State Park is located within the project study area and opened in 1972, two years after the construction of the Starvation Dam. It is managed by Utah Division of State Parks. At full operating capacity the reservoir is almost 3,300 acres of open water and is ideal for boating and other water recreational activities and offers a wide variety of opportunities such as camping, rental cabins, picnicking, fishing, boating, water sports, swimming, hiking, and mountain biking. Starvation Reservoir provides fishing for rainbow trout, brown trout, walleye, perch, and smallmouth bass. Strawberry River and Duchesne River offer a wide variety of recreational activities as well. These rivers provide fishing, camping, wildlife viewing, hiking, and other recreational opportunities.

#### No-Action Alternative

The No-Action Alternative would have no effect on recreational activities on or near the Starvation Collection System as well as the Strawberry and Duchesne Rivers.

#### Proposed Action Alternative

The Proposed Action Alternative would have no effect to recreational activities on or near the Starvation Collection System. The Proposed Action Alternative would be within the limits of the active storage elevation of Starvation Reservoir as shown in Figure 3-1.

### 3.6 Water Quality

Starvation Reservoir is classified by use designations assigned by the Utah Department of Environmental Quality. The water quality of the reservoir is protected for the following beneficial uses (see section R317-2-6 of Utah Code Annotated):

- Class 1C – Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water.
- Class 2A – Protected for frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.
- Class 3A – Protected for cold-water species of game fish and other cold-water aquatic life, including the necessary aquatic organisms in their food chain.
- Class 4 – Protected for agricultural uses including irrigation of crops and stock watering.

The water sources for Starvation Reservoir are the Strawberry River and Duchesne River.

#### No-Action Alternative

The No-Action Alternative would have no effect on water quality of the Starvation Reservoir, or the Strawberry and Duchesne Rivers.

#### Proposed Action Alternative

The Proposed Action Alternative would have no effect on water quality and would allow DCWCD, EDCWID, and Duchesne City the ability to use their proposed stored water in the reservoir when there is a water quality issue on the Duchesne River. Often during heavy rain and spring runoff events, high turbidity water

can flow in the Duchesne River. If Duchesne River water needs to be diverted into the reservoir to be treated at the DVWTP to meet water delivery obligation of the agencies during times of high turbidity it can cause operational concerns and increased costs. The Proposed Action would allow these agencies to convey and store their non-project water (on a space available basis) in the Starvation Collection System so the water is available for use at the DVWTP when Knight Diversion Dam has been shut down because of high turbidity or other issues on the Duchesne River.

### **3.7 Environmental Justice**

Executive Order 12898 established Environmental Justice as a federal agency priority to ensure that minority and low-income groups are not disproportionately affected by federal actions. Implementation of the Proposed Action Alternative would not disproportionately or unequally affect any low-income or minority communities. The proposed project would not involve any facility construction, population relocation, health hazards, hazardous waste, property takings, or substantial economic impacts. This action would therefore have no adverse human health or environmental effects on minority and low-income populations.

#### **No-Action Alternative**

The No-Action Alternative would have no effect on Environmental Justice populations.

#### **Proposed Action Alternative**

The Proposed Action Alternative would have no effect on Environmental Justice populations.

### **3.8 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 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. There are no known ITAs in the Project Study Area. The implementation of the Proposed Action Alternative would have no foreseeable negative impacts on Indian Trust Assets.

#### **No-Action Alternative**

The No-Action Alternative would have no effect on Indian Trust Assets.

#### **Proposed Action Alternative**

The Proposed Action Alternative would have no effect on Indian Trust Assets.

### **3.9 Climate Change**

Carbon dioxide (CO<sub>2</sub>) makes up the largest component of greenhouse gas emissions. The Proposed Action Alternative would not cause an increase in CO<sub>2</sub> or other greenhouse gas emissions; therefore, it would not contribute to climate change, nor would it create vulnerability to climate change impacts.

#### **No-Action Alternative**

The No-Action Alternative would have no effect on climate change.

#### **Proposed Action Alternative**

The Proposed Action Alternative would have no effect on Climate Change. In addition, Climate Change would have no effect on the Proposed Action.

### **3.10 Cumulative Impacts**

In addition to project-specific impacts, cumulative impacts were analyzed for the potential for adverse effects to resources affected by the project and by other past, present, and reasonably foreseeable activities. According to the CEQ's regulations for implementing NEPA (40 CFR §1508.7), a "cumulative impact" is an effect on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively larger actions taking place over a period of time. It focuses on whether the Proposed Action Alternative, considered together with any known or reasonably foreseeable actions by CUWCD, CUPCA Office, other federal or state agencies, or some other entity combined to cause an effect. The Joint Lead Agencies have determined that the Proposed Action Alternative would not have an adverse impact to any resource.

## CHAPTER 4: PROJECT COORDINATION

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Chapter 4 describes the project coordination and public involvement activities for the proposed project.

### 4.1 Cooperating Agencies

Cooperating Agencies, as defined in the Council of Environmental Quality regulations 40 CFR 1501.06, participate in the preparation and review of the Draft EA because of their jurisdiction by law or special expertise (e.g., Section 106 of the NHPA, Endangered Species Act, and Section 404 of the Clean Water Act). The Joint Lead Agencies invited the U.S. Bureau of Reclamation (Reclamation) and the Utah Reclamation Mitigation and Conservation Commission (Mitigation Commission) to be Cooperating Agencies. Both agencies accepted the invitation and assisted in the preparation of this Draft EA.

