



NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING FOR THE PERMIT 21112 PROJECT

In accordance with the provisions of the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, California Code of Regulations, Title 15, Section 15000 et seq., the El Dorado Irrigation District (District or EID) will be preparing an Environmental Impact Report (EIR) for its proposed modification of Water Right Permit 21112 (proposed project or project).

The purpose of this Notice of Preparation (NOP) is to provide an opportunity for the public, interested parties, and public agencies to comment on the scope and proposed content of the EIR. If you are a Responsible or Trustee Agency with jurisdiction by law over natural resources held in public trust, the District needs to know what environmental information germane to your statutory responsibilities should be included in the EIR.

A description of the proposed modification of Water Right Permit 21112, the location of the components related to Water Right Permit 21112, and a listing of probable environmental effects of the modification of Water Right Permit 21112 are provided in the NOP.

The District has determined that the project may result in potentially significant environmental effects and, consequently, an EIR is required; therefore, an Initial Study has not been prepared. The EIR will address the full range of potentially significant environmental effects of the proposed project and feasible alternatives to the proposed project that meet CEQA requirements.

DOCUMENT REVIEW & AVAILABILITY: The 30-day public review period begins on April 17, 2020 and ends on May 18, 2020. A copy of the NOP is available for public review at 2890 Mosquito Road, Placerville, CA 95667, or online at <http://www.eid.org/regulatory/environmental-docs-ceqa-nepa->.

PUBLIC SCOPING MEETING: The District will conduct a public scoping meeting to inform interested parties about the project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR. As a result of the COVID-19 pandemic, the scoping meeting will be convened via a teleconference format. The public is invited to participate in the scoping meeting by recorded teleconference via the instructions provided below. Members of the public who observe the meeting via teleconference will be given the opportunity to ask questions and/or provide comments on the scope of the analysis to be included in the environmental impact report. The meeting materials are available for download from the District's web site at www.eid.org. The meeting will be held on April 30, 2020 at 5:00 p.m.

To join the meeting using your phone: United States: 1 310-372-7549; Access Code: 281391



PROVIDING COMMENTS ON THIS NOTICE OF PREPARATION:

Comments on this NOP must be provided within 30 days. Written and/or email comments on the NOP should be provided at the earliest possible date, but must be received by 5:00 p.m. on May 18. If you wish to comment on the contents of the upcoming EIR, please send your comments (including, if applicable, the name of a contact person in your agency) to:

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667
Attn: Brian Deason, Environmental Resources Supervisor
Phone: (530) 642-4064
E-mail: P21112@eid.org

Comments provided by email should include the name and mailing address of the commenter in the body of the email and include "Water Right Permit 21112 Project" in the subject line.

In accordance with the Americans with Disabilities Act (ADA) and California law, it is the policy of the El Dorado Irrigation District to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including individuals with disabilities. If you are a person with a disability and require information or materials in an appropriate alternative format; or if you require any other accommodation for this meeting, please contact the EID ADA coordinator at 530-642-4045 or e-mail at adaordinator@eid.org at least 72 hours prior to the meeting. Advance notification within this guideline will enable the District to make reasonable accommodations to ensure accessibility.

PROJECT DESCRIPTION AND PROBABLE ENVIRONMENTAL EFFECTS TO BE ADDRESSED IN THE ENVIRONMENTAL IMPACT REPORT FOR THE MODIFICATION OF WATER RIGHT PERMIT 21112 PROJECT

This Notice of Preparation (NOP) is intended to provide sufficient information to Responsible and Trustee Agencies, other affected agencies, interested parties, and the public to enable them to make a meaningful response regarding the scope of issues which should be addressed in the Draft EIR, consistent with State CEQA Guidelines Section 15082(a)(1). It contains background information about the process leading up to the proposed project, a project description and location description, and the identification of probable environmental effects of the proposed modifications to Permit 21112.

1 PERMIT 21112 BACKGROUND

Current Permit 21112

The District currently holds Water Right Permit 21112, issued in 2001 by the State Water Resources Control Board (SWRCB). Permit 21112 allows the District to make direct diversions from the South Fork American River (South Fork) at Folsom Reservoir; to divert water to storage in Caples, Silver, and Aloha Lakes; and, to re-divert the water released from those upstream reservoirs once it reaches Folsom Reservoir for consumptive uses. The total quantity of water that may be diverted by the District at Folsom Reservoir annually (by a combination of direct diversion and re-diversion of stored water) is 17,000 acre-feet per year (AFY). The point of diversion at Folsom Reservoir draws direct diversions from the South Fork along with water previously stored in upstream reservoirs (Caples, Silver, Aloha Lakes) that are operated pursuant to the District's Project 184 Federal Energy Regulatory Commission (FERC) license. Folsom Reservoir is located near the lowest elevation within the District's service area and, as such, water must be pumped up from the reservoir to the District's treatment plant for subsequent treatment and distribution. Water Right Permit 21112 currently requires complete application of the water to the authorized beneficial use by December 31, 2020.

Stakeholders, Other Interested Parties, and CEQA Responsible Agencies

The EIR will be used in the planning and decision-making process for adoption and implementation of the proposed Permit 21112 project. The District will serve as the lead agency pursuant to CEQA for the proposed project. Other public agencies that would be expected to use the EIR in their decision-making processes as Responsible or Trustee Agencies, as defined in Sections 21069 and 21070 of CEQA and Sections 15096, 15381, and 15386 of the State CEQA Guidelines, include:

- ▶ California Department of Fish and Wildlife (CDFW) – Trustee Agency for projects that may affect fish, wildlife, or their habitat and potentially a Responsible Agency for issuing a Lake and Streambed Alteration Agreement should construction activities result in fill of waters of the state;
- ▶ State Water Resources Control Board – Responsible Agency because it must make a decision on whether to approve the requested modification to Permit 21112;
- ▶ Regional Water Quality Control Board – potentially a Responsible Agency for issuing Waste Discharge Requirements and Water Quality Certification should construction activities affect waters of the state or U.S.; and
- ▶ Sacramento Municipal Utility District (SMUD) – Responsible Agency because it must make a decision on whether to allow modifications at its White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir.

In addition to these agencies, the CEQA document may also be used by the following federal agencies during their environmental review (under the National Environmental Policy Act) for consideration of actions on the project.

- ▶ U.S. Army Corps of Engineers – Federal agency that may potentially issue a Clean Water Act Section 404 permit should construction activities result in fill of waters of the U.S.; and

-
- ▶ U.S. Fish and Wildlife Service (USFWS) – Federal agency that consults under the Endangered Species Act for projects that may require permits regarding sensitive species of fish, wildlife, or their habitat.

Project Location

The project location encompasses areas within and near the South Fork from Kyburz, California to Folsom Reservoir, including Jenkinson Lake. Figure 1 shows the South Fork, location of the existing diversion at Folsom Reservoir, and locations of the proposed diversion near Kyburz and a second proposed diversion at either Slab Creek Dam/Reservoir or the White Rock Penstock.

