EL DORADO IRRIGATION DISTRICT TEMPORARY CONSERVED WATER TRANSFER PROJECT

CEQA Initial Study/Negative Declaration

July 11, 2022

El Dorado Irrigation District

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Acronyms / Abbreviations

AF	Acre Feet
AQMD	Air Quality Management District
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CARB	California Air Resources Board
CVP	Central Valley Project
DOC	California Department of Conservation
DTSC	California Department of Toxic Substances Control
EID	El Dorado Irrigation District
FERC	Federal Energy Regulatory Commission
FMMP	Farmland Mapping and Monitoring Program
General Plan	El Dorado County General Plan
GHG	Greenhouse Gases
LAR	Lower American River
MMTCO2e	Million Metric Tons of Carbon Dioxide Equivalent
MRZ	Mineral Resource Zone
NAAQS	National Ambient Air Quality Standards
piping project	Upper Main Ditch Piping Project
PM	Particulate Matter
proposed project	Temporary Conserved Water Transfer Project
Reclamation	United States Bureau of Reclamation
SFAR	South Fork American River
SMARA	Surface Mining and Reclamation Act
SRA	State Responsibility Area
SWRCB	State Water Resources Control Board
USEPA	United States Environmental Protection Agency
VMT	Vehicles Miles Traveled
WWD	Westlands Water District

1 Introduction

El Dorado Irrigation District (EID) has prepared this initial study/negative declaration (IS/ND) to address the potential environmental consequences of the proposed EID Temporary Conserved Water Transfer (proposed project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

An initial study (IS) is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare a proposed negative declaration or mitigated negative declaration when: (a) The Initial Study shows that there is no substantial evidence that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level."

As described in the environmental checklist (Chapter 3), the project would not result in any significant environmental impacts, nor would the project require revisions to reduce any impacts to a less-than-significant level. Therefore, an IS/ND is the appropriate document to approve the proposed project in compliance with the requirements of CEQA. This IS/ND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

1.1 CEQA Lead Agency

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. EID is the CEQA lead agency because they are responsible for carrying out the proposed project. The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the proposed project. This disclosure document is being made available to the public for review and comment. This IS/ND will be available for a 30-day public review period from July 11 to August 9, 2022.

This document is available for review at:

> El Dorado Irrigation District
> 2890 Mosquito Road
> Placerville, CA 95667

Comments should be addressed to:

> Brian Deason, Environmental Resources Supervisor
> El Dorado Irrigation District
> 2890 Mosquito Road Placerville, CA 95667
> E-mail comments may be addressed to: bdeason@eid.org

Written comments (including via e-mail) must be received by 5:00 p.m. on August 9, 2022. After comments are received from the public and reviewing agencies, EID may (1) adopt the ND and approve

the project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, EID may elect to, but is not required to, proceed with the project.

1.2 Summary of Findings

Chapter 3, "Environmental Checklist," contains the analysis and discussion of potential environmental impacts of the proposed project. Based on the issues evaluated in that chapter, EID has determined that the proposed project would not result in any significant impacts and, therefore, no mitigation is required or proposed. The proposed project would result in no impacts related to the following issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions,
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems
- Transportation
- Tribal Cultural Resources
- Wildfire

The proposed project would result in less-than-significant impacts related to the following issue areas:

- Biological Resources
- Energy
- Hydrology and Water Quality
- Mandatory Findings of Significance

1.3 Document Organization

This IS/ND is organized as follows:

Chapter 1: Introduction. This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document as well as presents a summary of findings.

Chapter 2: Project Description. This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the project.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact.

Chapter 4: References. This chapter lists the references used in preparation of this IS/ND.

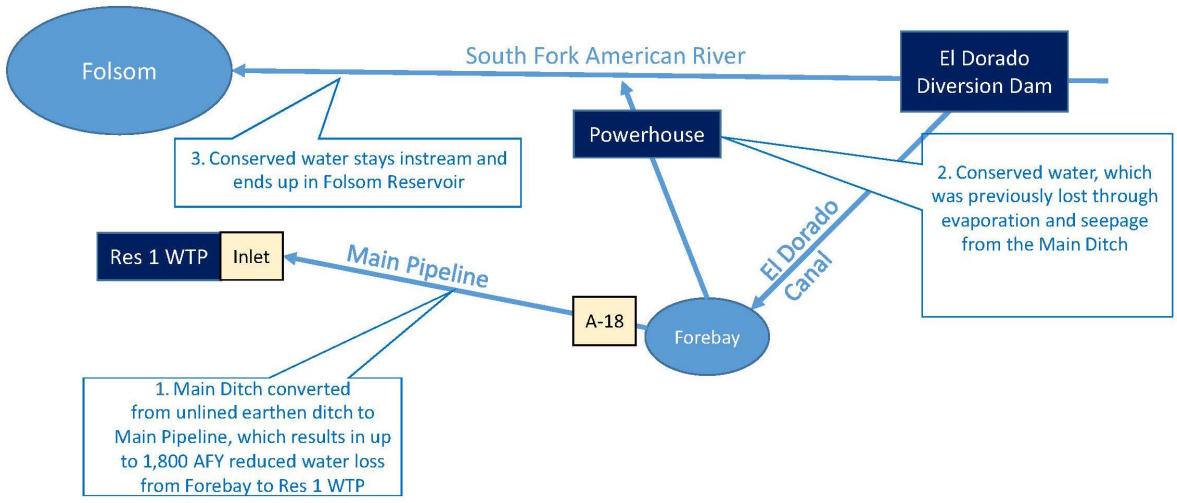
2 Project Description

2.1 Project Overview

The El Dorado Irrigation District (EID) proposes to implement the Temporary Conserved Water Transfer (proposed project) which would include the transfer up to 1,800 Acre Feet (AF) of its pre-1914 water right water to Westland's Water District (WWD) for use in the 2022/2023 irrigation season. The source of water for this temporary water transfer is water that has been conserved by EID from the conversion of an earthen unlined ditch (Upper Main Ditch) to a pipeline.

In the spring of 2022, EID completed construction of the Upper Main Ditch Piping Project (piping project). The piping project involved converting an earthen unlined ditch that delivered water from El Dorado Forebay to the Reservoir 1 Water Treatment Plant to a piped conveyance. By completing the piping project, EID is able to conserve an average of up to 1,800 AF annually that would have otherwise been lost through seepage and evapotranspiration from the unlined ditch. Under the proposed project, EID's diversions from the South Fork American River (SFAR) at the El Dorado Diversion Dam will not change. The same amount of water will be diverted into the El Dorado Canal and conveyed to the Forebay. However, because EID is able to meet the same customer consumptive demands as they did prior to the pipeline project with less water, that conserved water would instead be used for non-consumptive hydropower production, returned into the SFAR, and remain instream to flow into Folsom Reservoir, where the water will be re-regulated by the U.S. Bureau of Reclamation (Reclamation) for delivery to WWD for use in their service area south of the Delta, see Figure 1. The actual transfer quantity of conserved water will depend on hydrologic conditions and consumptive demand patterns leading up to and during the transfer period; however, the quantity will not exceed 1,800 AF.

Figure 1: Schematic of Conserved Water from El Dorado Irrigation District Main Pipeline



2.2 El Dorado Irrigation District

EID was organized in 1925 under the Irrigation District Law (Water Code Section 20500, et seq.). EID provides water to a population of more than 100,000 people within its service area for municipal, industrial, and irrigation uses, as well as wastewater treatment and recycled water services, to meet the growing needs of its customers. EID also owns and operates the El Dorado Hydroelectric Project, which is licensed by the Federal Energy Regulatory Commission (FERC) and consists 4 storage reservoirs (Echo Lake, Lake Aloha, Caples Lake, Silver Lake), the El Dorado Diversion Dam on the SFAR, approximately 22 miles of flumes, canals, siphons, and tunnels that make up the El Dorado Canal, the El Dorado Forebay that re-regulates water for hydropower and consumptive uses, and a powerhouse. EID also owns and operates recreational facilities located at its FERC-licensed facilities as well as at its primary drinking water supply reservoir at Jenkinson Lake in the Sly Park Recreation area. As such, EID is one of the few California districts that provide a full complement of water services.

EID's service area is located in El Dorado County on the western slope of the Sierra Nevada Mountains. The service area is bounded by Sacramento County to the west and the community of Strawberry to the east. The area north of the communities of Coloma and Lotus defines the northern-most part of the service area, while the communities of Pleasant Valley and South Shingle Springs define the southern boundary. EID's contiguous service area spans 220 square miles and ranges from 500 feet in elevation, at the Sacramento County line, to more than 4,000 feet in elevation in the eastern part of EID.

2.3 Westlands Water District

WWD was formed in 1952 and encompasses more than 600,000 acres of farmland in western Fresno and Kings Counties. WWD serves water for approximately 600 family-owned farms that average 900 acres in size. Water is delivered to WWD through the Central Valley Project (CVP), a federal water project that stores water in large reservoirs in Northern California for use by cities and farms throughout California. After it is released from CVP reservoirs, the water is typically pumped from the Sacramento–San Joaquin Delta (Delta) via U.S. Department of the Interior, Bureau of Reclamation's (Reclamation's) C. W "Bill" Jones Pumping Plant (Jones) and delivered 70 miles through the Delta–Mendota Canal to San Luis Reservoir. During spring and summer, the water is released from San Luis Reservoir and delivered to WWD farmers through the San Luis Canal and the Coalinga Canal. Once it leaves the CVP canals, water is delivered to farmers through 1,034 miles of underground pipe and more than 3,300 water meters.

WWD farmers produce more than 60 commercial food and fiber crops sold for the fresh, dry, canned, and frozen food markets, both domestic and export. More than 50,000 people live and work in the communities dependent on the WWD's agricultural economy. The communities in and near the WWD's boundaries include Mendota, Huron, Tranquility, Firebaugh, Three Rocks, Cantua Creek, Helm, San Joaquin, Kerman, Lemoore, and Coalinga

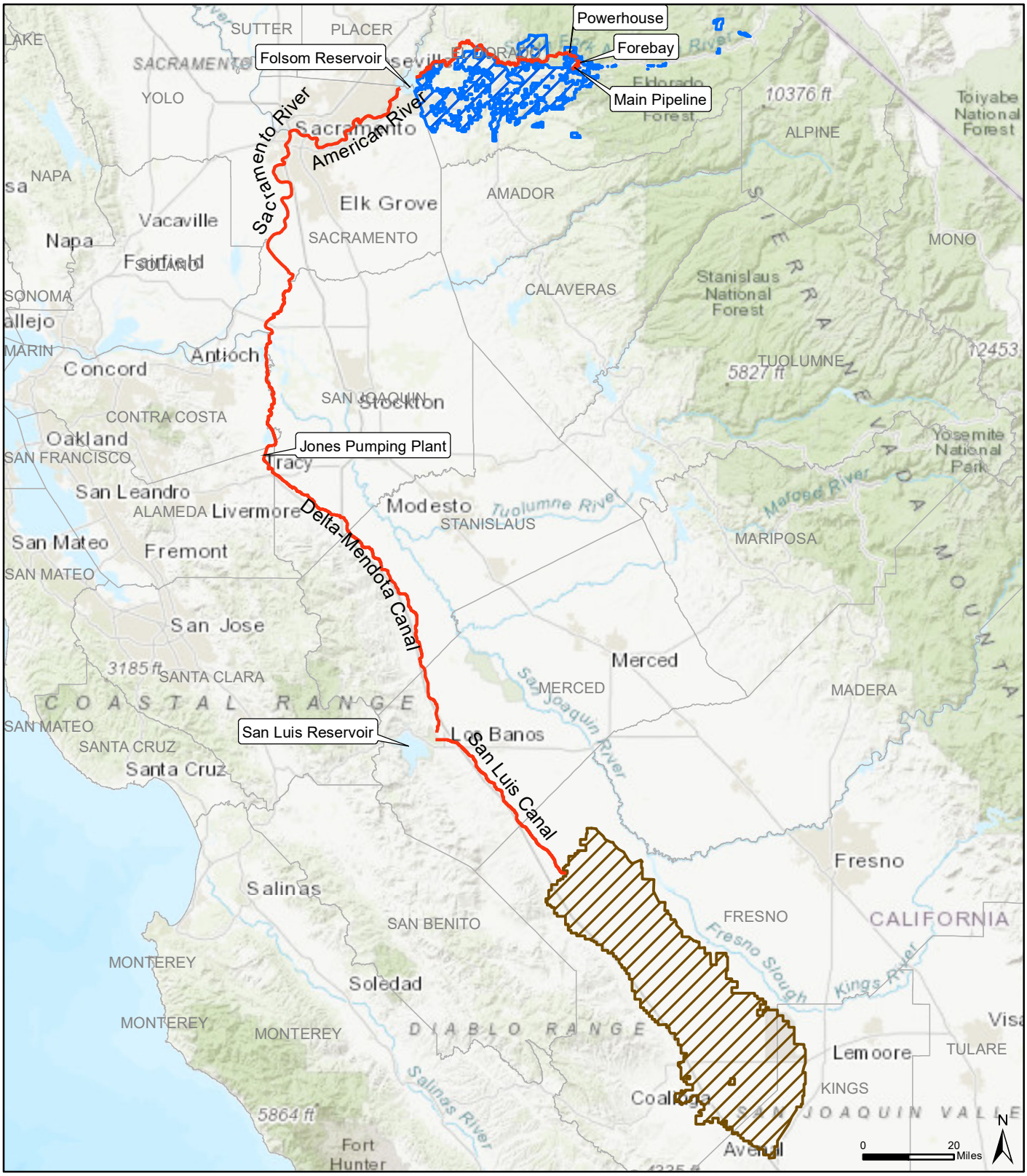
2.4 Project Location

Figure 2 provides an overview of the location where the conserved water originates in EID's service area and the flow path to WWD's service area.