### 4.2 Public and Agency Scoping Process

As part of the NEPA process, the Joint Lead Agencies initiated a public scoping process in May 2018 to inform the public and agencies about the Draft EA, the Proposed Action Alternative, the project's purpose and need, and to gather input regarding issues to be analyzed through the NEPA process.

The scoping period for the project started May 22, 2018 and run through June 29, 2018. A letter dated July 31, 2018 was received from the Ute Indian Tribe requesting that the scoping period be extended. Therefore, the Joint Lead Agencies extended the scoping period to September 7, 2018 and, as such, the Joint Lead Agencies sent letters to interested parties and groups notifying them of the scoping period extension.

Information delivered as part of the scoping process consisted of:

- Listing the project proponents (the Joint Lead Agencies and the other water agencies – Duchesne County Water Conservancy District, East Duchesne Culinary Water Improvement District, and Duchesne City);
- Stating that a NEPA document will be prepared;
- Proposed Action;
- Project purpose and need;
- Soliciting comments as part of the scoping process; and
- Project contact information including telephone numbers, email, and web site address.

Activities used during the scoping process to notify the public and agencies about the proposed project consisted of:

- Interested parties letters and scoping newsletter;
- Development of webpage with a copy of the newsletter and a means to provide comments on the Proposed Action;
- Newspaper ad with project information; and
- Native American Consultation Letters.

## Comments Received During the Scoping Period

Comments were received from the Duchesne County Commission and from five individuals. Table 4-1 shows the comments and response from the Joint Lead Agencies.

<b>TABLE 4-1: COMMENTS RECEIVED DURING SCOPING</b>		
<b>Name/Agency</b>	<b>Comments Received</b>	<b>Joint Lead Agency Response</b>
Duchesne County Commission	Supportive of the proposed project.	Thank you for your support of the proposed project.
Laura Lawrence	“In response to the the proposed action of putting our non-project water into Starvation I vote NO. I don't see the purpose of doing this. I feel this is unfair because Starvation is below where our water will be used and will be impossible to get it back. I vote NO to this proposed action.”	The proposed project only consists of conveyance and storage of specific waters that are identified in Tables 1-1, 2-1, 2-2, and 2-3 above in the Draft EA. The agencies listed in this Draft EA (DCWCD, EDCWID, and Duchesne City) either own these waters or lease them as described in Chapters 1 and 2 (DCWCD anticipates purchasing 68 AF of Pioneer Canal Company Class A shares from CUWCD).
Guy Taylor President of Pioneer Canal Company	“June 29, 2018 As President of the Pioneer Canal Company I speak for all of the owners of water stocks of The Pioneer Canal Company. We are adamantly opposed to using our project water in the proposed way. We are against you having the ability to have the administrative mechanism to allow non-project water to be conveyed and stored in the Starvation Collection System. It would be impossible for us to recover the water from the Starvation as our water delivery is above Starvation Reservoir. Guy Taylor, President Pioneer Canal Company”	The proposed project only consists of conveyance and storage of specific waters that are identified in Tables 1-1, 2-1, 2-2, and 2-3 above in the Draft EA. The agencies listed in this Draft EA (DCWCD, EDCWID, and Duchesne City) either own these waters or lease them as described in Chapters 1 and 2 (DCWCD anticipates purchasing 68 AF of Pioneer Canal Company Class A shares from CUWCD).
Nolan Potter	“As owner of "non project" water shares I am against the Government "storing" my water. Starvation Reservoir is downsream from me and as such the water is not available to me from that storage facility. The water taken from me in that manner would only be useful downstream.  Nolan”	The proposed project only consists of conveyance and storage of specific waters that are identified in Tables 1-1, 2-1, 2-2, and 2-3 above in the Draft EA. The agencies listed in this Draft EA (DCWCD, EDCWID, and Duchesne City) either own these waters or lease them as described in Chapters 1 and 2 (DCWCD anticipates purchasing 68 AF of Pioneer Canal Company Class A shares from CUWCD).
Janice Taylor	“I am opposed to the Conveyance and Storage of Non-Project Water in the Starvation Collection System. It would not be a good thing for the water users in the Starvation Collection System. A big NO from me and my family.”	The proposed project only consists of conveyance and storage of specific waters that are identified in Tables 1-1, 2-1, 2-2, and 2-3 above in the Draft EA. The agencies listed in this Draft EA (DCWCD, EDCWID, and Duchesne City) either own these waters or lease them as described in Chapters 1 and 2 (DCWCD anticipates purchasing 68 AF of Pioneer Canal Company Class A shares from CUWCD).
Dalas Jones	“As dry as ot is this year we need all the water we can get on our ground just to keep it producing. this is not yhe year to save extra water since there isnt any”	The proposed project only consists of conveying and storing 11,772 AF of non-project water. The intent would be for the agencies requesting conveyance and storage to store their water in Starvation Reservoir and use it at times when they determine.

## CHAPTER 5: LIST OF PREPARERS

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<b>Name</b>	<b>Title</b>	<b>Agency</b>
W. Russ Findlay	CUPCA Program Coordinator	CUCPA Office
Sarah Sutherland	Environmental Programs Manager	CUWCD
Rich Tullis	Assistant General Manager	CUWCD
Tom Bruton	Assistant General Manager	CUWCD
Gerard Yates	Water Quality/Treatment Plants Manager	CUWCD
Jared Hansen	CUP Manager	CUWCD
Chris Elison	Project Manager	CUWCD
Rachel Musil	Project Manager – Water Rights	CUWCD
Kevin Workman	Uintah Operations Manager	CUWCD
Linda Ivie	Duchesne Area Manager	CUWCD
Troy Ovard	Stillwater Area Manager	CUWCD
Chuck Hale	DVWTP Manager	CUWCD