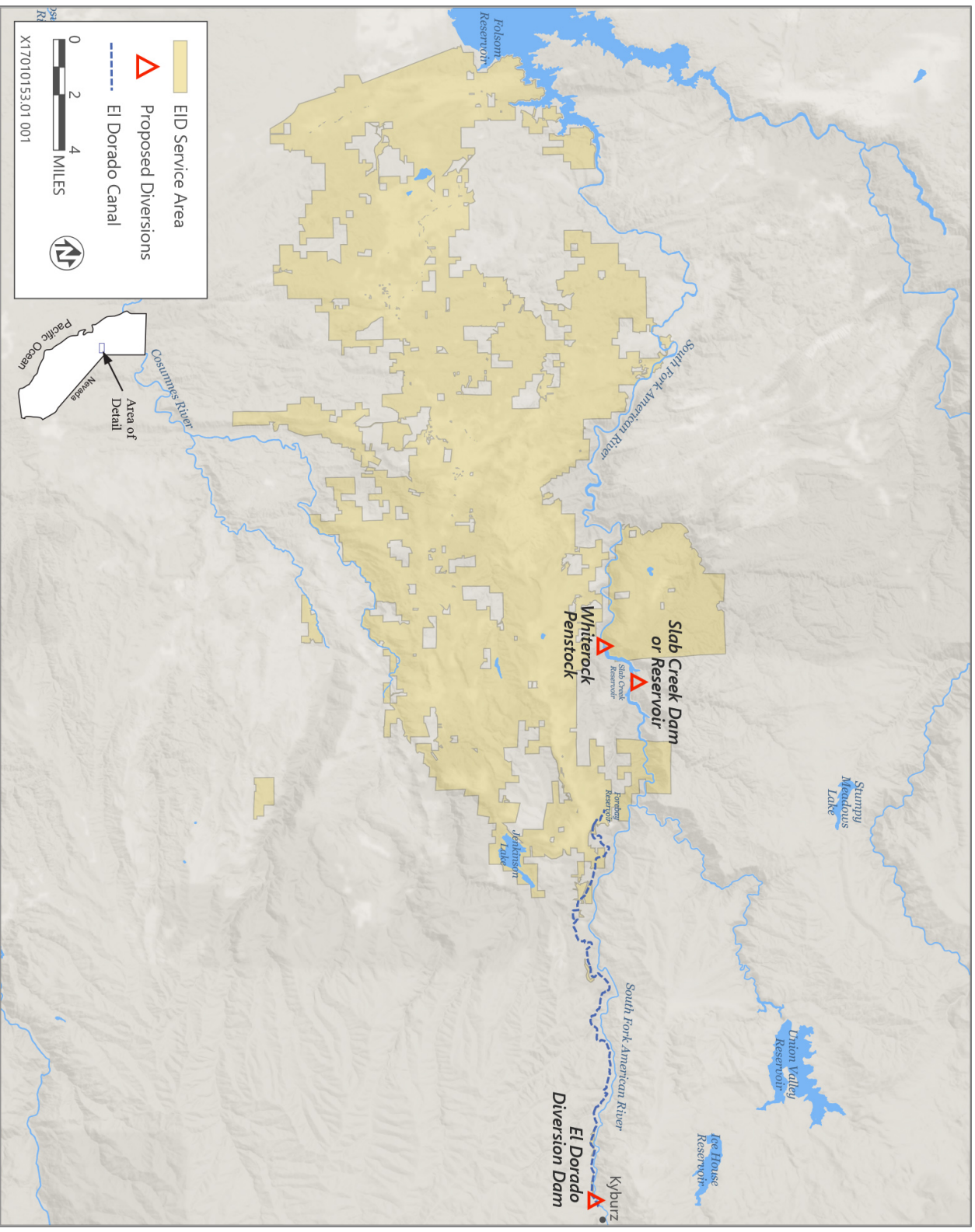
Project Overview

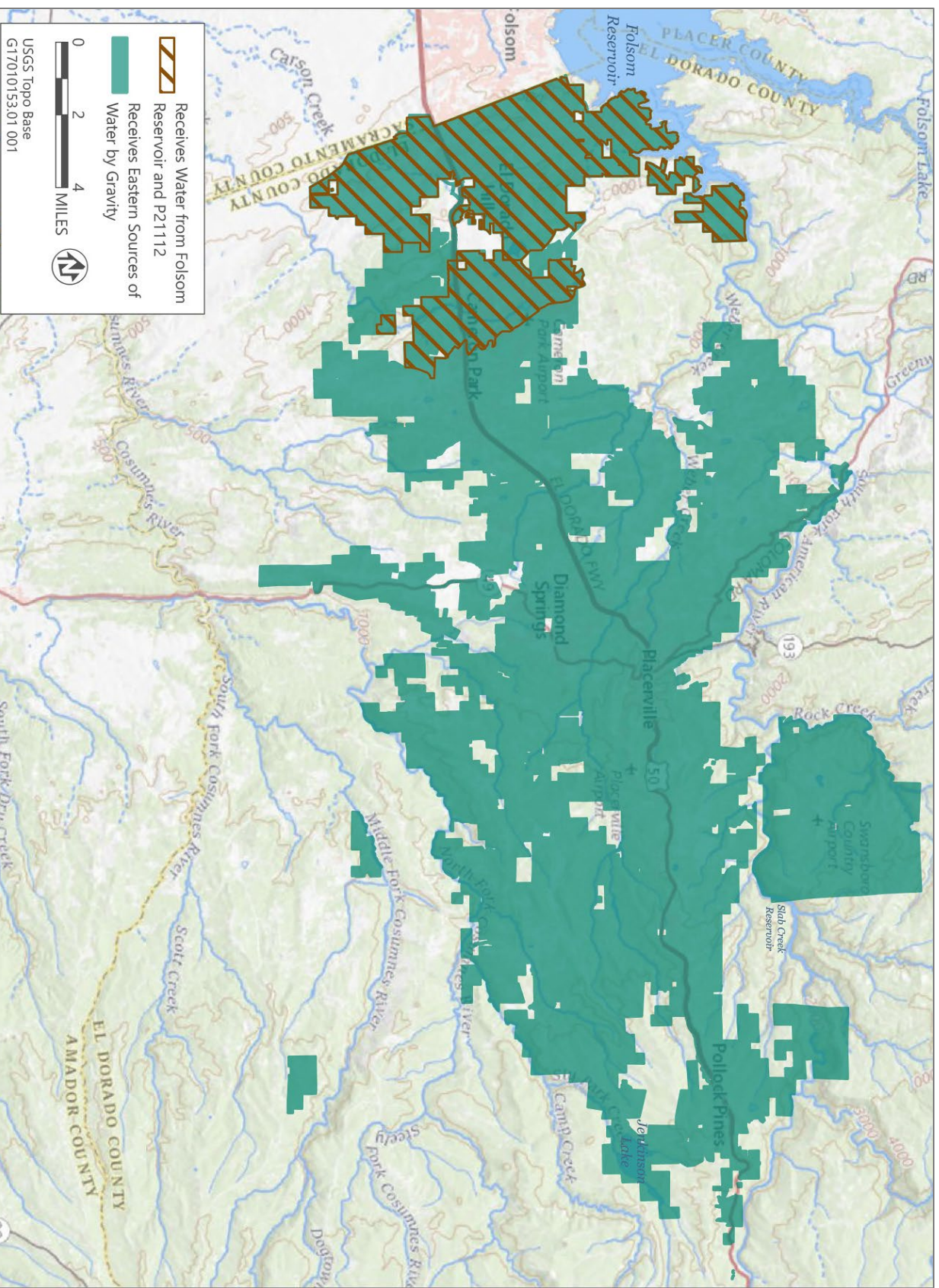
The El Dorado Irrigation District (District) seeks to modify its existing Water Right Permit 21112 to add authorized points of diversion and re-diversion to more effectively and efficiently meet the future water demands within El Dorado County. Water Right Permit 21112 presently allows the District to directly divert or re-divert water supplies from a combination of eastern sources (Jenkinson Lake and/or Forebay Reservoir) provided by the operation of Project 184 for consumptive uses at Folsom Reservoir. These locations are near the boundary extremes of the District's service area requiring long and significant conveyance facilities to provide treatment and delivery of water to customers. The single point of diversion and re-diversion at Folsom Reservoir precludes the District from effectively and efficiently utilizing this supply throughout the entirety of Permit 21112's authorized place of use.

Long-term water supply planning forecasts (including the District's 2013 Integrated Water Resources Master Plan and the El Dorado County Water Agency 2014 West Slope Update to the Water Resources Development & Management Plan) indicate that a portion of the Permit 21112 water supply will be necessary to serve areas of the District that are east of El Dorado Hills and at a higher elevation (Figure 2). Delivering water to these higher elevation areas of the District's service area would require extensive energy-intensive pumping of raw and treated water from Folsom Reservoir. Therefore, the District proposes to petition the State Water Resources Control Board (SWRCB) to modify Permit 21112 to allow additional upstream points of diversion and re-diversion along the South Fork. The proposed changes to Permit 21112 would allow additional points of diversion and re-diversion, while maintaining the other limitations of the water right, such as place of use, purpose of use, season of diversion, total diversion to storage, and total direct diversion. Also, adding points of diversion under Permit 21112 would increase water supply reliability by maximizing the flexibility to meet demands with multiple points of diversion of the water supply.

The additional points of diversion are proposed at the District's existing El Dorado Diversion Dam near Kyburz and at SMUD's Slab Creek Dam/Reservoir or at SMUD's White Rock Powerhouse Penstock north of Placerville near Chili Bar. In addition, the District proposes to add a point of re-diversion from the El Dorado Diversion Dam at Jenkinson Lake to allow for storage of Permit 21112 water in Jenkinson Lake.

With these additional points of diversion and re-diversion, water could be diverted from higher elevations under Permit 21112 and then delivered to customers at lower elevations in the District service area. By taking Permit 21112 water supply at the El Dorado Diversion Dam and at Slab Creek Dam/Reservoir or the White Rock Powerhouse Penstock, water can be treated and distributed largely via gravity flow to meet demands throughout the District's service area. In addition, allowing storage in Jenkinson Lake would help address the imbalance of low water availability and high water demand in the summer months. Water could be taken at the El Dorado Diversion Dam during the snowmelt season, when Jenkinson Lake is forecast not to fill to capacity, and diverted into Jenkinson Lake via the Hazel Creek tunnel and seasonally stored to allow re-diversion of storage during dry months of the year to meet District demands. Figure 3 contains a profile view of the existing diversion, proposed diversions, and locations of future population growth, which demonstrates the elevation differences between these locations and the efficiency benefits to diverting water upstream of Folsom Reservoir. The system would rely mainly on gravity rather than pumping, substantially reducing energy consumption and the costs of water conveyance and delivery, while improving water supply flexibility to meet growing water demand in the District's service area.