The conserved water originates from the operation of EID's newly constructed pipeline that conveys water from the Forebay to the Reservoir 1 Water Treatment Plant located in Pollock Pines in El Dorado County.

Conserved water would be conveyed via El Dorado Powerhouse to the SFAR, and remain instream to flow into Folsom Reservoir located in the counties of Sacramento, Placer, and El Dorado. Water released from Folsom Reservoir would be conveyed via Lake Natoma into the lower American River (LAR) and remain instream to flow to the Sacramento River. The Sacramento River flows approximately 55 miles where it meets the San Joaquin River at the head of the Sacramento-San Joaquin Delta. From this location, the conserved water would enter the tidal portion of the San Joaquin River and would be diverted 45 miles away at the Jones intake facility. Utilization of the Delta Cross Channel, when available, would decrease the total distance to the point of re-diversion by approximately 18 miles.

Water would be rediverted at the Jones intake facility and conveyed south for approximately 70 miles via the Delta Mendota Canal to San Luis Reservoir. The conserved water may be stored in San Luis Reservoir and then delivered to WWD via the San Luis Canal, or it may be used immediately by WWD. The WWD service area is located in western Fresno and Kings Counties.



Legend

- Conserved Tranfer Water Path
- El Dorado Irrigation District Service Area
- Westlands Water District Service Area

Stantec

Client/Project
El Dorado Irrigation District
Temporary Conserved Water
Transfer Project

Figure No.
2

Title
Project Location

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2.5 Background

EID has implemented, and continues to implement, projects, programs and policies that achieve water conservation. Existing law, under Water Code sections 1010 and 1011, establishes that a water rights holder who reduces water diversion/use as a result of conserving water is authorized to use, sell, exchange or otherwise transfer such water. In 2018, in response to water conservation legislation, the EID Board of Directors adopted Board Resolution No. 2018-010, which declared the District's general intent to retain control of water conserved through the District's various projects, programs, and policies.

One such project that achieved significant water conservation is the piping project. The piping project converted the prior water conveyance through the open and unlined Upper Main Ditch, to a secure raw water transmission pipeline. On January 24, 2022, the EID Board of Directors adopted Resolution 2022-004 recognizing the conserved water that would result from implementing the piping project and declaring its intention to retain control and ownership of such water for its intended use as it sought fit.

The piping project was completed during spring 2022 and EID began conserving water on May 11, 2022, when operation of the new pipeline started for the first time.

On June 13, 2022, the EID Board of Directors approved a one-year Water Purchase and Sale Agreement with WWD for the transfer of up to 1,800 AF of conserved water in 2022/2023, for water conserved by the piping project.

2.6 Project Objectives

The project objectives are to:

1. Put a portion of EID's pre-1914 direct diversion water right that is not needed by its customers in 2022 to beneficial use by transferring water that EID has made available through water conservation from the piping project; and

2. Generate non-rate revenue through the sale of water to offset the costs of EID's operations, thereby reducing the pressure on customer rate revenue.

2.7 Proposed Project

Under the proposed project, the District would transfer up to 1,800 AF of its pre-1914 water right[1] that has been conserved by EID to WWD for use in the 2022/2023 irrigation season. The source of water for this temporary water transfer is water that has been conserved by EID from the conversion of an earthen unlined ditch to a pipeline.

With or without the proposed transfer, the conserved water would be diverted from the SFAR at the El Dorado Diversion Dam, used for non-consumptive hydropower production, returned to the SFAR, and then would remain instream to flow into Folsom Reservoir. With the proposed transfer, the conserved

[1] The source of water is EID's pre-1914 water right S009034 that allows for direct diversions of up to 70 cubic feet per second from the SFAR.

water will then be re-regulated by the U.S. Bureau of Reclamation for delivery to WWD for use in their service area south of the Delta.

2.7.1 QUANTITY OF WATER

The amount of conserved water available to be transferred will be calculated based on the volume of water that is measured and conveyed through the pipeline from the Forebay to the Reservoir 1 Water Treatment Plant. Using historical gage data from the Main Ditch prior to piping, EID developed a methodology to calculate the amount of water loss that historically occurred in the Main Ditch due to seepage and evapotranspiration (Tully and Young 2021; Attachment A). The analysis included the review of past studies of water loss within the ditch as well as comparisons of recent gage data collected from 2009 to 2020. Gage data for water diverted into the Main Ditch (A-18 in Figure 1) is compared with gage data taken at the inlet to the Reservoir 1 Water Treatment Plant (Inlet in Figure 1). This analysis concludes that water loss within the Main Ditch prior to piping varied by flow and season as depicted in Table 1.

Table 1. Calculated water loss estimates of Main Ditch by flow and season

	October 1 – March 31	April 1 – September 30
5-10 cfs	28%	33%
10.1-15 cfs	25%	29%
15.1-20 cfs	18%	22%
20.1-25 cfs	14%	16%
25.1-30 cfs	12%	14%
30.1-35 cfs	10%	12%
35.1-40 cfs	9%	11%

The amount of water conserved from the piping project would be calculated by the amount of water entering the new Main Pipe and calculating the amount of water that would have been lost through the Main Ditch prior to the piping project. This calculation will provide the amount of water conserved from the piping project, at particular flows and seasons.

Thus, conserved water will be calculated using current data at gage A-18 and applying the correlated loss percentages by flow and season. As an example, the average daily flow measured at gage A-18 on May 20, 2022 was 14 cfs. Using Table 1, the loss percentage for that day would be 29%; therefore, 29% of 14 cfs is equal to 4 cfs of conserved water. Using this methodology, EID calculates that 317 AF of water has been conserved during the months of May and June 2022 as a result of the piping project.

2.7.2 SCHEDULE

EID completed the pipeline project during spring 2022 and began conserving water on May 11, 2022 when operation of the new pipeline started for the first time. EID proposes to transfer all water conserved since May 11, 2022 through September 30, 2022 or until the end of delivery of conserved water during 2022. If conserved water EID delivers to Folsom Reservoir cannot be conveyed to WWD through the Reclamation's export facilities during the typical July through September transfer period (or through an

extended transfer period through November 30 if authorized), WWD may seek Reclamation's authorization to carryover the conserved water in Folsom Reservoir for delivery in 2023. If the carryover water is not lost to spill or storage management operations of Folsom Reservoir during winter/spring 2023 such that is available for transfer during summer 2023, WWD may arrange to have Reclamation convey the conserved water up to and including through June 30, 2023 with the mutual agreement of EID and WWD.

The conveyance of conserved water from Folsom Reservoir would begin as soon as federal regulatory approvals are received, and WWD and EID have coordinated with Reclamation. Reclamation would provide the conserved water from Folsom Reservoir to federal export facilities to WWD on a schedule that is mutually agreeable and/or beneficial to Reclamation and WWD, and in such a manner that would not disrupt normal CVP operations while complying with all current flow standards for the LAR from Lake Natoma to the confluence with the Sacramento River, biological opinions for the coordinated operation of the State Water Project and the Central Valley Project, as well as the most up-to-date regulatory requirements for the Sacramento–San Joaquin Delta (Delta) as directed by the SWRCB.

2.8 Regulatory Requirements, Permits, and Approvals

As the lead agency, EID has the principal responsibility for approving and carrying out the proposed project and for ensuring that the requirements of CEQA, the State CEQA Guidelines, and all other applicable regulations are met. The following agencies also may have permitting approval or review authority over portions of the proposed project:

- Reclamation: Warren Act Contract with WWD

2.9 Environmental Checklist

1. Project Title:	El Dorado Irrigation District Temporary Conserved Water Transfer
2. Lead Agency Name and Address:	El Dorado Irrigation District 2890 Mosquito Road Placerville, CA 95667
3. Contact Person and Phone Number:	Brian Deason, Environmental Resources Supervisor El Dorado Irrigation District Phone: (530) 642-4064 bdeason@eid.org
4. Project Location:	Water would be released from El Dorado Irrigation District facilities in El Dorado County; flow through El Dorado, Sacramento, San Joaquin, Stanislaus, and Merced Counties; and be used by Westlands Water District in its service area in western Fresno and Kings Counties.
5. Project Sponsor's Name and Address:	El Dorado Irrigation District
6. General Plan Designation:	Various, see Section 3.11
7. Zoning:	Various, see Section 3.11
8. Description of Project:	EID proposes to transfer up to 1,800 acre-feet (AF) of its pre-1914 water right water to WWD for use in the 2022/2023 irrigation season. The source of water for this temporary water transfer is water that has been conserved by EID from the conversion of an earthen unlined ditch to a pipeline. Additional detail is provided in Section 2, "Project Description."
9. Surrounding Land Uses and Setting:	See "Environmental Setting" discussion under each issue area in Chapter 3, "Environmental Checklist."

10. Other Public Agencies Whose Approval is Required:

See Section 2.9, "Regulatory Requirements, Permits, and Approvals."

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation/Traffic	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature	July 11, 2022
	Date
Brian Deason	Environmental Resources Supervisor
Printed Name	Title

3 Impact Analysis

3.1 Aesthetics

I. AESTHETICS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				**X**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				**X**
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				**X**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				**X**

3.1.1 ENVIRONMENTAL SETTING

The proposed project would transfer up to 1,800 AF of conserved water through existing waterways and infrastructure from EID facilities located in El Dorado County to the WWD service area in Fresno and Kings Counties. Highway 50 from Placerville to eastern Lake Tahoe is an Officially Designated Scenic Highway and Highway 49 is designated as an Eligible scenic highway by the California Department of Transportation California State Scenic Highway System (Caltrans 2022). No designated state scenic highways are located within the WWD service area (Caltrans 2022). The El Dorado County General Plan (General Plan) does not have any designated scenic vistas, however maintaining natural landscapes are a focus identified in multiple goals and objectives in the General Pan (El Dorado County 2004, as amended). No designated scenic vistas are located within the WWD service area, however both the Fresno County and Kings County general plans contain policies for the preservation of agriculture and scenic resources (Fresno County 2000; Kings County 2035). The lower American River (LAR) (from Lake Natoma to the confluence with the Sacramento River) is designated under the National Wild and Scenic Rivers Act of 1968 (National and Wild Scenic Rivers System 2022).

3.1.2 IMPACT DISCUSSION

a) Would the Project have a substantial adverse effect on a scenic vista?

Finding: No Impact

There are no formally designated scenic vistas in or near the proposed project nor does the proposed project include any changes in the visual environment or changes in baseline conditions such that changes to a scenic vista or natural landscape would occur, therefore there would be no impact to scenic vistas.

b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a State Scenic Highway?

Finding: No Impact

As discussed in Section 3.1.1, Environmental Setting, above, Highway 50 is the only Officially Designated State Scenic Highway near the proposed project and Highway 49 is listed as an Eligible State Scenic Highway within the vicinity of the proposed project (Caltrans 2022). However, the proposed project would involve the transfer of conserved water, which would not change or alter any of the views from or around Highway 50 or Highway 49. There would be no impact.

c) Would the Project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Finding: No Impact

The proposed project would not result in any substantial changes in flows in the existing waterways and infrastructure as the conserved water is conveyed from EID facilities to the WWD service area. No construction or substantial operational changes would occur in the area. Therefore, the proposed project would result in no impact related to the existing visual character and quality of public views of the site and its surroundings in non-urbanized areas or conflict with any applicable zoning and other regulations governing scenic quality in urbanized areas.

d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Finding: No Impact

The proposed project does not involve any construction or operational activities that would result in additional light or glare in the area. There would be no impact.