Source: Data provided by EID in 2019

Figure 2 District Supply Area

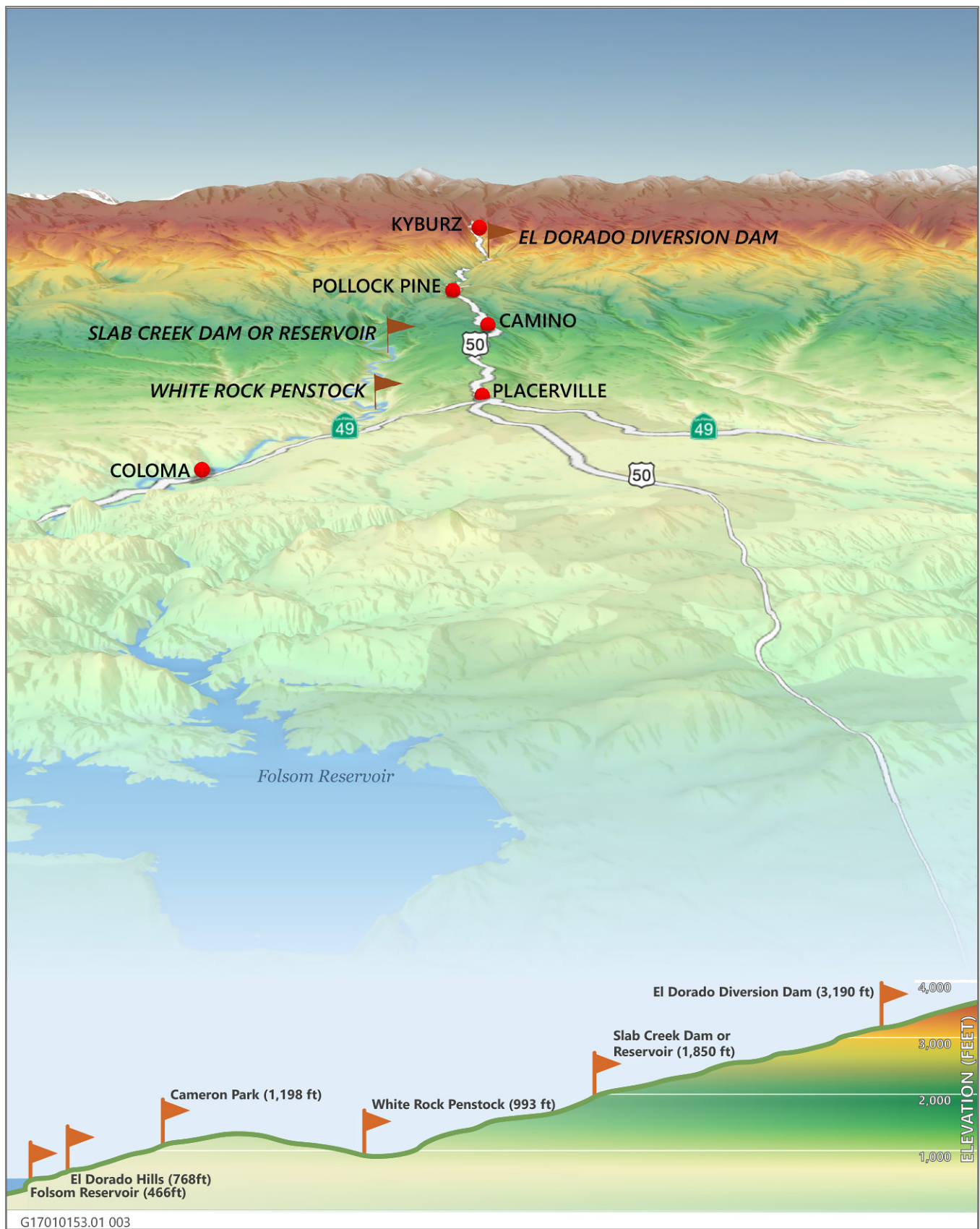


Figure 3 Profile View of Existing and Proposed Diversions

Time Extension

The District also seeks to extend the time for complete application of Permit 21112 water to the authorized beneficial use, by filing a Petition for Extension of Time with the SWRCB. The District seeks to extend the date for completing construction of facilities and demonstrating full beneficial use of Permit 21112 water from December 31, 2020 to December 31, 2040.

Background

The SWRCB issued Water Right Permit 21112 to EID on October 16, 2001, pursuant to Application 5645B. The 2001 version of Permit 21112 required that construction begin within five years of the permit date, work be completed by December 31, 2011, and that the water be applied to the authorized use by December 31, 2020. On December 28, 2011, EID filed a petition for an extension of time within which to complete construction work under Permit 21112 by December 31, 2020. The SWRCB approved the extension of time on May 7, 2018.

Proposed Time Extension

The SWRCB may grant an extension of time within which to commence or complete construction work or apply water to beneficial use upon a showing of good cause, which includes: (1) due diligence has been exercised; (2) failure to comply with previous time requirements has been occasioned by obstacles which could not be reasonably avoided; and (3) satisfactory progress will be made if an extension of time is granted.

EID has continued to make progress and demonstrate due diligence to put Permit 21112 water to beneficial use. In January 2015, the District executed a temporary (5-year) Warren Act Contract with the Bureau of Reclamation (Reclamation) for use of up to 8,500 acre-feet per year of Permit 21112 water from Folsom Lake. During the 2015 calendar year, EID diverted 5,591 acre-feet of Permit 21112 water from Folsom Lake.

In August 2016, the 5-year temporary Warren Act Contract was superseded by a long-term (40-year) Warren Act Contract with Reclamation for use of the full 17,000 acre-feet per year of Permit 21112 water. The provisions of the contract limits EID diversions under Permit 21112 to 8,500 acre-feet per year until such time that EID constructs a temperature control device (TCD) at its Folsom Lake intake facility. EID is making progress towards constructing the TCD and has completed CEQA for the project in May 2019. Reclamation is providing funding to EID to assist with the design and construction of the TCD and in May 2019, Reclamation completed NEPA for that federal action. EID plans to begin construction of the TCD project in summer/fall 2020. Construction is anticipated to take approximately 18 months to complete.

Additionally, as described in further detail in this NOP, EID, through a petition to the SWRCB, is seeking to add additional points of diversion and re-diversion to Permit 21112. The additional points of diversion include El Dorado Diversion Dam and either Slab Creek Dam/Reservoir or White Rock Powerhouse Penstock. The additional point of re-diversion is Jenkinson Lake. No new physical infrastructure would be needed to divert Permit 21112 water at the El Dorado Diversion Dam or re-divert water to Jenkinson Lake. Future construction activities would be required to access water from the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir. These construction activities would include installation of raw and treated water pipelines and construction of a new water treatment facility. These efforts would result in increased beneficial use of Permit 21112 water by providing additional flexibility for EID to use Permit 21112 water to meet demands throughout its drinking water system.

An extension of time is also warranted because failure to comply with previous time requirements has been occasioned by obstacles which EID could not reasonably avoid. One such obstacle beyond the control of EID is that projected water demand has occurred at a slower rate than forecasted. Other contributing factors affecting water demand beyond the control of EID include: implementation of mandatory water conservation measures (e.g., Senate Bill 7X-7), decreased water availability and use during extended periods of drought (e.g., 2007 – 2016), and general increase in customer awareness of the importance of water conservation.

While the timeframe needed to complete construction of facilities needed to deliver Permit 21112 water is largely dependent on a number of factors beyond the control of EID (e.g. population growth, economic conditions, land use decisions), at this time, EID anticipates that a time extension to December 31, 2040 provides a reasonable timeframe to complete construction activities associated with the current Permit 21112 as well as those construction activities

required to add the additional point of diversions at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir. A time extension to December 31, 2040 would also provide a reasonable timeframe for EID to demonstrate full beneficial use of Permit 21112 water.

The December 31, 2040 deadline for completing construction of facilities and demonstrating full beneficial use of Permit 21112 water would be consistent with the implementation schedule provided in EID's 2013 Integrated Water Resources Management Plan (IWRMP). The IWRMP provides a comprehensive program for optimizing the use of EID's water resources by providing a roadmap for development of future infrastructure and maintenance of existing water, wastewater, and recycled water facilities. The IWRMP implementation schedule for water facilities extends to 2030 and forecasts completion of the White Rock Powerhouse Penstock diversion and water treatment plant completed in 2025.¹ However, with projected water demands occurring at a slower rate than forecasted, such infrastructure has not yet been necessary and the anticipated start date for planning and design have been delayed from what was forecasted in the 2013 IWRMP implementation schedule. The District has been mindful of its ratepayers by making efficient use of its existing supplies to meet current demands. This responsible use of existing supplies has allowed EID to avoid premature investments in costly infrastructure that are not yet needed to meet current demands. It is still anticipated that the White Rock Powerhouse Penstock diversion and appurtenant facilities will be needed to meet future demands. However, the projected completion date for constructing these improvements will likely shift from the 2025 date contemplated in the 2013 IWRMP to sometime between 2030 and 2040.

Project Objectives

The District is pursuing the proposed project to provide a reliable and affordable supply of high-quality water to its service area. The project objectives are to:

- ▶ **Meet future water demand as identified in long-term water supply planning efforts.** Long-term water supply planning documents show that the District will have increased water demand throughout its service area. To efficiently and reliably meet future water demands, the District is seeking to modify its Water Right Permit 21112 to allow additional points of diversion and re-diversion at strategic upstream locations.
- ▶ **Reduce cost of water conveyance and delivery.** Water conveyance utilizing pumping facilities can increase costs of operations compared to a water conveyance system that is gravity-fed or a diversion point that is close to its place of use. The District aims to use the most economical option for water conveyance and delivery by adding points of diversion and re-diversion at upstream locations.
- ▶ **Increase flexibility and reliability in water delivery systems.** Water delivery systems are more reliable and efficient when the systems are designed to allow for operational flexibility, including building in redundancies in the event of infrastructure constraints, supply reductions or emergencies. The District is seeking to increase operational flexibility by adding points of diversion and re-diversion at upstream locations.
- ▶ **Maintain compliance with regulatory and legal obligations regarding water operations.** Several licenses, permits, agreements, and other requirements control water diversions and releases on the South Fork for the protection of fish, wildlife and water quality. The District would ensure continued compliance with these requirements with implementation of the proposed project.

State Water Resources Control Board Water Rights Modification Process

The District is proposing to petition the SWRCB to permanently modify existing Water Right Permit 21112 to allow additional upstream points of diversion/re-diversion. Before approving the change petition, the SWRCB must find that the change will not injure any legal water user and that the change will not have unreasonable effects on fish or wildlife.

If the petitioned change has the potential to impact other legal water users or the environment, the SWRCB will inform those who have requested notification about the petition. The District would also be required to notify the Department of Fish and Wildlife of the proposed change under Title 23, Section 794 of the California Code of

¹ The potential use of Slab Creek Dam/Reservoir as an additional point of diversion was not contemplated in the IWRMP because this concept was developed more recently than the IWRMP. It is anticipated that if the Slab Creek Dam/Reservoir is selected as an additional point of diversion for Permit 21112, the construction of needed infrastructure would occur on a similar timeline as anticipated for improvements required for the White Rock Powerhouse Penstock diversion.

Regulations. Other water right holders and the public may object to the proposed change by filing a protest form with the SWRCB. Before the SWRCB can approve the petition, all protests must be resolved, either through negotiation or by the SWRCB following an investigation or hearing.

Before approving the change petition, the SWRCB must also comply with CEQA. The SWRCB will rely on the CEQA document prepared by the District. The EIR will contain the information necessary for the SWRCB to make the necessary findings in compliance with CEQA.

2 PROJECT DESCRIPTION

The proposed project involves adding upstream points of diversion and re-diversion to the District's existing water right Permit 21112 at El Dorado Diversion Dam and at either Slab Creek Dam/Reservoir or White Rock Powerhouse Penstock, and adding a point of re-diversion at Jenkinson Lake to store water diverted at the El Dorado Diversion Dam. The existing diversion at Folsom Reservoir under Permit 21112 would be maintained. The maximum amount of water diverted at any one diversion location would be 17,000 AFY, and the total quantity diverted among all points of diversion would not exceed 17,000 AFY. For example, if during a particular year 5,000 AF were diverted at El Dorado Diversion Dam, up to 12,000 AF could be diverted at Folsom Reservoir and/or the point of diversion that would be constructed at either White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir, so long as total cumulative diversion at all points of diversion is no more than 17,000 AF. Thus, the proposed project would add additional points of diversion and re-diversion to Permit 21112, but would maintain the other limitations of the water right, such as season of diversion, total diversion to storage, and total direct diversion.

Existing Infrastructure and Operations (South Fork American River)

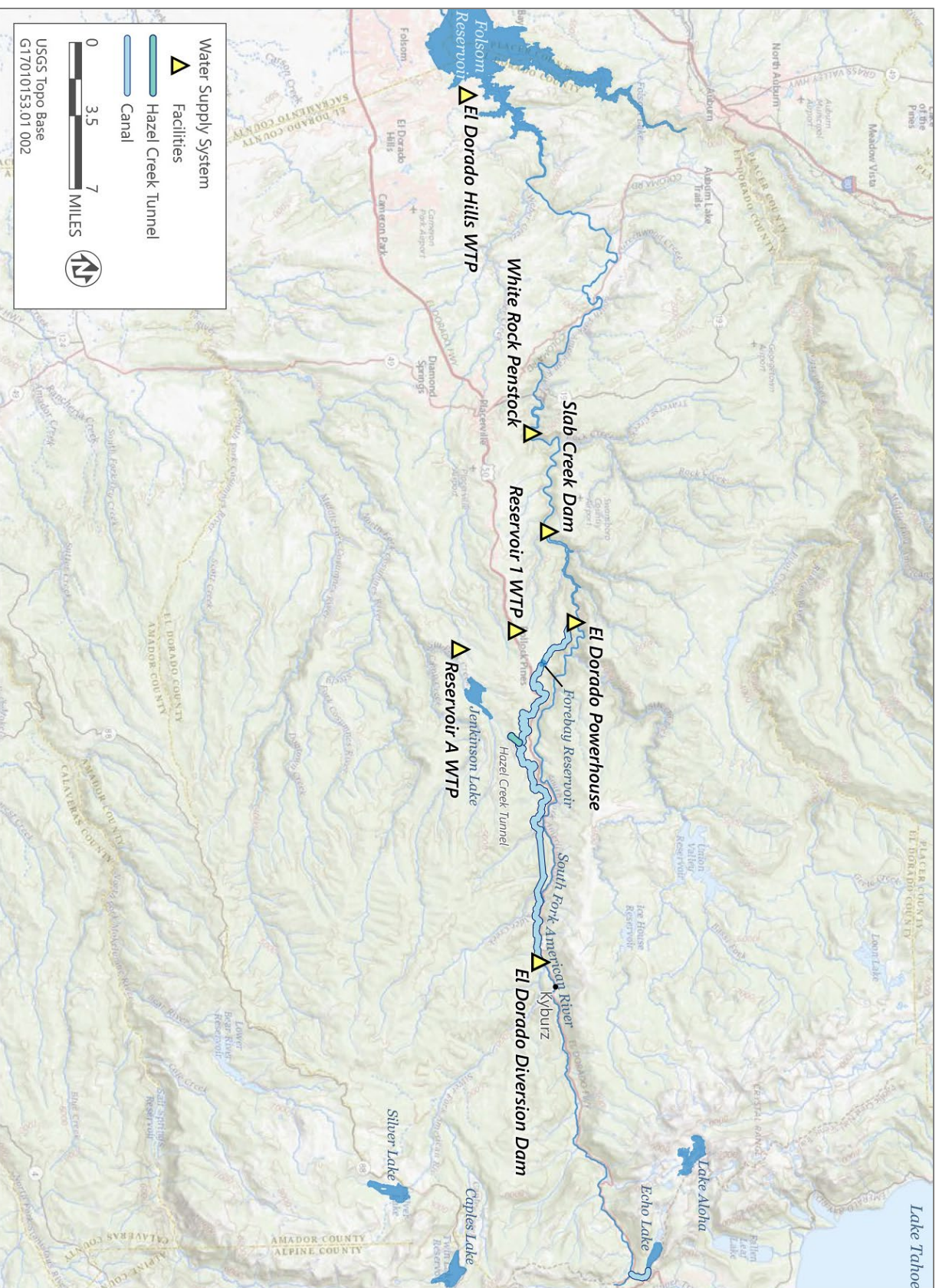
To aid in understanding the proposed modifications to Permit 21112, this section provides a general overview of existing infrastructure and operations on the South Fork and its tributaries and connected reservoirs associated with the proposed Project. Refer to Figure 4 for selected existing water supply and conveyance infrastructure along the South Fork American River watershed.

Project 184 and Permit 21112

Project 184 includes four reservoirs and associated dams, approximately 22 miles of conveyance facilities (i.e., canals, flumes, tunnels, and siphons), El Dorado Forebay, a 21-megawatt (MW) powerhouse, and other ancillary facilities. Silver Lake, Caples Lake and Lake Aloha are located in the South Fork American River basin. Echo Lake, on the east slope of the Sierra Nevada range, is located in the Upper Truckee River basin. These reservoirs are used to store water in the winter and spring for release to the South Fork and its tributaries for consumptive, hydropower and fish and wildlife uses in the summer, fall and early winter. Permit 21112 allows appropriation of up to 32,931 acre feet (AF) of water annually to be stored in Lake Aloha, Caples and Silver Lakes. Under Permit 21112, up to 17,000 AFY of consumptive water can be diverted and re-diverted from Project 184 sources at Folsom Reservoir. Permit 21112 allows for consumptive use of water previously stored and released for power generation from Caples Lake, Silver Lake, and Lake Aloha, as well as certain direct diversions from the South Fork, all of which have been first used by Project 184 for hydroelectric power generation and/or instream flows.

South Fork American River at El Dorado Diversion Dam and El Dorado Forebay

The District currently diverts water from the South Fork at Kyburz at the El Dorado Diversion Dam. Water is currently diverted for hydropower purposes pursuant to the District's existing pre-1914 and hydropower appropriative water rights. The District currently diverts water for consumptive use at the El Dorado Diversion Dam under its pre-14 rights only. Once diverted, the water is then conveyed via the El Dorado Canal to the El Dorado Forebay, which serves as the terminus of the canal upstream of the El Dorado penstock and powerhouse. Water held in the Forebay is used either to meet consumptive use or for hydropower use. Up to 15,080 AF of water for consumptive use (under the District's pre-14 water rights) is conveyed via the Main Ditch to the Reservoir 1 Water Treatment Plant. Water for hydropower use (under both the pre-14 water right and the hydropower right) is conveyed into the penstock from the Forebay and through the turbine/generators in the El Dorado Powerhouse. Water used for hydropower is then returned to the South Fork below the powerhouse.



Source: Data provided by EID in 2019

Figure 4 Existing Water Supply Sources (South Fork American River)

Sly Park Dam and Jenkinson Lake

Jenkinson Lake is the main storage reservoir in the District and is formed by Sly Park Dam and dike. Under the District's water rights Licenses 11835 and 11836, the District is allowed to divert water from the Cosumnes River watershed and either directly use that water or store the water in Jenkinson Lake for later use. Under those water rights, the combined total amount of water that can be beneficially used by direct diversion and withdrawal from storage is 33,400 AFY. The District also has existing physical infrastructure to divert water from the South Fork at the El Dorado Diversion Dam into Jenkinson Lake via the Hazel Creek Tunnel. The Hazel Creek Tunnel originates at the El Dorado Canal and extends 2,200 feet and discharges to Hazel Creek, a tributary to Jenkinson Lake. Water is conveyed from Jenkinson Lake to the Reservoir A Water Treatment Plant (WTP) via a raw water pipeline for treatment, transmission, and distribution. Jenkinson Lake has a maximum capacity of 41,033 acre-feet.

Folsom Reservoir

The District uses Folsom Reservoir to divert three water supplies providing water to El Dorado Hills. Water is provided via a U.S. Bureau of Reclamation Central Valley Project water service contract and two Warren Act contracts (one for Permit 21112 water) that allow the District's non-federal water supplies to be conveyed through the federal storage facility.

Water Treatment Facilities

The 26-million gallon per day (mgd) Reservoir 1 WTP treats water from the South Fork via Forebay Reservoir. Raw water is diverted at the El Dorado Forebay where it travels in the Main Ditch to the Reservoir 1 WTP. The 56-mgd Reservoir A WTP treats water from Jenkinson Lake. Water treated at Reservoir 1 WTP and Reservoir A WTP are combined to serve the entire District service area. During higher demands, the 19.5-mgd El Dorado Hills WTP, shown in Figure 3, treats raw water from Folsom Reservoir to supply potable water to the El Dorado Hills service zone.

White Rock Penstock and Slab Creek Dam/Reservoir

The Upper American River Project contains many components, including several existing facilities operated by SMUD. The Slab Creek Dam is a concrete dam on the South Fork that creates the Slab Creek Reservoir. The Slab Creek Powerhouse is located at the Slab Creek Dam and generates electricity using minimum stream flow releases. Slab Creek Penstock passes through the dam to connect the reservoir with the Slab Creek Powerhouse. White Rock Powerhouse Penstock is aboveground and connects the White Rock tunnel to the White Rock Powerhouse. The White Rock tunnel runs between the White Rock Powerhouse Penstock and Slab Creek Reservoir. The Slab Creek Reservoir operates to facilitate power generation; therefore, water is not stored for any substantial length of time in Slab Creek Reservoir. After going through the Slab Creek Powerhouse, flows are released back into the South Fork at Chili Bar Reservoir, which is part of PG&E's Chili Bar Project.