3.2 Agricultural and Forestry Resources

II. AGRICULTURAL AND FORESTRY RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

3.2.1 ENVIRONMENTAL SETTING

Agricultural uses and zoning occur in both the EID and WWD service areas, and the lands include areas that are designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland by the California Department of Conservation (DOC) (DOC 2016a). Approximately 5 million AF of water from Reclamation's Central Valley Project is used for agriculture (Reclamation 2022a).

Under the California Land Conservation Act of 1965, also known as the Williamson Act, local governments can enter into contracts with private property owners to protect land (within agricultural preserves) for agricultural and open space purposes. Lands under active Williamson Act contracts are located in both the EID and WWD service areas (DOC 2016b).

The following California Public Resources Code sections are referenced in the impact discussion in Section 3.2.2 below:

- California Public Resources Code Section 12220(g): "Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including: timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.
- California Public Resources Code Section 4526: "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to

produce lumber and other forest products, including: Christmas trees. Commercial species shall be determined by the board on a district basis.

- California Public Resources Code Section 51104(g): "Timberland production zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, "timberland preserve zone" means "timberland production zone".

3.2.2 IMPACT DISCUSSION

a) Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Finding: No Impact

As discussed in Section 3.2.1, Environmental Setting, above, EID and WWD service areas includes areas that are designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland under the Farmland Mapping and Monitoring Program (FMMP) (DOC 2016a). The transfer of conserved water would not result in reductions of supplies to existing customers within the EID service area thus no project-related changes in farmland would occur in the County that could impact farmland. The conserved water that was previously lost water through evaporation and seepage from the Upper Main Ditch, would be used for non-consumptive hydropower production and then returned to the SFAR and then flow to Folsom Reservoir. From Folsom Reservoir, the water would be re-regulated for delivery to WWD for use in their service areas south of the Delta, helping to sustain agricultural operations within the WWD service area during the current drought. The proposed project would not convert farmland to nonagricultural uses and could prevent farmland from becoming fallowed. No impact would occur.

b) Would the Project conflict with existing zoning for agricultural use or a Williamson Act contract?

Finding: No Impact

As discussed under question “a” above, the proposed project would not result in any changes to farmland, including lands zoned for agriculture or Williamson Act contracted lands, nor would there be any reduction in water provided to any of these lands. There would be no impact.

c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Finding: No Impact

There are numerous areas that meet the definition of forestland, timberland, and timberland production zones within EID’s service area and in the vicinity of the proposed project, however, the proposed project would not result in changes of water supplies that flow into these areas and would thus not result in any

physical changes. The transfer of conserved water would not result in changes to lands zoned for forest use or timberland use, nor would there be any changes in water provided to any of these lands. No timberland is located in the WWD service area. There would be no impact.

d) Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

Finding: No Impact

As discussed under question “c” above, the proposed project would not result to any physical changes to forest land, nor would there be any changes in water supplies provided to forest land in the area. No construction or substantial operational changes would occur as a result of the proposed project such that loss of forest land or conversion of forest land to non-forest use would occur. There would be no impact.

e) Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Finding: No Impact

As discussed under question “a” through “d” above, the proposed project would not result in any changes to the physical environment or reductions in water use such that conversion of agriculture or forest lands would occur. There would be no impact.

3.3 Air Quality

III. AIR QUALITY Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				X
c) Expose sensitive receptors to substantial pollutant concentrations?				X
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				X

3.3.1 ENVIRONMENT SETTING

The EID service area is located in the Mountain Counties Air Basin which lies along the northern Sierra Nevada, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. The El Dorado County Air Quality Management District attains and maintains air quality conditions in El Dorado County and the Amador County Air Pollution Control District attains and maintains air quality conditions in Amador County.

The WWD service area is located in the San Joaquin Valley Air Basin, which includes all of Fresno and Kings Counties as well as several other Central Valley counties. The San Joaquin Valley Air Pollution Control District implements air quality management strategies to attain and maintain Central Valley air quality standards.

GENERAL AIR QUALITY ENVIRONMENTAL SETTING

The federal Clean Air Act and the California Clean Air Act required the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (ARB) to establish health-based air quality standards at the federal and state levels. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) were established for the following criteria pollutants: carbon monoxide (CO), ozone, sulfur dioxide (SO2), nitrogen dioxide (NO^2), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead. These standards have been established with a margin of safety to protect the public's health. Both EPA and ARB designate areas of the state as attainment, nonattainment, maintenance, or unclassified for the various pollutant standards according to the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively.

An "attainment" designation for an area signifies that pollutant concentrations did not violate the NAAQS or CAAQS for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as identified in the criteria. A "maintenance" designation indicates that the area previously had nonattainment status and currently has attainment status for the applicable pollutant; the

area must demonstrate continued attainment for a specified number of years before it can be redesignated as an attainment area. An “unclassified” designation signifies that data do not support either an attainment or a nonattainment status.

Under the NAAQS, the EID and WWD service areas are designated as nonattainment for 8-hour ozone, and the western portion of the EID service area and all of the WWD service area are designated as nonattainment for $PM_{2.5}$. Under the CAAQS, the EID and WWD service areas are designated as nonattainment for ozone and PM_{10}, and the WWD service area is designated as nonattainment for $PM_{2.5}$ (CARB 2019).

3.3.2 IMPACT DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Finding: No Impact

Air quality plans describe air pollution control strategies to be implemented by an air district, city, county, or region. No construction activities are proposed with the project and no long-term operational or maintenance activities that would generate emissions are proposed. The conserved water would augment WWD existing water supply for use in their service area and would be used for irrigation of agricultural crops. Although agricultural operations may generate air quality emissions, these land uses are existing land uses that would occur without the project. If the proposed project did not occur, WWD would buy water from another water purveyor, pump groundwater to serve the existing land uses in their service areas, and/or fallow existing irrigated agricultural crops. Because water transfer operations and agricultural operations would be within the historic range of typical use, the proposed project would not generate new emissions that would conflict with or obstruct implementation of an air quality plan. There would be no impact.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Finding: No Impact

The analysis of cumulative effects focuses on whether implementing a specific project would result in cumulatively considerable emissions to a significant cumulative impact. For the reasons discussed under “a” above, the proposed project would not generate new air quality emissions and existing agriculture water use would not increase as a result of the project. Therefore, the proposed project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact. There would be no impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Finding: No Impact

Sensitive receptors are defined as facilities or land uses (e.g., residences, schools, hospitals) that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Although there are numerous sensitive receptors within the vicinity of the proposed project, the transfer of water would not result in any construction or substantial changes

in operational activities that would result in increased emissions which could adversely affect these sensitive receptors. There would be no increases in pollutant concentrations as a result of the proposed project. There would be no impact.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Finding: No Impact

Land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, fiberglass molding, and other industrial uses. As discussed under questions “a” through “c” above, the proposed project would not result in any construction activities or substantial changes in operations that could result in increased emissions or pollutants in the area. Therefore, the proposed project would not create new objectionable odors or any other emissions that would adversely affect a substantial number of people. There would be no impact.

3.4 Biological Resources

IV. BIOLOGICAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?				X

3.4.1 ENVIRONMENTAL SETTING

The source of water for this temporary water transfer originates from direct diversions from the SFAR. EID's diverts water from the SFAR at the El Dorado Diversion Dam near Kyburz. Water is conveyed via the El Dorado Canal to the Forebay located in Pollock Pines. At the Forebay, water is re-regulated and delivered for either consumptive use through the Main Pipeline or for hydropower generation at the El Dorado Powerhouse.

The proposed project involves the transfer of water that has been conserved by EID from the conversion of an earthen unlined ditch (Upper Main Ditch) to a pipeline. As described in Section 2, "Project Description", following completion of the piping project in the spring of 2022, EID is able to conserve an average of up to 1,800 AF annually that would have otherwise been lost through seepage and evapotranspiration from the previously unlined ditch.

Because EID is able to meet the same customer consumptive demands served from Forebay as they did prior to the pipeline project with less water, that conserved water would instead be used for non-consumptive hydropower production at the El Dorado Powerhouse, returned into the SFAR, and remain

instream to flow into Folsom Reservoir, where the water will be re-regulated by Reclamation for delivery to WWD for use in their service area south of the Delta. The actual transfer quantity of conserved water will depend on hydrologic conditions and consumptive demand patterns leading up to and during the transfer period; however, the quantity will not exceed 1,800 AF.

Because the proposed project involves the transfer of conserved water utilizing existing facilities and waterways, special status terrestrial biological resources would not be affected by the proposed project and are not further considered in this analysis. Numerous special status aquatic biological resources are potentially present in the waterways in which the conserved water would be conveyed. Foothill yellow-legged frog, red-legged frog, and western pond turtle are documented in the SFAR or its tributaries. Four runs of Chinook salmon, steelhead, green sturgeon, delta smelt and long fin smelt are known to occur in the LAR and/or Delta.

Water management through the Delta is managed by Reclamation and DWR as part of the coordinated operations of the CVP and SWP. Operations are subject to compliance with NMFS and USFWS 2019 Biological Opinions for the Reinitiation of Consultation on the Long-Term Operation of the Central Valley Project and State Water Projects (2019 BiOps) (USFWS 2019; NMFS 2019). Reclamation would provide the conserved water from Folsom Reservoir to federal export facilities to WWD on a schedule that is mutually agreeable and/or beneficial to Reclamation and WWD, and in such a manner that would not disrupt normal CVP operations while complying with all current flow standards for the LAR from Lake Natoma to the confluence with the Sacramento River, 2019 BiOps, as well as the most up-to-date regulatory requirements for the Delta. With or without the proposed project, EID's conserved water would enter Folsom Reservoir.

3.4.2 IMPACT DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Finding: Less Than Significant

Potential Effects Above Folsom

There would be no impact to biological resources, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the CDFW or USFWS with the proposed project at facilities and waterways upstream of Folsom Reservoir. With or without the proposed project, the conserved water would be diverted from the SFAR at the El Dorado Diversion Dam, used for non-consumptive hydropower production at the El Dorado Powerhouse, returned to the SFAR, and then would remain instream to flow into Folsom Reservoir. Therefore, there would be no change to instream flows or water temperatures upstream of Folsom Reservoir associated with implementation of the proposed project. Therefore, there would be no impact, direct or indirect, to protected species that may be present in the area upstream of Folsom Reservoir.

Potential Effects Below Folsom Reservoir

Reclamation would be responsible for coordination and scheduling of the volume and timing of releases of conserved water from Folsom Reservoir for delivery to WWD. Reclamation would provide the

conserved water from Folsom Reservoir to federal export facilities to WWD on a schedule that is mutually agreeable and/or beneficial to Reclamation and WWD, and in such a manner that would not disrupt normal CVP operations while complying with all current flow standards for the LAR from Lake Natoma to the confluence with the Sacramento River, biological opinions for the coordinated operation of the State Water Project and the Central Valley Project, as well as the most up-to-date regulatory requirements for the Sacramento–San Joaquin Delta (Delta) as directed by the SWRCB.

With or without the transfer, the conserved water would flow into Folsom. Therefore, the delivery of up to 1,800 AF of EID's conserved water to Folsom Reservoir is considered the baseline condition. As such, the proposed transfer will not change the timing or volume of water entering Folsom Reservoir and would not influence the temperature of the water entering Folsom Reservoir.

Release of the transfer water from Folsom Reservoir would be coordinated by Reclamation and the regulatory agencies in compliance with all applicable requirements for flow and temperature in the LAR to protect aquatic resources. Releases from Folsom Reservoir first enter the LAR which in turn flows into the Sacramento River. During summer months, stream flows in the American River, Sacramento River, and Sacramento-San Joaquin Delta are typically dominated by CVP and SWP deliveries, as well as temporary water transfers. This is largely related to the fact that the normal, historical unimpaired hydrology of the American and Sacramento rivers, as well as those of the Delta and its tributaries, would typically support a declining hydrograph during these summer months. Given the relatively small quantity of conserved water to be conveyed with the proposed project, benefits or potential adverse impacts to the aquatic environment downstream of Folsom Reservoir as a result of the proposed project are anticipated to be negligible even in a year like 2022 when CVP/SWP deliveries are significantly reduced.

Given that any release of transfer water from Folsom Reservoir would be coordinated with the system-wide operation of the CVP and SWP, including compliance with the 2019 BiOps, potential impacts, direct or indirect, to protected species that may be present in the area downstream of Folsom Reservoir would be considered less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?