Modification of Operations at El Dorado Diversion Dam and Jenkinson Lake

Modification to Permit 21112

The District seeks to change Permit 21112 to allow for direct diversion and re-diversion for consumptive use at the existing El Dorado Diversion Dam near the unincorporated community of Kyburz, California, as shown in Figure 5. The District already diverts water at the El Dorado Diversion Dam for consumptive use and hydropower generation. Water currently diverted for hydropower generation is returned to the South Fork below the El Dorado Powerhouse. To implement the proposed modification to Permit 21112, the District would not divert additional water at El Dorado Diversion Dam due to conveyance capacity restrictions of the canal, but would instead reduce the amount diverted for power generation by the amount designated for consumptive use under modified Permit 21112. For example, if the District diverts 10,000 AFY per year for consumptive use under modified Permit 21112 at El Dorado Diversion Dam, the District would divert 10,000 AFY per year less at El Dorado Diversion Dam for power generation. The total amount of water ultimately diverted from the South Fork at El Dorado Diversion Dam therefore would not change. Because water would be diverted for consumptive use instead of power generation, the Permit 21112 modification would reduce the amount of water returned to the South Fork at the El Dorado Powerhouse. Water would be diverted from the El Dorado Diversion Dam into the El Dorado Canal. From there, water would be diverted into Forebay Reservoir. As is currently done for the District's pre-1914 water rights, diverted water would be released from Forebay Reservoir into the Main Ditch, which conveys water to the Reservoir 1 WTP.

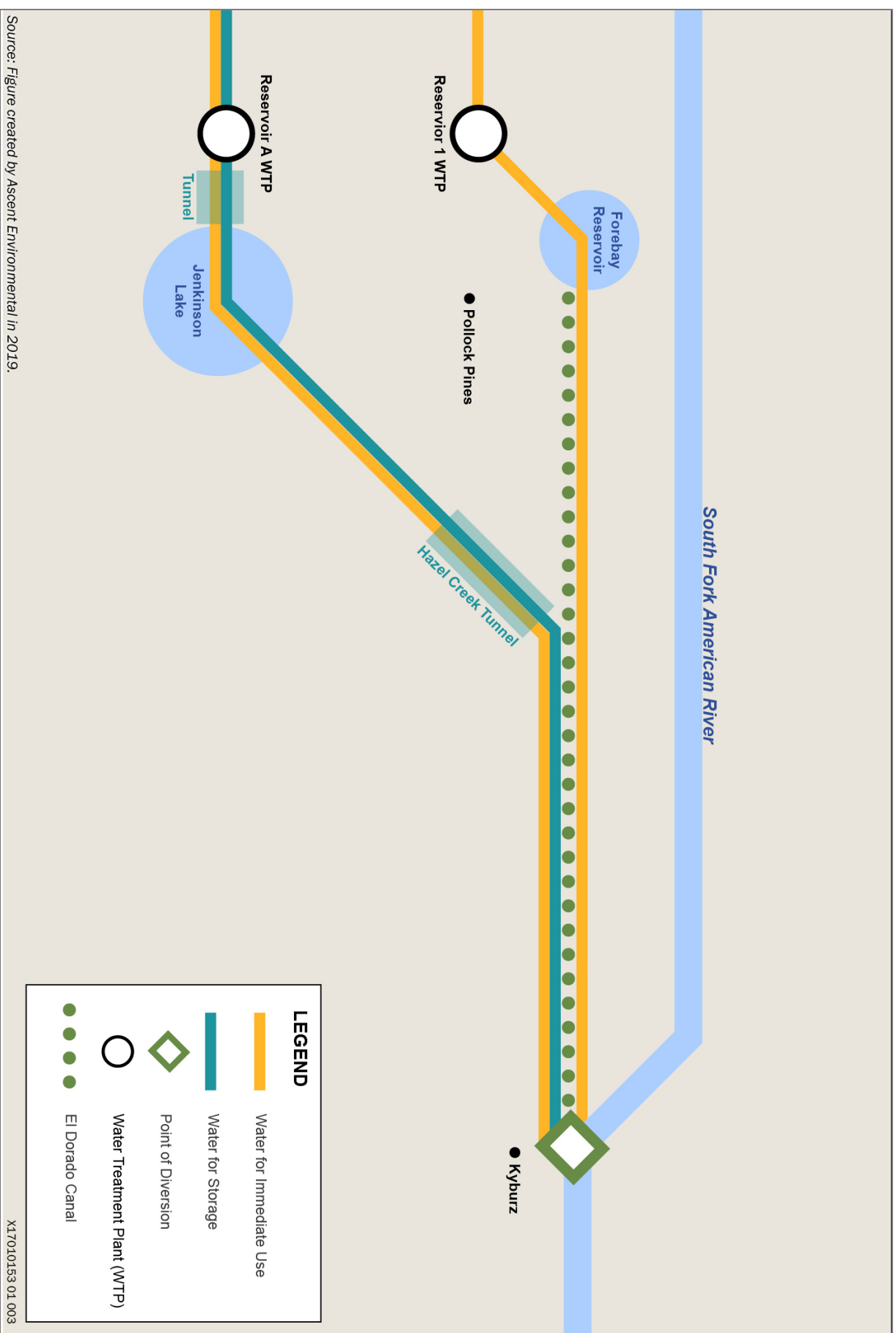


Figure 5 Water Diversion from El Dorado Diversion Dam

The District is also seeking to add a point of re-diversion at Jenkinson Lake to allow for the storage of Permit 21112 water in Jenkinson Lake. Adding Jenkinson Lake as a point of re-diversion to storage under Permit 21112 would allow water that has been diverted at Kyburz during the snowmelt season (when water is typically most often available) to be put to storage in Jenkinson Lake for use later in the season to better match the District demand pattern. Water diverted at Kyburz can be conveyed to Jenkinson Lake via the Hazel Creek Tunnel. From Jenkinson Lake, water would be released to the Reservoir A WTP for subsequent treatment, transmission, and distribution. No new raw water infrastructure would be needed to divert Permit 21112 water supply at the El Dorado Diversion Dam, and no physical modifications would be needed to convey water via the Hazel Creek Tunnel or to store this water in Jenkinson Lake. The Reservoir 1 WTP and Reservoir A WTP has enough physical capacity to treat the consumptive water made available under the proposed project.

Refer to Figure 5 for a schematic of water diversion and conveyance.

Construction Activities

As previously described, no new physical infrastructure would be needed to implement this modification to Permit 21112. Therefore, there would be no construction activities associated with this modification to Permit 21112.

Maintenance Activities

Maintenance at the El Dorado Diversion Dam, Forebay Reservoir, Jenkinson Lake, Hazel Creek Tunnel, El Dorado Canal, and other existing facilities would continue to occur as it is currently undertaken. Activities include periodic inspection, maintenance, and repairs.

Modifications at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir

Modification to Permit 21112

The District seeks to change Permit 21112 to allow for direct diversion and re-diversion for consumptive use at the White Rock Powerhouse Penstock north of Placerville near Chili Bar Reservoir or at the Slab Creek Dam/Reservoir, just east of the White Rock Powerhouse Penstock. This diversion would be constructed as a connection to SMUD's existing facilities at either location. SMUD and the District are both parties to the El Dorado – SMUD Cooperation Agreement, an agreement signed in 2005 that contemplates the District's future construction of an interconnection to SMUD's White Rock Penstock for the purposes of taking delivery of water supplies unrelated to the proposed Project. The use of SMUD's White Rock Penstock for diverting Permit 21112 water will require a separate approval from SMUD along with the construction of additional water treatment and conveyance facilities. A raw water conveyance pipeline would be connected to an existing flange at White Rock Penstock. Due to topography, the raw water would need to be boosted over a ridge through the conveyance pipeline to a new WTP. District planning documents have identified a new WTP location south of Placerville in Diamond Springs. After treatment, water would be gravity fed through new conveyance infrastructure to customers west of Placerville. The potential use of Slab Creek Dam/Reservoir as an additional point of diversion was not contemplated in the 2005 El Dorado – SMUD Cooperation Agreement because this concept was developed more recently than the Agreement. Conceptually, a diversion at Slab Creek Dam would involve construction of a diversion at the dam itself. If the diversion is at Slab Creek Reservoir, an intake structure would be installed upstream of the dam and draw water directly from the reservoir.

The diversion at the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir would be implemented on a longer planning horizon than the diversion at Kyburz. Previous planning efforts in the 2013 Integrated Water Resource Management Plan (IWRMP) indicate the new WTP could initially have a capacity of 10 mgd, with a potential future expansion of up to 44 mgd; however, as the ultimate capacity and utilization of this diversion are not known, the timing and magnitude of initial and phased treatment capacity will be refined in the future. The 2013 IWRMP indicates it would be implemented sometime between 2025 and 2030; however, the timing is likely significantly extended following the recent drought, reduced customer water use trends, new residential and commercial water efficiency standards and future State conservation mandates. The IWRMP also contains a conceptual map of facilities for a White Rock Powerhouse Penstock diversion: the raw water pipeline would generally trend south of the new diversion to a WTP south of Placerville. The treated water conveyance pipeline would generally trend west of the WTP toward Cameron Park and El Dorado Hills. For a diversion at Slab Creek Dam/Reservoir, similar infrastructure would

be needed, but would occur further east of the conceptual White Rock Powerhouse Penstock diversion infrastructure. Figure 6 contains a map of the general vicinity in which these facilities may be located. However, these locations may change as development occurs and the geographic demand for water is refined through periodic master planning updates. As a result, precise dates of implementation and details of precise infrastructure locations and characteristics (e.g., pipeline length) are unknown. Therefore, discussions of infrastructure and their location are included here at the programmatic level.