Finding: No Impact

With or without the proposed project, there would be no change to instream flows upstream of Folsom Reservoir associated with implementation of the proposed project and as such there would be no potential adverse effect on any riparian habitat or other sensitive natural community. The release of conserved water from Folsom Reservoir for delivery to WWD would be integrated into Reclamation's current operations and is anticipated to be within the historic range of operational levels and flow regimes for all involved waterways. Given the relatively small quantity of conserved water to be transferred and that the operations would be coordinated with system-wide CVP operations, there would be no adverse effects on any riparian habitat or other sensitive natural community. There would be no impact.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Finding: No Impact

With or without the proposed project, there would be no change to instream flows upstream of Folsom Reservoir associated with implementation of the proposed project and as such there would be no potential adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act. The release of conserved water from Folsom Reservoir for delivery to WWD would be integrated into Reclamation's current operations and is anticipated to be within the historic range of operational levels and flow regimes for all involved waterways. Given the relatively small quantity of conserved water to be transferred and that the operations would be coordinated with system-wide CVP operations, there would be no adverse effects on federally protected wetlands as defined by Section 404 of the Clean Water Act. There would be no impact.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Finding: Less than Significant

With or without the proposed transfer, there would be no change to instream flows upstream of Folsom Reservoir associated with implementation of the proposed project and as such there would be no potential to substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The release of conserved water from Folsom Reservoir for delivery to WWD would be integrated into Reclamation's current operations and is anticipated to be within the historic range of operational levels and flow regimes for all involved waterways. Given the relatively small quantity of conserved water to be transferred and that the operations would be coordinated with system-wide CVP operations, there would negligible potential for the proposed project to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Impacts would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Finding: No Impact

The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There would be no impact.

f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?

Finding: No Impact

The proposed project would not conflict with a habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.

3.5 Cultural Resources

V. CULTURAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				X
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				X

3.5.1 ENVIRONMENTAL SETTING

The Sierra Nevada and Central Valley of California contain a wide range of ecological zones that have supported prehistoric and historic people for thousands of years. Their long record of occupation and activities has left numerous prehistoric and historic-era remains on the landscape, including scattered artifacts, the remains of seasonal and long-term occupation, human interments, buildings, structures, and in some cases heavily altered landscapes.

3.5.2 IMPACT DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could impact historical resources. The conserved water would be transferred through existing facilities and would not result in construction or alteration of any of these facilities. There would be no impact.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes and there would be no ground disturbing activities that would impact archaeological resources. The conserved water would be transferred through existing facilities and would not result in construction or alteration of any of these facilities. There would be no impact.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could impact human remains. The conserved water would be transferred through existing facilities and

would not result in construction or alteration of any of these facilities. No ground disturbing activities would occur as part of the proposed project. There would be no impact.

3.6 Energy

VI. Energy Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

3.6.1 ENVIRONMENTAL SETTING

EID uses utility grid power throughout its service area through approximately 168 different Pacific Gas & Electric Company (PG&E) service connections to provide drinking water, wastewater, recycled water, and recreational services. EID also operates the 21-megawatt El Dorado Hydroelectric Project, which is located on the SFAR and utilizes direct diversions and releases from storage from four upstream reservoirs (Silver Lake, Caples Lake, Lake Aloha, and Echo Lake) to generate hydroelectric power. Power generated at the El Dorado Powerhouse is delivered to the PG&E transmission system at the Powerhouse switchyard.

PG&E owns and operates electricity infrastructure throughout Northern California that includes power lines, powerhouses, and substations. PG&E operates the powerhouses located at Chili Bar on the SFAR.

Reclamation operates Folsom and Nimbus Dams to generate hydroelectric power. Folsom is a 198-megawatt peaking powerplant which is dedicated first to meeting the requirements of the CVP facilities. The remaining energy is marketed to various preference customers in northern California. This plant also provides power for the pumping plant, which supplies the local domestic water supply (Reclamation 2022b). Nimbus Dam, located 7 miles downstream of Folsom Dam on the American River, regulates releases made through Folsom Dam. Nimbus Powerplant's two generators have a capacity of 7.8-megawatts (Reclamation 2022c).

The San Luis & Delta Mendota Water Authority operates the Jones Pumping Plant for Reclamation. The pumping plant near Tracy, California, lifts water at the southern end of the Sacramento-San Joaquin Delta into the Delta-Mendota Canal (DMC), which delivers water to CVP water service contractors, exchange contractors, and wildlife refuges. The pumping plant lifts water nearly 200 feet from the Delta into the DMC through 15-foot diameter pipes with six 22,500-horsepower motors capable of pumping a total of 8,500 acre-feet per day (Reclamation 2022d).

No natural gas is directly consumed to operate EID facilities involved in the proposed project.

3.6.2 IMPACT DISCUSSION

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Finding: Less Than Significant

The proposed project does not include any construction activities, therefore there would be no potential to result in wasteful, inefficient, or unnecessary consumption of energy resources during construction.

The conserved water will be used for non-consumptive hydropower production at EID's El Dorado Powerhouse, returned to the South Fork of the American River, and then flow into Folsom Reservoir. At Folsom Reservoir the water would be re-regulated for delivery to WWD for use in their service areas south of the Delta. Given the relatively small quantity of water proposed for transfer, the proposed project would result in a negligible increase in the overall pumping at the Jones Pumping Plant to pump the transfer water for distribution. Furthermore, the energy being consumed is for the conveyance of water, which is a necessary resource for agriculture, manufacturing, and drinking water, and would therefore not be considered wasteful. There would be no permanent or substantial changes to flows and therefore, operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Finding: No Impact

There are no energy policies or plans that would be applicable to the proposed project and therefore there would be no impact.

3.7 Geology and Soils

VII. GEOLOGY AND SOILS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

3.7.1 ENVIRONMENTAL SETTING

EID's service area is located within the geomorphic province of the Sierra Nevada, which is a northwest trending mountain range that extends for 400 miles in length, and 40 to 100 miles in width. Sierra Nevada bedrock consists of varied rock types and geological ages, from Paleozoic metamorphic to Holocene sedimentary and volcanic rock.

WWD's service area is located in the geomorphic province of the Great Valley. The Great Valley is an alluvial plain about 50 miles wide and 400 miles long in the central part of California. Its northern part is the Sacramento Valley, drained by the Sacramento River and its southern part is the San Joaquin Valley drained by the San Joaquin River. The Great Valley is a trough in which sediments have been deposited almost continuously since the Jurassic (DOC 2002a).

Active faults are present within all of the geomorphic providences in proximity to the proposed project.

3.7.2 IMPACT DISCUSSION

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Finding: No Impact

The proposed project involves the transfer of conserved water that would occur through existing facilities and waterways and would result in no physical changes to these facilities and would therefore not result in an increased risk. The proposed project would not directly or indirectly cause potential substantial adverse effects involving rupture of a known fault, strong seismic ground shaking, seismic induced ground failure, or landslides. There would be no impact.

b) Result in substantial soil erosion or the loss of topsoil?

Finding: No Impact

The proposed project does not include any construction activities or movement of soils. The transfer of conserved water would occur through existing facilities and waterways and would result in no physical changes to these facilities. Therefore, there would be no increased potential for erosion with the proposed project. There would be no impact.

c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Finding: No Impact

The proposed project does not include any construction activities or movement of geologic units or soils. The transfer of conserved water would occur through existing facilities and waterways and would result in no physical changes to these facilities. None of these existing facilities are located within geologic units that are unstable. There would be no impact.

d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial risks to life or property?

Finding: No Impact

The proposed project does not include any construction activities or development of new facilities or structures that would have the potential to be located on expansive soils. The transfer of conserved water would occur through existing facilities and waterways and would result in no physical changes to these facilities. There would be no impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Finding: No Impact

The proposed project would not include septic tanks or wastewater treatment. There would be no impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could impact paleontological resources. The conserved water would be transferred through existing facilities and would not result in construction or alteration of any of these facilities. No ground disturbing activities would occur as part of the proposed project. There would be no impact to paleontological resources.

3.8 Greenhouse Gas Emissions

VIII. GREENHOUSE GAS EMISSIONS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				X
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

3.8.1 ENVIRONMENTAL SETTING

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 420 million metric tons of carbon dioxide equivalent (MMTCO2e) per year. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions. Emissions of GHGs contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing, electricity generation by utilities and consumption by end users, residential and commercial on-site fuel usage, and agriculture and forestry. Emissions of CO2 are, largely, byproducts of fossil fuel combustion.

Assembly Bill 32 was established by CARB to provide statewide GHG emissions cap for 2020, adopt mandatory reporting rules for significant sources of GHG, and adopt comprehensive Climate Action Scoping Plans to help identify how emission reductions will be achieved. Assembly Bill 32 was then amended by Senate Bill 32 on September 16, 2016, and further required that statewide GHG emissions are reduced to 40 percent below the 1990 level by the year 2030 (CARB 2018).

The CEQA Guidelines focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (CEQA Guidelines Section 15064[h][3]). A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.

3.8.2 IMPACT DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Finding: No Impact

The proposed project does not include any construction or substantial operational activities that would increase GHG emissions. Water would be transferred through the existing facilities and no alterations of these facilities would occur. Therefore, because the proposed project would not result in any construction or substantial operational changes, the proposed project would not generate any new GHG emissions that would have a significant impact on the environment.

The conserved water transferred to WWD would be used for agricultural activities that may contribute to GHG emissions. The conserved water would augment WWD existing water supply for use in their service area and would be used for irrigation of agricultural crops. Although agricultural operations may generate GHG emissions, these land uses are existing land uses that would occur without the project. If the proposed project did not occur, WWD would buy water from another water purveyor or pump groundwater to serve the existing land uses in their service areas. Because water transfer operations and agricultural operations would be within the historic range of typical use, the proposed project would not generate new GHG emissions that would otherwise be generated in any given year. Additionally, given the relatively small quantity of water being transferred (up to 1,800 AF) compared to the average volume of water utilized for agricultural purposes in the Central Valley (5 million AF from the CVP), the GHG emissions produced by implementation of the proposed project would not be considered to have a significant impact on the environment. There would be no impact.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Finding: No Impact

The proposed project would not conflict with plans, policies, or regulations prepared or established to reduce GHG emissions. As discussed under question “a” above, water would be transferred through the existing facilities and no alterations of these facilities would occur. There would be no impact.

3.9 Hazards and Hazardous Materials

IX. HAZARDS AND HAZARDOUS MATERIALS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

3.9.1 ENVIRONMENTAL SETTING

General Hazards

Hazardous materials such as diesel, gasoline, oils, and lubricants are typically associated with construction activities and industrial uses. No hazardous materials are associated with the proposed project.

Schools

There are numerous schools located within EID and WWD service areas, most of which are centered around developed areas.

Airports

There are numerous airports within EID and WWD service areas.

Cortese List Sites

The Cortese list, which is compiled pursuant to Government Code Section 65962, is used to comply with CEQA requirements and provides a list of the known locations of hazardous material release sites. The EnviroStor and GeoTracker databases, which are managed by the California Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB), respectively, are used to determine the proximity of a project to the nearest hazardous materials site. A desktop review of both the EnviroStor and GeoTracker databases identified numerous hazardous materials sites throughout EID's service area and WWD's service area (DTSC 2022, SWRCB 2022), however there are no known hazardous materials sites within the proposed project area.

Wildfires

The severity of wildland fires is influenced primarily by vegetation, topography, and weather (temperature, humidity, and wind). The California Department of Forestry and Fire Protection (CAL FIRE) hazard severity scale considers vegetation, climate, and slope to evaluate the level of wildfire hazard in a State Responsibility Area (SRA). CAL FIRE designates three levels of Fire Hazard Severity Zones (Moderate, High, and Very High) to indicate the severity of fire hazard in a particular geographical or SRA area. El Dorado County and the EID service area contain areas that include Very High, High, and Moderate fire zones, as identified on the Fire Hazard Severity Zone Viewer developed by CAL FIRE (CAL FIRE 2022). WWD's service area is located within a Local Responsibility Area and does not have fire hazard severity zones defined.

3.9.2 IMPACT DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities that would result in increased transport, use, or disposal of hazardous materials. Water would be transferred through existing facilities and waterways and no new sources of hazardous materials would be created as a result of the proposed project. There would be no impact.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities that would result in increased risk of release of hazardous materials. Water would be transferred through existing facilities and waterways and no new sources of hazardous materials would be created as a result of the proposed project. There would be no impact.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Finding: No Impact

Although there are schools located within 0.25 mile of EID facilities, the proposed project does not include any increases in hazardous materials or emissions. There are no construction activities associated with the proposed project and no substantial changes in operational activities such that increases in hazardous materials or emissions would occur. There would be no impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Finding: No Impact

As discussed in Section 3.9.1, Environmental Setting, above, there are numerous hazardous materials/Cortese listed sites within EID's service area and WWD's service area (DTSC 2022, SWRCB 2022). However, the proposed project does not include substantial changes in operational use such that interference or interaction with any of these sites could occur. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. There would be no impact.

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

Finding: No Impact

There are several airports in the EID service area, however the proposed project does not include any construction activities or substantial changes in operational use such that safety hazards or excessive noise would occur. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. There would be no impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which would interfere with an adopted emergency response plan or emergency evacuation plan. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. There would be no impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Finding: No Impact

Although there are portions of El Dorado County and the EID service area that are within Very High and Moderate fire hazard severity zones (CAL FIRE 2022), the proposed project does not include any construction activities or substantial operational changes that would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. WWD's service area is located within a Local Responsibility Area and does not have fire hazard severity zones defined by CAL FIRE, no features of the proposed project would increase the fire danger in the WWD's service area. There would be no impact.

3.10 Hydrology and Water Quality

X. Hydrology and Water Quality Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial on-or offsite erosion or siltation;			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;			X	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) Impede or redirect flood flow			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

3.10.1 ENVIRONMENTAL SETTING

Hydrology

EID's water sources are provided from surface water from the west slope of the Sierra Nevada in the SFAR and the Cosumnes River watersheds. Surface water is diverted from streams and reservoirs and conveyed via canals and pipelines. Access to groundwater is relatively limited when compared to surface water due to geologic conditions and the related fragmented/fractured rock groundwater system found in EID's service area, although wells remain a primary source of water in rural areas.

The source of water for this temporary water transfer originates from direct diversions from the SFAR. EID's diverts water from the SFAR at the El Dorado Diversion Dam near Kyburz. Water is conveyed via the El Dorado Canal to the Forebay located in Pollock Pines. At Forebay, water is re-regulated and delivered for either consumptive use through the Main Pipeline or for hydropower generation at the El Dorado Powerhouse.

The proposed project involves the transfer of water that has been conserved by EID from the conversion of an earthen unlined ditch (Upper Main Ditch) to a pipeline. As described in Section 2, "Project Description", following completion of the piping project in the spring of 2022, EID is able to conserve an average of up to 1,800 AF annually that would have otherwise been lost through seepage and evapotranspiration from the previously unlined ditch.

Because EID is able to meet the same customer consumptive demands served from Forebay as they did prior to the pipeline project with less water, that conserved water would instead be used for non-consumptive hydropower production at the El Dorado Powerhouse, returned into the SFAR, and remain instream to flow into Folsom Reservoir, where the water will be re-regulated by Reclamation for delivery to WWD for use in their service area south of the Delta. The actual transfer quantity of conserved water will depend on hydrologic conditions and consumptive demand patterns leading up to and during the transfer period; however, the quantity will not exceed 1,800 AF.

Water Quality

SWRCB requires water providers to conduct a source water assessment to help protect the quality of water supplies. The assessment describes where a water system's drinking water comes from, the types of polluting activities that may threaten the quality of the source water, and an evaluation of the water's vulnerability to the threats.

Updated assessments of EID's drinking water sources were most recently completed in 2021. EID source water is considered most vulnerable to recreation, residential sewer, septic system, and urban runoff activities, which are associated with constituents detected in the water supply. EID source water is also considered most vulnerable to illegal activities, dumping, fertilizer, pesticide and herbicide application, forest activities, and wildfires. EID's water quality monitoring program includes taking samples of raw and treated water throughout the year from many locations in EID's service area. Analyses cover more than 100 different constituents. No maximum contaminant level violations were detected in the most recent reported samplings (EID 2021).

3.10.2 IMPACT DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Finding: Less Than Significant

The proposed project would not violate any water quality standards or waste discharge requirements. The proposed water transfer would use existing infrastructure and waterways operating within all applicable requirements. The conserved water is currently diverted from the SFAR at the El Dorado Diversion Dam near Kyburz, conveyed via the El Dorado Canal to the Forebay located in Pollock Pines, and because EID can meet the same consumptive demand with less water following implementation of the piping

project, the conserved water is used for hydropower generation at the El Dorado Powerhouse, returned to the SFAR, and then flows to Folsom Reservoir. The conserved water delivered to Folsom Reservoir would be re-regulated for delivery to WWD for use in their services area south of the Delta. With or without the proposed project, the conserved water will be used for non-consumptive hydropower production, returned to the SFAR, and then flow into Folsom Reservoir. With the project, Reclamation would provide the conserved water from Folsom Reservoir to federal export facilities to WWD on a schedule that is mutually agreeable and/or beneficial to Reclamation and WWD, and in such a manner that would not disrupt normal CVP operations while complying with all current flow standards for the LAR from Lake Natoma to the confluence with the Sacramento River, biological opinions for the coordinated operation of the State Water Project and the Central Valley Project, as well as the most up-to-date regulatory requirements for the Sacramento–San Joaquin Delta (Delta) as directed by the SWRCB.

The proposed project would not include construction activities that could temporarily degrade surface or groundwater. The proposed project would use existing facilities and waterways operating within all applicable requirements. Given the documented quality of EID's water supply (EID 2021) and relatively small amount of conserved water to be transferred, the proposed project would not violate water quality standards or waste discharge requirements. Reclamation's delivery of the conserved water to WWD likewise would not violate water quality standards or waste discharge requirements because the water would be conveyed in compliance with all regulatory requirements. Agricultural activities in the WWD service area would not change as a result of the proposed project, and no new violations in water quality standards or waste discharge requirements are expected to occur. Therefore, impacts would be considered less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Finding: No Impact

No substantial effects on groundwater hydrology would occur from proposed project. Flows in the affected waterways upstream of Folsom Reservoir would be the same with or without the proposed project and flows downstream of Folsom Reservoir would be within typical ranges normally experienced during the transfer period and would not have a noticeable impact on either accretion from or depletion from the affected waterways. WWD participates and directs groundwater monitoring, management, and banking operations within their service area to improve groundwater levels. The proposed project provides WWD with a surface water supply and would not increase groundwater usage within WWD's service area. No impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on-or offsite erosion or siltation;

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) Impede or redirect flood flow?

Finding: Less Than Significant

The proposed project would not include construction activities that could result in substantial on-or offsite erosion or siltation, substantially increase the rate or amount of surface runoff, create or contribute runoff water, or impede or redirect flood flows. The proposed project would use existing facilities and waterways operating within all applicable requirements. Flows in the affected waterways upstream of Folsom Reservoir would be the same with or without the proposed project and flows downstream of Folsom Reservoir would be within typical ranges normally experienced during the transfer period. Given the relatively small amount of conserved water to be transferred, the conveyance of the conserved water from Folsom Reservoir to WWD would not result in substantial on-or offsite erosion or siltation, substantially increase the rate or amount of surface runoff, create or contribute runoff water, or impede or redirect flood flows. Therefore, impacts would be considered less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Finding: No Impact

The proposed project would not result in inundation by seiche, tsunami, or mudflow. There would be no impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Finding: No Impact

The proposed project would not include construction activities that could temporarily degrade water quality and the proposed project would not result in degradation of existing water quality at any of the involved facilities or waterways. The project would not involve the use of groundwater. In addition, water usage and agricultural operations within the WWD service areas would not change as a result of the proposed project. Use of the surface water from the proposed project in the WWD service area would potentially result in a decrease in groundwater pumping due to increased surface water supplies which would help aid in groundwater sustainability. With the project, Reclamation would provide the conserved water from Folsom Reservoir to federal export facilities to WWD on a schedule that is mutually agreeable and/or beneficial to Reclamation and WWD, and in such a manner that would not disrupt normal CVP operations while complying with all current flow standards for the LAR from Lake Natoma to the confluence with the Sacramento River, biological opinions for the coordinated operation of the State Water Project and the Central Valley Project, as well as the most up-to-date regulatory requirements for the Sacramento–San Joaquin Delta (Delta) as directed by the SWRCB. Therefore, the project would not interfere with implementation of a water quality control plan or sustainable groundwater management plan and no impact would occur.

3.11 Land Use and Planning

XI. LAND USE AND PLANNING Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

3.11.1 ENVIRONMENTAL SETTING

Land uses are varied throughout El Dorado County and the EID service area and can include, but are not limited to, commercial, residential, agricultural lands, recreational areas, industrial, residential, open space, and public facilities (EID 2013). Similar to land uses in EID's service area, land uses in WWD's service area include agriculture, residential, commercial, industrial, public facilities, agricultural lands, open space, and recreational areas.

3.11.2 IMPACT DISCUSSION

a) Physically divide an established community?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could result in division of an established community. The water transfer would occur through existing facilities and no changes to these facilities are proposed. There would be no impact.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could result in changes in land use or conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The water transfer would occur through existing facilities and no changes to these facilities are proposed. There would be no impact.

3.12 Mineral Resources

XII. MINERAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X

3.12.1 ENVIRONMENTAL SETTING

El Dorado County contains a wide variety of mineral resources and Mineral Resource Zones (MRZ) as designated by the Surface Mining and Reclamation Act of 1975 (SMARA) (El Dorado County 2003). Sand, gravel, and oil have been mapped in the vicinity of the WWD service area (Fresno County 2000).

3.12.2 IMPACT DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could result in loss of availability of a known mineral resource. The water transfer would occur through existing facilities and no changes to these facilities are proposed. There would be no impact.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could result in loss of availability of a locally important mineral resource site delineated on a local general plan, specific plan, or other land use plan. The water transfer would occur through existing facilities and no changes to these facilities are proposed. There would be no impact.

3.13 Noise

XIII. Noise Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or applicable standards of other agencies?				X
b) Generation of excessive groundborne vibration or groundborne noise levels?				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

3.13.1 ENVIRONMENTAL SETTING

The existing noise environment in a project area is characterized by the area's general level of development because the level of development and ambient noise levels tend to be closely correlated. Areas which are not urbanized are relatively quiet, while areas which are more urbanized are noisier as a result of roadway traffic, industrial activities, and other human activities. Typical noise sources in EID's service area include highways and roadways, business centers and commercial areas, recreational areas and activities, and natural sources (e.g., wildlife, flowing water, wind, etc.). Typical noise sources in WWD's service area include equipment for agricultural production, highways and roadways, business centers and commercial areas, recreational areas and activities, air traffic, and natural sources (e.g., wildlife, flowing water, wind, etc.).

3.13.2 IMPACT DISCUSSION

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or applicable standards of other agencies?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which could result in increased noise levels. The water transfer would occur through existing facilities and no changes to these facilities are proposed, therefore there would be no increases in noise levels in excess of standards established in the local general plans or applicable standards of other agencies. There would be no impact.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which could result in increased groundborne vibration or groundborne noise levels. The water transfer would occur through existing facilities and no changes to these facilities are proposed, therefore there would be no increases in groundborne vibrations. There would be no impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Finding: No Impact

While there are several airports in the EID and WWD service areas, the proposed project does not include any construction activities or substantial changes in operational use such that any increases in noise would occur. Water would continue to be transferred through existing facilities and waterways and no changes to these facilities would occur. There would be no impact.

3.14 Population and Housing

XIV. Population and Housing Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

3.14.1 ENVIRONMENTAL SETTING

The population in El Dorado County in 2021 was 193,221 with EID providing service to more than 125,000 people throughout the County (USCB 2022, EID 2022). WWD serves water for approximately 600 family-owned farms in Fresno and Kings Counties.

3.14.2 IMPACT DISCUSSION

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Finding: No Impact

The proposed project would not result in a long-term or permanent water supply that would allow construction of new homes or businesses or extension of roadways or other infrastructure that could increase the population in the vicinity of the proposed project. Implementing the proposed project would not directly or indirectly induce substantial population growth. The proposed project could prevent agricultural land from becoming fallowed, but it would not expand agricultural activities beyond existing levels. Further, the transfer water would be conveyed through existing facilities and waterways and no changes to these facilities would occur. No impact would occur

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Finding: No Impact

The proposed project does not include construction or substantial changes in operational activities that could result in displacement of substantial numbers of people. There would be no impact.

3.15 Public Services

XV. PUBLIC SERVICES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other Public Facilities?				X

3.15.1 ENVIRONMENTAL SETTING

EID's service area is generally located within unincorporated areas of El Dorado County and is protected by numerous police and fire protection districts which provide police and fire protection services to residents and businesses throughout the County. Fresno and Kings County Sheriff's Departments and Fire Protection Districts operate in the WWD service area.