Construction Activities

Raw Water and Treated Water Pipelines

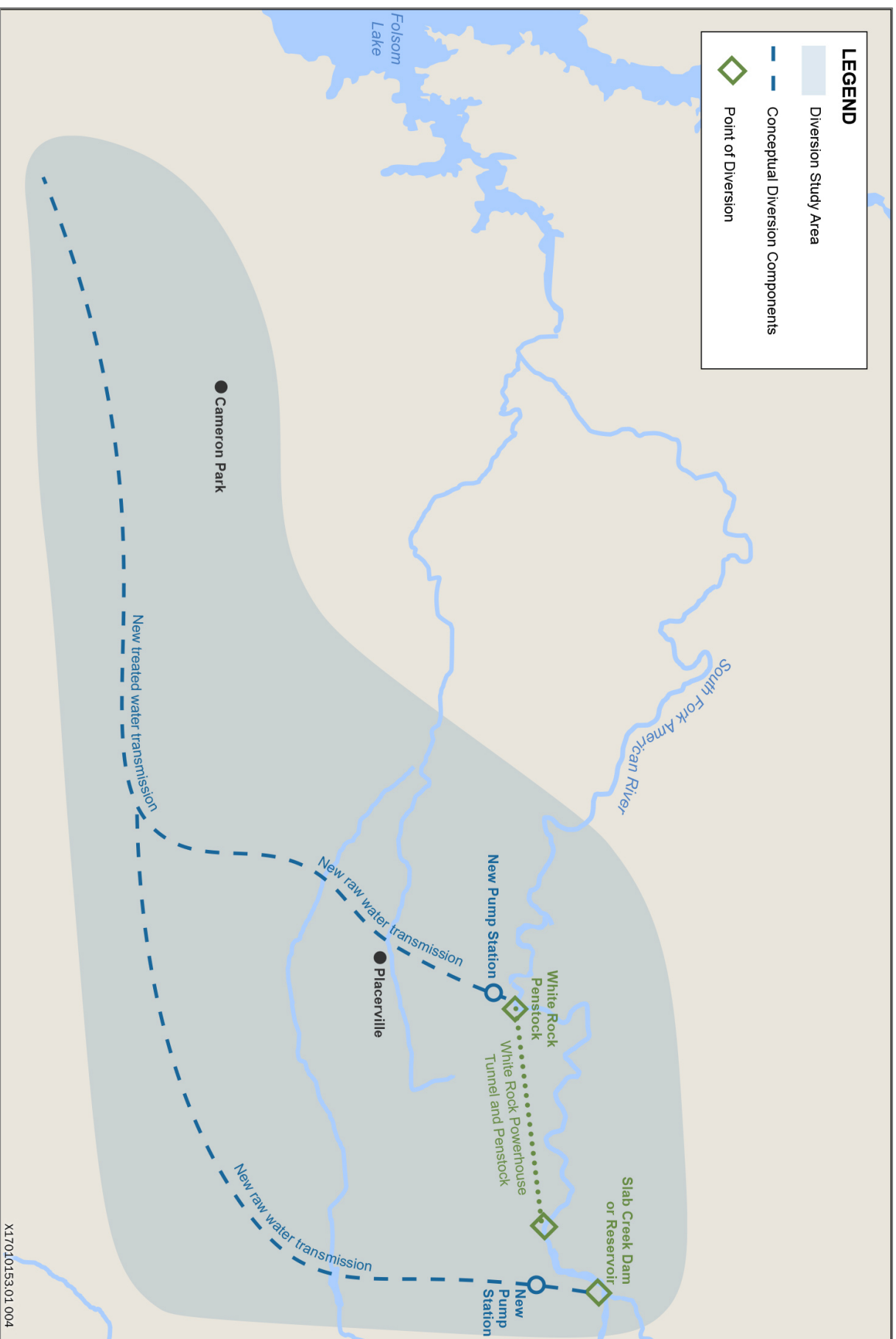
Construction activities associated with water pipelines could include:

- ▶ **Vegetation and tree removal:** Vegetation and trees would be removed within and around the pipeline alignment to facilitate construction equipment and trenching. Vegetation and tree removal can be done with heavy equipment or by hand with hand or power tools.
- ▶ **Trenching, installation of pipe, and backfilling trench:** Trenches would be excavated to place pipe in areas where open-cut construction methods are used. Trenches are usually excavated with heavy equipment, such as an excavator. Saw cutting of pavement and pavement restoration may be necessary in roadways. Blasting may be needed in areas with bedrock. Soil is typically stockpiled adjacent to or near the trench, and then used to backfill the trench.
- ▶ **Trenchless installation of pipe:** In areas where trenchless construction is used, methods such as jack and bore, guided auger bore, and horizontal directional drilling could be used. With these methods, the only excavation would be at the entry and exit points for the pipeline bore. The drilling unit would then bore a pathway for the pipeline to be installed. Any excavated areas would be backfilled once the pipeline is installed.
- ▶ **Staging of equipment and material:** Equipment and material staging would be necessary at various locations near the pipeline alignments.

Water Treatment Plant

Construction activities associated with the WTP could include:

- ▶ **Vegetation and tree removal:** Vegetation and trees would be removed within and around the WTP site to facilitate construction equipment and activities and the new WTP facility. Vegetation and tree removal can be done with heavy equipment or by hand with hand or power tools.
- ▶ **Grading:** It is likely that the proposed WTP site would need to be graded. Depending on the quality and integrity of the soil at the site, some of it may need to be excavated and replaced with suitable material. Blasting may be needed in areas with bedrock. Access roads may need to be graded if there is not existing adequate access to the site.
- ▶ **Trenching, installation of pipe, and backfilling trench:** Trenches would be excavated to install pipelines and other utilities for connections within the WTP and to connect to the raw water and treated water pipelines. Trenches are usually excavated with heavy equipment, such as an excavator. Blasting may be needed in areas with bedrock. The trenches would be backfilled.
- ▶ **Construction of WTP facility:** The WTP facility construction would likely require heavy equipment use to construct WTP components. Access roads may also need to be paved if there is not existing adequate access to the site.
- ▶ **Staging of equipment and material:** Equipment and material staging would be necessary at and near the WTP site.



Source: Figure created by Ascent Environmental in 2019

Figure 6 Conceptual Locations of White Rock Powerhouse Penstock/Slab Creek Dam or Reservoir Diversion Facilities

Maintenance Activities

Raw Water and Treated Water Pipelines

Maintenance of the raw water and treated water pipelines would be limited to occasional exercising (i.e., opening and closing) of valves to ensure they are operating correctly and maintaining the easement free of large vegetation that would impede access. The pipelines would be accessed for routine maintenance. Once the new pipeline is in service, operation of the system would not change unless there was an emergency.

Water Treatment Plant

Consistent with other similar District facilities, the WTP would be manned during normal work hours and operated remotely during the night. Additional employees would be needed for operations activities.

3 PROBABLE ENVIRONMENTAL EFFECTS AND OTHER INFORMATION IN THE EIR

Pursuant to the State CEQA Guidelines Section 15082(a)(1)(C), this section of the NOP describes the probable environmental effects of the proposed project. For each environmental topic area, a summary of environmental conditions is presented followed by a listing of probable environmental effects which will be addressed in the Draft EIR. Also, other pertinent information to be presented in the EIR is briefly described. Finally, resources that would be not be significantly affected by the proposed modifications to Permit 21112 are briefly summarized below. Resources not significantly affected by the project would not be evaluated in the EIR.

EIR Approach

The EIR will address the project at both a programmatic and project level. For the proposed point of diversion at El Dorado Diversion Dam, the EIR will conduct a project-level analysis. Operational details of this diversion are known, and their probable environmental impacts can be analyzed at the project level. The amount of water diverted at the El Dorado Diversion Dam would not change from existing conditions because a portion of the water, up to 17,000 AFY, that is currently diverted for hydropower purposes would instead be diverted for consumptive use. No additional infrastructure would need to be constructed to implement the proposed Permit 21112 diversion at the El Dorado Diversion Dam. The timing of these diversions could change from existing conditions, which would result in changes in flows between the El Dorado Diversion Dam and the El Dorado Powerhouse at certain times of the year resulting in potential impacts on resources in this stretch of the South Fork. Additionally, compared to existing conditions, implementation of the proposed project would result in less water being returned to the South Fork below the El Dorado Powerhouse. Therefore, with regard to the proposed diversion at El Dorado Diversion Dam, the EIR would evaluate impacts resulting from changes in diversion timing and changes resulting from less water returned to the South Fork below the El Dorado Powerhouse.

The precise dates of implementation and details of precise infrastructure locations and characteristics (e.g., pipeline length) of the facilities needed for the proposed diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir are unknown. Therefore, the EIR will conduct a programmatic evaluation of impacts from the diversion proposed at either the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir. At the time that project details are refined for modifications at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir, additional CEQA review or evaluation may be needed if new impacts not addressed in the EIR would result. Implementation of the proposed Permit 2112 modifications at the White Rock Penstock Powerhouse or Slab Creek Dam/Reservoir would require construction of new raw and treated water conveyance pipelines and a new water treatment plant.

Probable Environmental Effects Addressed in Detail in the EIR

As required by CEQA, the EIR will describe existing conditions and evaluate the potential environmental effects of the proposed project and a reasonable range of alternatives, including the no-project alternative. It will address direct, indirect, and cumulative effects. The EIR will also discuss potential growth-inducing impacts and summarize significant and unavoidable environmental effects. The EIR will identify feasible mitigation measures, if available, to

reduce potentially significant project impacts. At this time, the District has identified a potential for environmental effects in the resource areas identified below.

Hydrology and Water Quality

El Dorado County contains four major watersheds: the Tahoe Watershed, the Middle Fork American River, the South Fork American River, and the Cosumnes River. The project area is located within the South Fork American River Watershed, and part of the project area (Jenkinson Lake) drains into the Cosumnes River Watershed. The South Fork American River watershed encompasses the central portion of the county, and extends from the Echo Summit west to Folsom Reservoir. Major tributaries within the South Fork American River Watershed include Silver Fork American River, Silver Creek, Slab Creek, Rock Creek, and Weber Creek. Other water features within the watershed include Caples Lake, Silver Lake, Lake Aloha, Weber Reservoir, Ice House Reservoir, Union Valley Reservoir, Junction Reservoir, Camino Reservoir, Brush Creek Reservoir, Slab Creek Reservoir, and Chili Bar Reservoir (El Dorado County 2003). The California Department of Water Resources (DWR) does not have data on the quality of groundwater in the proposed Project area basin, and the Sierra foothill region is not considered to have an identified aquifer (DWR 2016).

The EIR will assess the potential effects of the proposed project on the hydrology and water quality in the South Fork below the El Dorado Diversion Dam resulting from changes in diversion/re-diversion of water from the South Fork for consumptive use at multiple diversion points upstream from the existing diversion point at Folsom Reservoir, which includes diversion at the El Dorado Diversion Dam west of Kyburz and at either the White Rock Powerhouse Penstock on the Chili Bar Reservoir or Slab Creek Dam/Reservoir north of Placerville. Under the proposed project, the amount of water diverted at the El Dorado Diversion Dam would not change from existing conditions because a portion of the water, up to 17,000 AFY, that is currently diverted for hydropower purposes would instead be diverted for consumptive use. However, the timing of these diversions could change from existing operations, which could affect flows on the South Fork between the El Dorado Diversion Dam and the El Dorado Powerhouse. Additionally, compared to existing conditions, implementation of the proposed project would result in less water being returned to the South Fork below the El Dorado Powerhouse. The proposed diversion point at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir would be a new diversion, which could affect flows on the South Fork below this new diversion point.

The EIR will assess the potential impacts of the proposed project related to:

- ▶ the changes in timing of flows between the El Dorado Diversion Dam and the El Dorado Powerhouse compared to existing conditions;
- ▶ the reduction in flow levels in the South Fork below the El Dorado Powerhouse compared to existing flows, including reduction of flows into Folsom Reservoir;
- ▶ the ability to continue to meet instream flow requirements in the South Fork to protect the beneficial uses of this surface water body for municipal and domestic water supply, irrigation, hydropower, recreation, freshwater habitat, spawning, and wildlife habitat;
- ▶ the effects on water quality, including water temperature, sediment transport, and changes in turbidity, from reduced flows in the South Fork below the El Dorado Diversion Dam and including into Folsom Reservoir;
- ▶ flow levels in the South Fork required to meet the needs of other water rights, contracts, or operational requirements, such as those held by SMUD and Pacific Gas & Electric Company (PG&E); and
- ▶ any potential changes in groundwater recharge and groundwater quality along the South Fork from a reduction in flows below the El Dorado Powerhouse and from a change in the timing in flows between the El Dorado Diversion Dam and the El Dorado Powerhouse.

Jenkinson Lake would be used for storage of diverted water. Water stored in Jenkinson Lake would then be routed back into the District system for consumptive use. Therefore, the proposed Permit 21112 would not affect outflows from Jenkinson Lake and would not affect the Cosumnes River watershed.

Biological Resources (Aquatic)

The South Fork is characterized by deep, fast runs flowing into cascades or falls, deep pools, and riffle habitat that support both native and recreationally important fish species and robust benthic macroinvertebrate communities between the El Dorado Diversion Dam and Folsom Reservoir. The Water Quality Control Plan for the Sacramento and San Joaquin River Basins (CVRWQCB 2018) lists cold freshwater habitat as an existing beneficial use on the South Fork from its source to Placerville. Warm freshwater habitat is a potential beneficial use from the source to Placerville and an existing beneficial use from Placerville to Folsom Lake. Fish species in the stretch of the South Fork between El Dorado Diversion Dam and Folsom Reservoir include hardhead, Sacramento pikeminnow, speckled dace, California roach, Sacramento sucker, rainbow trout, brown trout, brook trout, prickly sculpin, and riffle sculpin. Rainbow trout and brown trout are widespread in the project area and support an important fishery. Fish species in Jenkinson Lake include rainbow trout, brown trout, Sacramento sucker, California roach, multiple nonnative centrarchid species, and carp.

The project elements have the potential to affect flows in the South Fork between El Dorado Diversion Dam and Folsom Reservoir, and therefore, could have potential impacts on aquatic biological resources. The analysis of potential impacts on aquatic biological resources will be informed by modeling of South Fork inflows to Folsom Reservoir, instream flows and water temperatures in affected reaches of the South Fork, and water surface elevations in affected project reservoirs that would occur with implementation of the proposed project. The potential environmental effects related to aquatic biological resources to be addressed in the EIR include:

- ▶ the effects on instream flows, water surface elevations, water temperatures, and other stressors for fish species in the South Fork below the El Dorado Diversion Dam, in Jenkinson Lake, and in Folsom Reservoir and the responses of fishery resources to these characteristics over varying hydrologic conditions; and
- ▶ the effects on the physical habitat of fish, including spawning habitat, from reduced instream flows in the South Fork below El Dorado Powerhouse and changes in water surface elevations in Jenkinson Lake.

Biological Resources (Terrestrial)

Terrestrial wildlife habitats along the South Fork between the El Dorado Diversion Dam and Folsom Reservoir include Sierran mixed conifer, Ponderosa pine, montane hardwood conifer, montane hardwood, blue oak-foothill pine, montane riparian, montane chaparral, and riverine. Sensitive species that may occur near project components include California spotted owl, northern goshawk, foothill yellow-legged frog, and bats. Special-status species of plants may also occur along the river in areas of suitable habitat.

Project-related activities that could result in direct effects on terrestrial biological resources include construction of diversion, conveyance, and treatment facilities associated with the White Rock Powerhouse Penstock or Slab Creek/Reservoir diversion, and reductions in water flowing downstream of the El Dorado Powerhouse, which could affect habitat in riparian zones. The potential environmental effects related to terrestrial biological resources to be addressed in the EIR include:

- ▶ the effects on wetland and riparian vegetation and associated wildlife from reductions in seasonal instream flows in the South Fork below the El Dorado Powerhouse; and
- ▶ the potential for the proposed project to directly remove or disturb riparian and other sensitive habitats along the South Fork or elsewhere in the EID service area, such as potential locations for diversion, conveyance, and treatment facilities.

Recreation

The South Fork and surrounding area provide extensive water-related and other recreation opportunities. The Water Quality Control Plan for the Sacramento and San Joaquin River Basins lists water contact and non-contact water recreation as existing beneficial uses of the South Fork. Most of the recreation users include local residents and visitors from throughout the Sacramento region, but the South Fork is also widely known for its whitewater boating opportunities (e.g., kayaking and rafting) and draws visitors from throughout California and beyond. Most boating on the South Fork occurs below Chili Bar Reservoir where sufficient river flows for boating are available nearly all year long as a result of reservoir releases. The river reaches upstream of Chili Bar Reservoir are usually accessible to kayaks and rafts only during the spring when natural runoff provides sufficient flow. The river reaches in the project area are

utilized by visitors participating in a variety of recreation activities, including picnicking, camping, hiking, fishing, swimming, and nature viewing. Forebay Reservoir, located in Pollock Pines at the end of the El Dorado Canal, is a no-body-contact-reservoir that provides opportunities for picnicking, fishing, nature viewing, and walking. Jenkinson Lake is located within the Sly Park Recreation Area, which provides opportunities for swimming, fishing, motorized boating, picnicking, camping, hiking, horseback riding, and mountain biking. The EIR will provide setting information related to these recreation facilities and uses as well as other recreation resources along the South Fork in the project area, including Marshall Gold Discovery State Historic Park and Henningsen Lotus Park.

Because the proposed project has the potential to affect stream flows in the South Fork between the El Dorado Powerhouse and Folsom Reservoir and water levels at Jenkinson Lake, the project elements could also result in impacts to water-related recreational activities. Recreation impacts will be evaluated based on the output of streamflow modeling (including flow change, seasonal timing, and frequency under the range of water-year type conditions), guidance in the El Dorado County River Management Plan, and input received during outreach to river recreation stakeholders. The EIR will assess:

- ▶ the effects of changes in and timing of river flows from implementation of the proposed project on the availability and quality of rafting, kayaking, fishing, and other river recreation opportunities or the physical resources that support river recreation (e.g., put in/take out points, shoreline conditions).

Cultural Resources and Tribal Cultural Resources

Within the project area, cultural resources may consist of prehistoric and ethnographic sites, as well as historic sites and structures. For example, the most common types of archaeological resources around Placerville are mining sites, homesteads/orchards, and linear features (roads, ditches, railroad grades, etc.) as well as Native American camps and village sites.

The proposed project could affect cultural resources by changing water levels below the El Dorado Powerhouse in the South Fork. The proposed project could also affect cultural resources by ground-disturbing activities associated with construction of the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion and related conveyance and treatment facilities. Depending on the presence of certain kinds of cultural resources, potential environmental effects to be addressed in the Draft EIR related to cultural resources may include:

- ▶ the effect on fluctuations in water volumes in the South Fork and the potential for degradation to some cultural sites because of changes in water flow;
- ▶ the potential to directly remove or disturb cultural resources or tribal cultural resources for construction of infrastructure related to the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir Diversion; and
- ▶ the potential to periodically disturb cultural resources or tribal cultural resources during maintenance activities that requires excavation or other ground disturbance.