School districts in the vicinity of the EID facilities where the conserved water originates include Pollock Pines Elementary School District and Camino Union School District. School districts in the WWD service area include Mendota Unified School District, Central Union School District, and Coalinga-Huron School District.

EID owns and operates several recreational facilities, including facilities at Jenkinson Lake and Silver Lake (Sly Park Recreation Area). Several recreational areas are located in the WWD service area, including fishing access and Mendota Wildlife Management Area.

3.15.2 IMPACT DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire Protection?
Police Protection?
Schools?

Parks?
Other Public Facilities?

Finding: No Impact

The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services. The proposed project would not create any new structures or uses or result in population growth that would affect schools, fire protection, police protection, parks, or other public facilities. The proposed project would not include any construction activities and all operational activities would occur within the existing infrastructure and waterways. No impact would occur.

3.16 Recreation

XVI. Recreation Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				**X**
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				**X**

3.16.1 ENVIRONMENTAL SETTING

EID owns and operates several recreational areas including the facilities at Jenkinson Lake/Sly Park Recreation Area and Forebay Reservoir. The SFAR is a popular recreational area, especially in spring and summer months and includes trails, rafting, kayaking, and fishing opportunities. Several recreational areas are located in the WWD service area, including fishing access and Mendota Wildlife Management Area.

3.16.2 IMPACT DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Finding: No Impact

The proposed project would not create any new structures or uses or result in population growth that would cause increased use of existing parks or other recreational facilities in the area. The proposed project would not include any construction activities and all operational activities would occur within the existing infrastructure and waterways. No impact would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Finding: No Impact

The proposed project would not create any new structures or uses or result in the construction or expansion of recreational facilities in the area. The proposed project would not include any construction activities and all operational activities would occur within the existing infrastructure and waterways. The project would not alter flows in the SFAR or inflows into Folsom, nor would the project affect water levels at any recreational facility. No impact would occur.

3.17 Transportation

XVII. Transportation Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities				X
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

3.17.1 ENVIRONMENTAL SETTING

Major roadways within the El Dorado County and the EID service area include Highway 50, which travels in an east/west direction through the County, as well as Highway 49, which travels in a north/south direction through the county. Surface roadways and country roadways are distributed throughout the county near cities and in rural areas, respectively. Roads in the WWD service area are primarily rural in character. Interstate 5 runs in a north-south direction along the western boundary of the WWD service area.

3.17.2 IMPACT DISCUSSION

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which would interfere with existing programs, plans, ordinances, or policies addressing the circulation system in the area. The project will not alter normal agricultural operations within WWD. No additional vehicles would be added to roadways as a result of the proposed project. There would be no impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities that would increase vehicle miles travelled (VMT). The project will not alter normal agricultural operations within WWD. In addition, the proposed water transfer would not result in long-term changes in

land uses or new facilities that would cause increases in VMT and no additional vehicles would be added to roadways as a result of the proposed project. There would be no impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which could create increased hazards or incompatible uses. The project will not alter normal agricultural operations within WWD. No additional vehicles would be added to roadways as a result of the proposed project. There would be no impact.

d) Result in inadequate emergency access?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which would interfere with emergency access in the area. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. The project will not alter normal agricultural operations within WWD. No additional vehicles would be added to roadways as a result of the proposed project. There would be no impact.

3.18 Tribal Cultural Resources

XVIII. Tribal Cultural Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				**X**
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				**X**

3.18.1 ENVIRONMENTAL SETTING

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. California Native Americans are classified and subdivided into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the current project area and includes the Nisenan or Southern Maidu and Northern Sierra Miwok. The Washoe also utilized the Project area but are included in the Great Basin culture area. Nisenan inhabited the drainages of the Yuba, Bear, and American rivers, and also the lower reaches of the Feather River, extending from the east banks of the Sacramento River on the west to the mid-/high elevations of the western flank of the Sierra Nevada. Northern Sierra Miwok inhabited the southern end of the area bounded on the north by the Cosumnes River, extending beyond the Calaveras River to the south, demarcated on the west by the 500-foot elevation contour, and continuing toward the east to beyond the snowline. Washoe historically inhabited the region east of the crest of the Sierra Nevada into Carson Valley, extending from the Walker River in the south to Honey Lake in the north, with peripheral territory extending to the mid-elevations of the west Sierra slope. All three ethnographic groups probably exploited resources in the proposed project area (EID 2018).

AB 52 Consultation

AB 52 applies to those projects for which a lead agency had issued a notice of preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration on or after July 1, 2015. Therefore, the requirements of AB 52 apply to the proposed project.

Under AB 52, the Shingle Springs Band of Miwok Indians, Torres Martinez Desert Cahuilla Indians, United Auburn Indian Community of the Auburn Rancheria, Wopumnes Nisenan-Mewuk Nation of El Dorado County, and Wilton Rancheria have requested that EID, as a CEQA lead agency, formally notify them of any proposed projects within their geographic area of traditional and cultural affiliation. EID sent formal notification of the project to all of these tribes on June 3, 2022. Responses were requested within 30 days. No responses from tribes or requests for consultation pursuant to AB 52 were received.

3.18.2 IMPACT DISCUSSION

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could impact tribal cultural resources. The conserved water would be transferred through existing facilities and would not result in construction or alteration of any of these facilities. No ground disturbing activities would occur as part of the proposed project. There would be no impact.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Finding: No Impact

The proposed project does not include any construction activities or substantial operational changes that could impact tribal cultural resources. The conserved water would be transferred through existing facilities and would not result in construction or alteration of any of these facilities. No ground disturbing activities would occur as part of the proposed project. There would be no impact.

3.19 Utilities and Service Systems

XIX. Utilities and Service Systems Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?				**X**
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				**X**
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?				**X**
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				**X**
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				**X**

3.19.1 ENVIRONMENTAL SETTING

EID provides wide-ranging services for water, wastewater treatment, and recycled water systems, as well as hydropower and parks and recreation for nearly 125,000 residents (EID 2022). WWD serves water for approximately 600 family-owned farms in Fresno and Kings Counties.

3.19.2 IMPACT DISCUSSION

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Finding: No Impact

The proposed project involves the transfer of raw water and would not include changes to water treatment facilities for EID or WWD. The proposed project would not require wastewater service and no expansion of existing or construction of new water or wastewater facilities would be required. In addition, the project

would not increase demand for natural gas or telecommunication facilities. As discussed in Section 3.6, "Energy," the proposed water transfer would require pumping to convey the water. However, the project would not require any new or expanded electrical facilities and given the relatively small quantity of water proposed for transfer, the proposed project would result in only a negligible increase in the overall pumping at the Jones Pumping Plant to pump the transfer water for distribution. There would be no impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Finding: No Impact

No new water supplies would be required for the proposed project. In addition, the proposed project would not include any new development that would require public water supplies. Thus, no new or expanded water supply entitlements would be needed. The proposed project includes the temporary transfer of conserved water through existing facilities and waterways. This conserved water supply is not needed to meet EID's current consumptive demands. The water would be used within the WWD's service areas in support of ongoing agricultural uses. There would be no impact.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

Finding: No Impact

The proposed project would not increase wastewater generation. Thus, the proposed project would not exceed a wastewater treatment provider's capacity. There would be no impact.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Finding: No Impact

Any solid waste generated during proposed project activities would be in the WWD service area, and would be incidental and no different than current conditions. No impact would occur.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Finding: No Impact

Any solid waste generated during agricultural activities would be in the WWD service area, would be incidental, and would be disposed in local landfills. Transportation and disposal would be in accordance with all applicable federal, state, and local statutes and regulations. No impact would occur.

3.20 Wildfire

XX. Wildfire Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

3.20.1 ENVIRONMENTAL SETTING

The severity of wildland fires is influenced primarily by vegetation, topography, and weather (temperature, humidity, and wind). The CAL FIRE hazard severity scale considers vegetation, climate, and slope to evaluate the level of wildfire hazard in a SRA. CAL FIRE designates three levels of Fire Hazard Severity Zones (Moderate, High, and Very High) to indicate the severity of fire hazard in a particular geographical or SRA area. El Dorado County and the EID service area contain areas that include Very High, High, and Moderate fire zones, as identified on the Fire Hazard Severity Zone Viewer developed by CAL FIRE. WWD's service area is located within a Local Responsibility Area and does not have fire hazard severity zones defined (CAL FIRE 2022).

3.20.2 IMPACT DISCUSSION

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Finding: No Impact

The proposed project does not include any construction activities or substantial changes in operational activities which would interfere with emergency access in the area or impair implementation of an adopted emergency response plan or emergency evacuation plan. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. There would be no impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Finding: No Impact

The proposed project does not include any construction activities or development of new housing or facilities or other land uses where the public would congregate. There would be no project occupants that could be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Water would be transferred through existing facilities and waterways and no changes to these facilities would occur. There would be no impact.

c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Finding: No Impact

No infrastructure (such as roads, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment are proposed. The proposed project does not include any construction activities or any physical alteration of facilities such that fire risks would be exacerbated. No impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Finding: No Impact

The proposed project does not include any construction activities which could expose people or structures to significant risks from post-fire flooding or landslides. The water transfer would occur through existing facilities and waterways and no alterations to the facilities are required. There would be no impact.

3.21 Mandatory Findings of Significance

XXII. Mandatory Findings of Significance	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			X	

3.21.1 IMPACT DISCUSSION

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Finding: Less than Significant

The analysis conducted in this IS concludes that implementation of the proposed project would not have a significant impact on the environment. As evaluated in Section 3.4, "Biological Resources," impacts on biological resources would be less than significant. Therefore, the proposed project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of an endangered, rare, or threatened species.

As evaluated in Section 3.5, “Cultural Resources,” the proposed project would not eliminate important examples of the major periods of California history or prehistory.

Overall, impacts would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Finding: No Impact

As discussed in the IS, all of the potential project impacts would result in a less than significant or no impact. Given the relatively small quantity of water proposed for transfer, the temporary nature of the proposed project, and because no construction activities or long-term operations and maintenance activities are necessary to facilitate the proposed project, there would be no impact or less-than-significant impacts on the physical environment. None of the proposed project’s impacts make cumulatively considerable, incremental contributions to significant cumulative impacts. This impact would be less than significant

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Finding: Less Than Significant Impact

The proposed project would not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. All of the identified impacts were determined to be less than significant or to have no impact. Therefore, the proposed project’s environmental effects would be less than significant.

4 References

California Air Resource Board (CARB). 2019. Area Designations for State Standards. Available: https://ww2.arb.ca.gov/our-work/programs/state-and-federal-area-designations/state-area-designations/summary-tables. Accessed: June 22, 2022.

_____. 2018. Climate pollutants fall below 1990 levels for first time. Available: https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time. Accessed: June 22, 2022

California Department of Conservation (DOC). 2016a. California's Geomorphic Province California Important Farmland Finder. Available: https://www.conservation.ca.gov/dlrp/fmmp. Accessed: July 8, 2022.

_____. 2016b. Williamson Act Program https://www.conservation.ca.gov/dlrp/lca. Accessed: July 8, 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer. Available: https://egis.fire.ca.gov/FHSZ/. Accessed: June 22, 2022.

California Department of Toxic Substances Control (DTSC). 2022. EnviroStor. Available: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=el+dorado+county. Accessed June 22, 2022.

California Department of Transportation (Caltrans). 2022. California State Scenic Highway System Map. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed: June 21, 2022.

El Dorado County. 2004, as amended. El Dorado County General Plan. Last amended December 10, 2019. Available: https://www.edcgov.us/Government/Planning/pages/Adopted_General_Plan.aspx. Accessed: June 21, 2022.

_____. 2003. El Dorado County General Plan EIR. Available: https://www.edcgov.us/Government/planning/pages/draft_environmental_impact_report_(deir).aspx. Accessed: June 21, 2022.

El Dorado Irrigation District (EID). 2022. District Information. Available: https://www.eid.org/about-us/district-information. Accessed; June 22, 2022.

_____. 2021. El Dorado Irrigation District 2021 Water Quality Report. Available: https://www.eid.org/home/showpublisheddocument/15321. Accessed June 30, 2022.

_____. 2018. El Dorado Irrigation District Upper Main Ditch Piping Project Draft Environmental Impact Report. Accessed June 24, 2022.

_____. 2013. Integrated Water Resources Master Plan. Prepared by HDR. https://www.eid.org/home/showpublisheddocument/3554/635369711672500000

Fresno County 2000. Fresno County General Plan Policy Document https://www.co.fresno.ca.us/home/showpublisheddocument/18117/636753797422170000 Accessed: July 8, 2022.

Kings County 2035. 2035 General Plan https://www.countyofkings.com/departments/community-development-agency/information/2035-general-plan Accessed July 8, 2022.

National Wild and Scenic Rivers System. 2022. California National System. Available: https://www.rivers.gov/california.php. Accessed: June 21, 2022.

U.S. Bureau of Reclamation. 2022a. Central Valley Project. https://www.usbr.gov/mp/cvp/index.html

_____. 2022b. Folsom Powerplant. https://www.usbr.gov/projects/index.php?id=547

_____. 2022c. Nimbus Dam. https://www.usbr.gov/projects/index.php?id=222

_____. 2022d. Jones Pumping Plant. https://www.usbr.gov/mp/mpr-news/docs/factsheets/jones-pumping-plant.pdf

State Water Resource Control Board (SWRCB). 2022. GeoTracker. Available: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=el+dorado+county. Accessed: June 22, 2022.

United States Census Bureau (USCB). 2022. QuickFacts - El Dorado County, California. Available: https://www.census.gov/quickfacts/eldoradocountycalifornia. Accessed: June 22, 2022.

United States Environmental Protection Agency (USEPA). 2022. Current Nonattainment Counties for All Criteria Pollutants. Available: https://www3.epa.gov/airquality/greenbook/ancl.html. Accessed: June 22, 2022.

U.S. Fish and Wildlife Service (USFWS). 2019. Biological Opinion for the Reinitiation of Consultation on the Coordinated Operations of the Central Valley Project and State Water Project. 10-19-2019. Service File No. 08FBTD00-2019-F-0164

U.S. National Marine Fisheries Service. 2019. Biological Opinion on Long-term Operation of the Central Valley Project and the State Water Project. 10-21-2019. Consultation Tracking Number: WCRO-2016-00069. Digital Object Identifier (DOI): https://doi.org/10.25923/f6tw-rkl 9

Appendix A

Technical Memorandum – Updated Main Ditch Water Loss Analysis with 2020 Data

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TECHNICAL MEMORANDUM

To: Brian Deason, EID

Date: December 30, 2021

From: Greg Young
Kris Olof

Subject: Updated Main Ditch Water Loss Analysis with 2020 Data

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The purpose of this memorandum is to provide the results of an analysis performed by Tully & Young to understand and quantify the water losses associated with water conveyance in the El Dorado Irrigation District's (EID) Upper Main Ditch (Main Ditch). The document refines the analysis from a prior memorandum used to support EID's CEQA document that assessed potential environmental impacts of the proposed project to pipe the water supply that is currently conveyed through the Main Ditch (hereafter the "Project"). Additionally, the document is intended to support EID's efforts to market for transfer the water that would be conserved through implementation of the Project until it is needed to support future growth within EID's service area. This memorandum incorporates the most recent operational data from 2020.

This memo presents the detailed underlying data supporting the analysis, a general characterization of the physical operations of the Main Ditch, and the analysis method and results.

Background and Summary

The purposes of the Project are to improve water conservation by reducing system losses from the unlined Main Ditch, and to improve water quality by piping the water delivered from the El Dorado Forebay (Forebay) to the Reservoir 1 Water Treatment Plant (WTP). Because the Main Ditch is uncovered and unlined, a portion of the water conveyed through the ditch is lost to seepage and evapotranspiration and the WTP has to contend with higher turbidity influent associated with sediment and water of unknown quality entering the ditch after water is released from Forebay. The U.S. Bureau of Reclamation has noted that losses from unlined earthen canals may be estimated to be one-third of the water conveyed or more.[1]

[1] Reclamation research project: https://www.usbr.gov/research/projects/detail.cfm?id=845

However, for the Main Ditch, losses throughout the season vary based upon the flow rate. Past flow studies conducted by EID for the Main Ditch (Attachments 1 and 2) indicate losses from the canal due to seepage range from approximately 6% to 33% based on single measurements, depending on flow rate at the time of the measurement. As documented in Attachment 1, a study from 1977, EID's analysis estimated that when conveying the full water right at 40 cfs, approximately 1,300 acre-feet would be lost annually from the Main Ditch. **Table 1** summarizes the results of estimated loss rates including recently completed analysis for 2016 through 2020 operational data. The 2018 and 2019 data includes data for one gauge (referred to a gauge A-18) that was relocated after 2017 and again replaced in the spring of 2019. 2020 data was derived from the SCADA system and from end of year summary reports.

Approach

Digital water meter data was available beginning in 2009 of recorded releases from Forebay into the Main Ditch and from the Main Ditch into the WTP inlet. The loss in this section of the ditch would typically be determined from the difference between these two values with a correction for backwash return flows ahead of the WTP inlet meter. However, this meter was found to be producing erroneous data between 2009 and 2015, which resulted in the prior WTP flow records being deemed unreliable. Prior to the start of 2016 deliveries, the WTP inlet flow meter was replaced and calibrated, assuring more reliable data going forward. Separate single-day ditch flow measurements were also taken at various flow rates over the season (Attachment 3) to supplement and calibrate, if necessary, the WTP inlet meter data. With the improved data source, electronically recorded data (hereafter "SCADA data") during 2016 became the best source for deriving loss estimates and was used for EID's 2016 Upper Main Ditch Annual Water Loss analysis (Attachment 4). In winter 2016/2017, the primary gauge at the upper end of the Main Ditch (A-18) was damaged by winter storms and was replaced and re-calibrated in spring of 2017 prior to operation for the 2017 season, which was delayed until early June due to storm damage to upstream canal conveyance facilities. A comparison of 2017 data for calibration and an estimate of 2017 and 2018 seasonal loss (Attachment 6) are summarized in **Table 1**.

Construction activites on the upper end of the Main Ditch resulted in the replacement of the A-18 gauge again in the spring of 2019 and the installation at a slightly different location than used during 2018. Additionally, the location and water conditions resulted in staff replacing the gauging equipment with a equipment better suited to the site.

Table 1 – Summary of Flow Studies

Flow Study	Flow Rate/Quantity	Loss Estimate
1977 Environmental Assessment – Ditch Flow Measurement[2] (Attachment 1)	18 cfs 40 cfs	1 cfs (6%) 5.1 (13%)
2012 Ditch Flow Measurement (Attachment 2)[3]	8.5 cfs	2.8 cfs (33%)
EID 2016 Single-Day Ditch Flow Measurement (Attachment 3)	13.08 cfs 20.76 cfs 30.92 cfs	2.25 cfs (17.2%) 4.42 cfs (21.3%) 4.5 cfs (14.6%)
EID 2016 Upper Main Ditch Annual Water Loss Analysis - Forebay to Reservoir 1 WTP (Attachment 4)	5,296 af at varying rates over period of operation 3,464 af at 20 cfs July 7 – Sept 30	1,100 af (20.8%) over period of operation 617 ac-ft (17.8%) July 7 – Sept 30
2015 Sage Engineering Ditch Modeling (Attachment 5)	20 cfs 40 cfs	0.8 to 4.2 cfs 0.8 to 4.5 cfs
EID 2017 Upper Main Ditch Annual Water Loss - Forebay to Reservoir 1 WTP (Attachment 6)	4,555 af at 20 cfs over period of operation	867 af (19%) over period of operation
EID 2018 Upper Main Ditch Annual Water Loss - Forebay to Reservoir 1 WTP (Attachment 6)	5,642 af over period of operation 1636 af at 15 cfs June 28th – Aug 21st	1,420 af (25%) over period of operation 315 af (19.2%) June 28th – Aug 21st
EID 2019 Upper Main Ditch Annual Water Loss - Forebay to Reservoir 1 WTP (Attachment 6)	4,445 af over period of operation 2,751 af at 17 cfs June 25th – Sept 14st	1,085 af (24%) over period of operation 680 af (24.7%) June 25th – Sept 14th
EID 2020 Upper Main Ditch Annual Water Loss - Forebay to Reservoir 1 WTP (Attachment 6)	Estimated 3,945 af over period of operation 1,609 af at 15cfs July 26th-Sept 17th	Estaimted 1,211 af (31%) over period of operation 442 af (27.5%) July 26th- Sept 17th

[2] Losses between Forebay and Blair Road were estimated to be 0.8 cfs to 4 cfs (4 to 10 percent) at flow rates of 18 and 40 cfs, respectively. The length of the ditch between Forebay and the Reservoir 1 WTP is approximately 15,400 feet and Blair Road is approximately 3,200 feet upstream of Reservoir 1. When loss estimates are extrapolated to the entire length of the canal, the losses are estimated to be 1 cfs to 5.1 cfs (6 to 13 percent). (SAGE 2015).

[3] The length of the ditch between Forebay and the Reservoir 1 WTP is approximately 15,400 feet and Patrick Lane is approximately 1,800 feet upstream of Reservoir 1. When loss estimates are extrapolated to the entire length of the canal, the losses are estimated to be 2.8 cfs from the originally measured 2.47 cfs.

Tully & Young obtained and analyzed the entirety of the SCADA data collected by EID during 2016, 2017, 2018, 2019, and 2020, as well as recent soils testing and seepage modeling completed in December 2015 by SAGE Engineers (Attachment 5). The 2016, 2017, 2018, 2019, and 2020 data included recorded flows released from Forebay as well as flows entering the WTP. The difference between these two data sets, excluding backwash water returned ahead of the WTP meter, represents estimated water lost during conveyance in the Main Ditch. The 2016 data included a limited flow range (13 cfs to 31 cfs) with most data being collected during a long duration of steady 20 cfs flows. 2017 was operated at 20 cfs flow for the entire operating season which provides an additional 20 cfs data point for **Figure 3**. 2018 was operated at varying flow rates but was steady at around 15 cfs flow for the longest period, and 2019 operated the longest at 17 cfs. 2020 saw operations holding steady at 15 cfs but did have a gauging issue for two weeks at Reservoir 1 at the start of the 15 cfs period. Deriving a broader spectrum of estimated losses over varying flow rates required interpretations and extrapolations using data from the prior studies, professional understanding of hydraulics, and EID operator knowledge to develop relationships between flow rates and estimated losses. The results provide a basis that can be used for estimating historical losses, and for projecting future losses.

The 2016 data also provided enough diurnal detail throughout the summer to understand the approximate portion of flow "lost" to evaporation and bankside vegetation, referred to here as ETc as shorthand for channel evapotranspiration. From this information, the effect of ETc during the summer on overall loss percentages compared to that during winter months was assessed, the results of which are represented in **Table 2**.

To derive estimated losses for flow rates outside the range recorded during the 2016 operations, several factors were assessed. After discussions with EID staff and review of mathematical models developed using the 2016 data, ditch cross section geometry was assessed to help develop loss rates outside the 2016 empirical range. A topographic survey of the ditch completed by Domenichelli & Associates for pipeline design and stormwater modeling provided cross sectional geometry useful for understanding the relationship between flow and wetted perimeter.

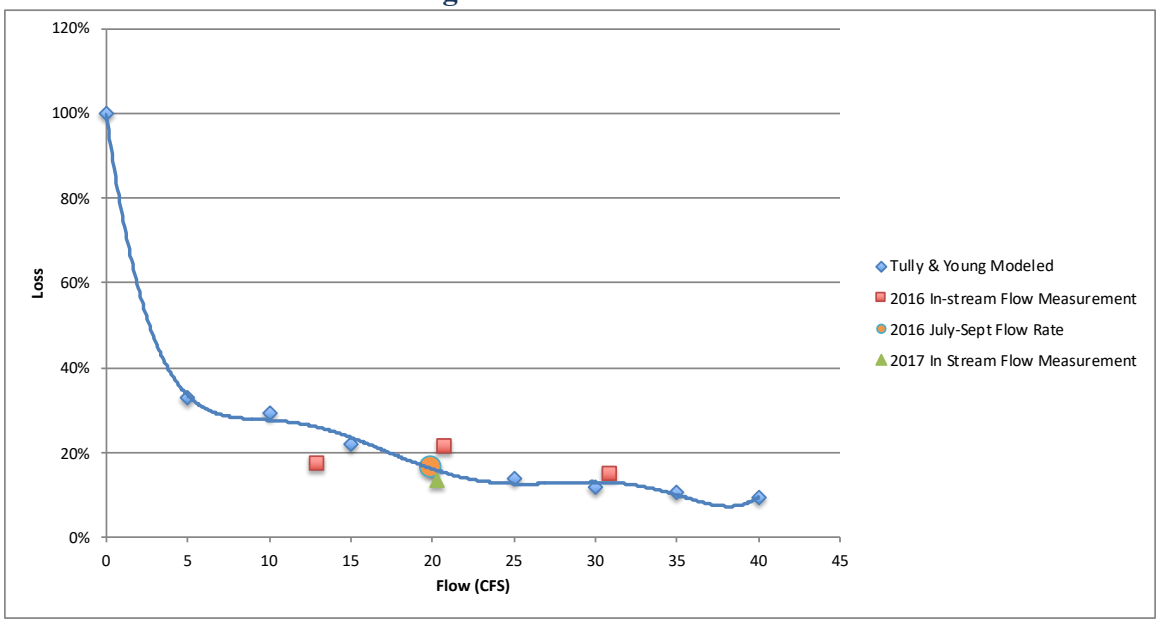
The 2017, 2018, 2019, and 2020 data further supported the conclusions of the 2016 data analysis and shows a clear pattern matching the 2016 ETc estimates.

Analytic Results

One key finding from assessing the full dataset was the percentage of flows lost while traveling between Forebay Reservoir and the WTP varied with the actual flow rate. Using the entire set of 2016 and 2017 data in conjunction with data points from prior studies, a representative curve and equation were developed to correlate flow to the loss percentage. **Figure 1** below demonstrates the derived representation of loss at varying flow rates. Also shown in **Figure 1** are the single ditch flow measurements, separate from the SCADA dataset, taken during the 2016 and 2017 seasons which closely

correlate with the derived curve. This figure reflects the entirety of 2016 and 2017 SCADA data for the A-18 gage measuring flows out of Forebay, using the recorded losses at approximately 20 cfs (occurring between July 6 through September 28, 2016), and a best-fit curve derived using the wetted perimeter analysis to reflect loss percentages at a range of flow rates greater and less than the 20 cfs estimate. The wetted perimeter analysis is depicted in **Figure 2**.

Figure 1 – Loss vs. CFS[4]



It is important to note a few critical factors considered while developing the curve:

- Wetted perimeter data was used to model losses at flows greater and less than 20 cfs. The flow rate of 20 cfs was determined by Tully & Young to be the rate with the most accurate data for estimating losses due to the prolonged SCADA data set recorded at that flow.

- The slope and channel configuration, as described in the Domenichelli & Associates topographic survey and accompanying data, shows that wetted perimeter expands rapidly at low flows, but increases much more slowly above 5 cfs. The resulting relationship between average wetted perimeter and flow rate is presented in **Figure 2.**

- Based on available data and operational observation, flows below 5 cfs realize losses of a minimum of 33% and up to 100%.[5] This factor helped establish a functional, polynomial curve to reflect significantly decreasing loss percentages

[4] Since 2009, ditch customer water use between Forebay and the WTP has averaged approximately 28 acre-feet per year. This represents 0.5% of 2016 diversions and 0.2% for the full water right diversion of 15,080 acre-feet and is considered insignificant for this analysis.

[5] 33% minimum losses are tied to the 2012 measurement but are likely higher in this low flow range.

until around 10 cfs, when losses begin to be more consistent. It is noted that the WTP typically avoids operating when flow rates are below 7 cfs due to water quality considerations and operational efficiency objectives.

Comparing Study Results

Comparing the various study results to the modeled best-fit curve in **Figure 1** demonstrates: (1) the 1977 Study estimates higher losses at 40 cfs and lower losses at 18 cfs than the wetted perimeter analysis and the 2016 findings; (2) the SAGE analysis provides a broad theoretical range of loss that bounds the modeled curve; (3) the 2012, 2016, and 2017 single measurement flow data deviates somewhat above and below the derived curve; (4) 2018 measurements in a wetter year still trend nicely with the previously derived curve; (5) 2019 measurements in a normal year were slightly below the curve; and (6) 2020 measurements were slightly above the curve. These comparisons are all represented in **Figure 3**, which illustrates the derived curve under this analysis is a reasonable representation of likely losses.

Figure 2 – Wetted Perimeter vs. CFS

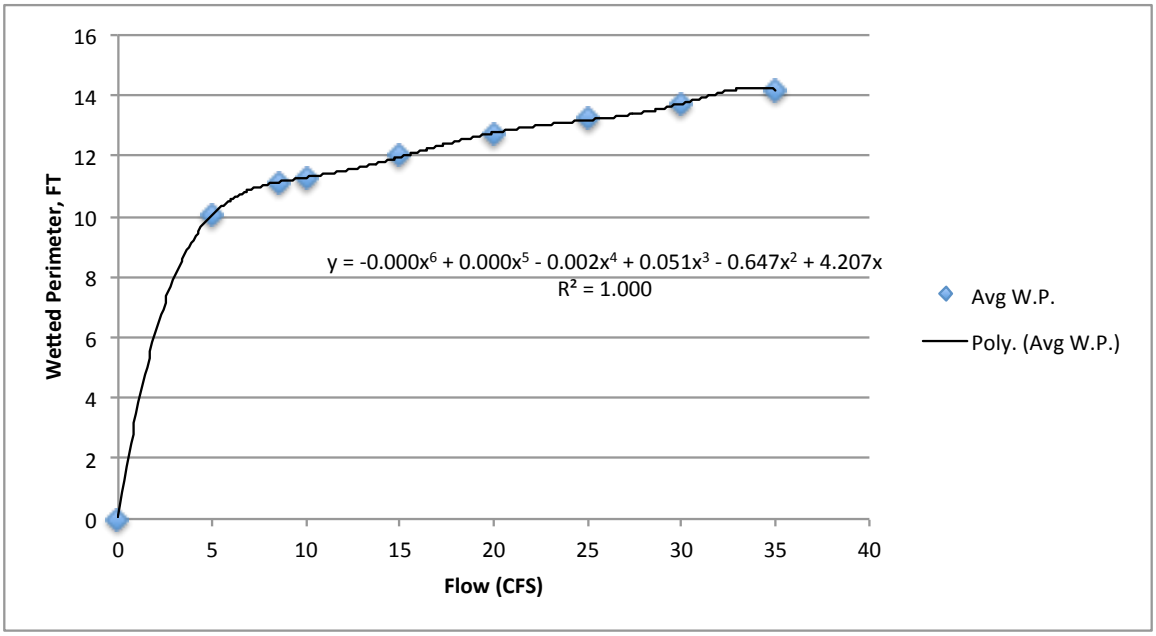
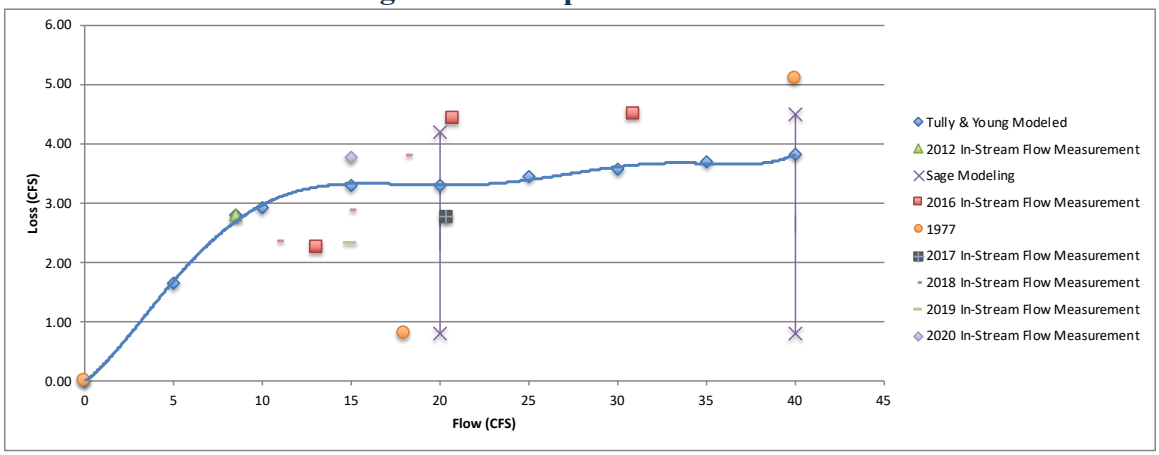


Figure 3 – Comparison of Studies



2020 Canal Flow Measurements Along Length

On 5/26/2020, EID Hydrologists Jordan Baxter conducted measurements in the canal along its length to assess what losses along the entire length. Here are measurement results on 5/26/20:

Magmeter at A18: 12.09 cfs	-Instant flow at time of survey
Reported A18 daily average: 11.97 cfs for day	-1% difference in instant vs average
1000 ft u/s of Pinewood Ln: 10.7 cfs	-11.5% loss
1000 ft d/s Pinewood Ln: 10.13 cfs	-16.2% loss
100 ft u/s Blaire Rd culvert: 7.38 cfs	-39.0% loss
Meter at Res 1 Inlet: 5.36 cfs	-55.7% loss

Unfortunately this was towards the beginning of the season so the canal was not fully wetted and thus we cannot derive any firm information. It does appear that losses are not uniform along the canal length.

Estimating Historic and Future Losses

Because the exact loss is not measurable at each increment of flow, the curve presented in **Figure 1** was translated to a look-up table to reflect the approximate percentage of loss for each increasing 5 cfs increment from 5 cfs to 40 cfs (see **Table 2**). The table also separately represents loss percentages during the two primary delivery periods of October-March and April-September considering the ETc factors described above.[6]

[6] Loss estimates for the April-September period include a component that represents ETc. During the winter period, ETc was assumed to not occur, since channel evaporation is very limited and bank vegetation is essentially dormant.

Table 2 – Seasonal Loss Percentages

	Oct 1-Mar 31	Apr 1-Sept 30
5-10cfs	28%	33%
10.1-15cfs	25%	29%
15.1-20cfs	18%	22%
20.1-25cfs	14%	16%
25.1-30cfs	12%	14%
30.1-35cfs	10%	12%
35.1-40cfs	9%	11%

Using the look-up table, losses can be estimated for the historical monthly flow records for 2009 through 2020 for releases from Forebay (referred to as Gage A-18). **Table 3** below presents the resulting monthly and annual loss estimates. Note that although the flow records indicated flows from Forebay during the months of October through December, the flows were approximately 1 cfs or less to provide ditch customers with water and were thus conservatively reflected as zero loss in the table. This tends to under-estimate seepage losses and does not capture carriage losses that occur during this period.

Table 3 – Calculated Loss

Loss (AF)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Average
Jan	162	156	139		157	102							143
Feb	180	151	112	122	194	145							151
Mar	167	177	154	145	223	142	136			109			157
Apr	247	179	198	145	256	194	220			187			204
May	268	222	265	231	241	232	226	172		229	185	133	219
Jun	245	205	256	262	240	242	257	240	198	241	239	294	243
Jul	239	221	222	203	248	251	207	228	204	204	257	382	239
Aug	226	229	221	204	221	245	266	205	269	248	258	261	238
Sep	244	222	216	263	239	232	193	199	197	201	146	224	215
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Loss	**1,977**	**1,763**	**1,783**	**1,576**	**2,021**	**1,786**	**1,505**	**1,044**	**867**	**1,420**	**1,085**	**1,293**	**1,807**
Total Supplied	**11,585**	**8,289**	**6,998**	**7,318**	**12,048**	**8,663**	**5,421**	**5,467**	**4,555**	**5,642**	**4,445**	**3,945**	**8,617**
Percent Loss	**17%**	**21%**	**25%**	**22%**	**17%**	**21%**	**28%**	**19%**	**19%**	**25%**	**24%**	**33%**	**21%**

The look up table allows losses to also be estimated for historic periods when EID routinely conveyed up to 15,080 acre-feet annually through the Main Ditch. These historic higher flows pre-date the monthly digital records and were therefore not readily available for inclusion in this memo.

Conclusion

Using a look-up table that reflects the varying percentage of loss under different flow conditions and different seasons provides a supportable basis for estimating historic losses, and will be useful for establishing a method to identify quantifiable savings associated with the Project. Based on 2009 to 2020 data, minimum water savings of approximately 900 acre-feet per year and an average of approximately 1,800 acre-feet can be expected to result from piping the water supply that is currently conveyed through the Main Ditch.

Attachments (Available on request)

Attachment 1 – 1977 Ditch Flow Measurement
Attachment 2 – 2012 Ditch Flow Measurement
Attachment 3 – EID 2016 Single-day Ditch Flow Measurement
Attachment 4 – 2016 EID Upper Main Ditch Annual Water Loss Analysis
Attachment 5 – 2015 Sage Engineering Ditch Modeling
Attachment 6 – 2017, 2018, 2019, and 2020 EID Upper Main Ditch Annual Water Loss Analysis