Geology and Soils

The project site is in the western foothills of the Sierra Nevada mountain range, which is composed of northwest-trending metamorphic and igneous rocks that stretch from Bakersfield to Lassen Peak. The topography of the EID service area varies from rolling hills in the west to steep slopes along sections of the South Fork. The service area is bounded by Sacramento County to the west and the Pollock Pines to the east, and ranges from 500 to more than 4,000 feet in elevation.

No seismic hazard zones have been delineated in the proposed project area under the Seismic Hazard Mapping Act. The project area is not considered seismically active. Active faults are those with evidence of displacement during the Holocene period (less than 10,000 years in age). The EID service area includes a portion of the Foothills Fault System, which consists of a series of northwest-trending faults of pre-Quaternary and Quaternary age (over 1.6 million years in age). No active faults or Alquist-Priolo fault zones have been delineated in El Dorado County (El Dorado County 2015; U.S. Geological Survey 2019).

In general, soils in the EID service area include well-drained silt, sandy, and gravelly loams. There are also extensive areas mapped as rock outcrops (EID 2009; U.S. Department of Agriculture, Soil Conservation Service and Forest Service 1974).

The new diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir would involve construction of conveyance lines and a water treatment plant. Operation of the proposed project would involve the use of dams, the El Dorado Canal, reservoirs, and powerhouses to manage the diversion of flows of water in the South Fork for consumptive use. Although the total amount of water diverted at the El Dorado Diversion Dam would not change with the proposed project, the timing of the diversions could change. The EIR will assess the potential impacts from construction and operation of the project elements related to:

- ▶ soil erosion or loss of topsoil impacts resulting from grading, earth-moving, or construction-related activities during construction as well as from changes in geomorphology from operation of the proposed project;
- ▶ exacerbation of geologic hazards, such as risk of landslides, unstable soils, and other geologic hazards, from construction; and
- ▶ destruction of unique paleontological resources or sites or unique geological sites.

Because there are no active faults or Alquist-Priolo fault zones delineated in El Dorado County, the physical changes resulting from implementation of the proposed Permit 21112 modification would have no impact related to exacerbation of seismic hazards. Impacts related to seismic hazards will not be discussed further in the EIR.

Aesthetics

The project elements are located in an area with a wide range of landscapes: forested, rugged American River canyon beginning at approximately 3,900 feet elevation at the El Dorado Diversion Dam (approximately 1.5 miles west of the town of Kyburz), and rolling hills containing oak woodlands around the east end of Folsom Lake, which is the location of the existing diversion point for Permit 21112. Much of the land along the South Fork between the El Dorado Diversion Dam and Slab Creek Reservoir is undeveloped U.S. Forest Service land that is moderately forested up to the banks of the river.

U.S. 50 is a heavily traveled east-west route across the Sierra Nevada and is a designated state scenic highway east of Placerville (Caltrans 2019). U.S. 50 generally closely follows the South Fork, and motorists have occasional views of the river from U.S. 50 between Kyburz and Riverton. West of Riverton to the community of Fresh Pond, U.S. 50 still generally tracks the South Fork, but views from U.S. 50 are generally blocked by trees. Near Fresh Pond, U.S. 50 and the South Fork diverge from one another. Views of the river from U.S. 50 and other surrounding areas include deep pools, cascades, and large boulders in the river and riparian vegetation, mixed conifers, and vegetated steep slopes along the river.

The El Dorado Canal is a 15-foot wide and approximately 22-mile long canal that extends through a forested landscape from the El Dorado Diversion Dam to Forebay Reservoir. The Forebay Reservoir has a surface area of approximately 23 acres, is located in a rural community with almost its entire shoreline visible to drivers along Forebay Road. The reservoir is used by nearby residents as well as other visitors for recreation activities, such as fishing and picnicking.

Hazel Creek Tunnel serves as a diversion point for conveying water from the El Dorado Canal to Jenkinson Lake. The Hazel Creek Tunnel is located in a remote area that is not readily accessible to the public. Jenkinson Lake has a surface area of approximately 650 acres, is surrounded by forest and contains recreation facilities such as boat launches, piers, and picnic areas.

The White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion and the potential locations of future raw water conveyance lines associated with a new diversion at that location are north of Placerville in an area characterized by rolling foothills with mature oak woodlands. The conveyance lines would extend through portions of Placerville to a new water treatment plant. Placerville contains a mix of rural residential uses, farmland for vineyards and orchards, and urban development.

The potential impacts on aesthetics that will be addressed in the EIR include:

- ▶ the effects from the changes in flows on the appearance of riparian vegetation, flowing water, and other natural landscape features in and around the South Fork between the El Dorado Powerhouse and Folsom Reservoir;
- ▶ the effects on scenic vistas from potential changes in surface water flows in the South Fork below the El Dorado Powerhouse or from construction of new conveyance facilities and a water treatment plant;
- ▶ the potential for new conveyance facilities and a water treatment plant in rural areas to substantially degrade the existing visual character or quality of public views of the site and its surroundings;
- ▶ conflicts with applicable General Plan policies and State Scenic Highway policies related to scenic quality from the new conveyance facilities and water treatment plant in urbanized portions of Placerville; and
- ▶ the potential for new facilities associated with a diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir, such as the water treatment plant, to create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Although U.S. 50 is a scenic highway, the project elements would not affect views from U.S. 50. Project facilities located closest to U.S. 50, including the El Dorado Diversion Dam, El Dorado Canal, Hazel Creek Tunnel, and Jenkinson Lake, are not visible from U.S. 50, and flows in the South Fork between the dam and the El Dorado Powerhouse would not change from existing conditions; thus, the project elements would have no impact on scenic resources in a designated scenic highway. Therefore, impacts related to scenic highways will not be discussed in the EIR.

Utilities

Water services in western El Dorado County are provided by EID, Georgetown Divide Public Utility District, and Grizzly Flat Community Services District. Wastewater collection and treatment services in the western portion of the county are provided by the two EID wastewater treatment plants or on-site wastewater treatment systems (i.e., septic systems). Electricity and natural gas services in western El Dorado County are provided by PG&E and local propane companies. El Dorado County has franchise agreements with solid waste companies to provide solid waste collection services, as well as recycling and disposal services, for the unincorporated portion of the county, as well as the cities of South Lake Tahoe and Placerville. Most west slope residents and businesses are served by Waste Connections El Dorado Disposal for solid waste collection and disposal.

Some utilities, including SMUD and PG&E, use flows on the South Fork as a source for hydroelectric power production. The proposed project would result in a small reduction in flows on the South Fork, which could potentially affect the SMUD and PG&E hydroelectric power supplies. The EIR will assess the potential of the proposed modifications to:

- ▶ result in physical impacts because of changes in electricity generation that could occur as a result of flow reduction on the South Fork, and
- ▶ generate solid waste during construction of the proposed conveyance lines and water treatment plant that could exceed the capacity of nearby landfills.

Transportation

The primary vehicle travel routes in the EID service area include U.S. 50, State Route (SR) 49, and SR 193. The local street network is limited in the EID service area outside of the City of Placerville and El Dorado Hills. Transportation plans that are applicable to the proposed project include the El Dorado County General Plan Transportation and Circulation Element and the El Dorado County Regional Transportation Plan, which designate level of service (LOS) standards and requirements relating to transportation operation and safety.

Construction of the new conveyance lines and water treatment plant for the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion would generate construction-related traffic associated with construction worker trips and hauling equipment and materials. The locations of the conveyance lines and water treatment plant are currently unknown and, thus, potential temporary impacts on pedestrian, bicycle, or transit facilities are unknown at

this time. The EIR will assess the following potential impacts from the proposed project based on a reasonably foreseeable, conservative scenario:

- ▶ causing total vehicle miles traveled (VMT) within and in the area surrounding the EID service area to change in a way that would be considered a significant impact under CEQA Guidelines section 15064.3(b);
- ▶ interference with bicycle paths or sidewalks, such as the El Dorado Trail, as a result of construction activities or the locations of new conveyance lines; and
- ▶ potential hazards on local roads or effects on emergency access resulting from construction equipment accessing the project site for the new conveyance lines or water treatment plant.

Operation of the proposed changes in EID's diversion of water for consumptive use along the South Fork would not increase maintenance activities at the existing facilities that would be used by the diversions and, thus, would not result in any transportation-related changes. Operation of the new water treatment plant would require several new employees; however, the increase in trips associated with these new employees would not be substantial and would not result in a significant impact related to increases in VMT or result in a reduction of roadway and intersection operations to below LOS standards or result in conflicts with requirements relating to transportation operation and safety. Therefore, the impact associated with employee vehicular trips would not be discussed further in the EIR.

Air Quality

The proposed project is located within the Mountain Counties Air Basin (MCAB). The elevation of MCAB generally increases from west to east. Regional airflows are influenced by the mountains and hills and eastward winds can transport air pollutants from the Sacramento and San Joaquin Valleys and the San Francisco Bay Area air basins. The western portions of El Dorado County are in nonattainment for ozone and particulate matter (El Dorado County Air Quality Management District [EDCAQMD] 2019a).

Construction of the proposed project would result in some short-term emissions associated with earth-disturbing activities, including grading and clearing, material delivery, hauling, worker commute exhaust emissions, and building construction. Operation of the proposed project would generate air pollutant emissions from vehicle trips to and from the water treatment plant and from electricity consumption associated with the new water treatment plant. Additionally, electricity would be required to pump water from the diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir to the new water treatment and conveyance facilities, although this may be offset by pumping avoided by changing the location of the diversion from Folsom Reservoir to the upstream location of White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir. The EIR will assess the potential impacts of the proposed project related to:

- ▶ conflicts with or obstructing implementation of the applicable air quality plan associated with operational or construction emissions;
- ▶ the potential for operational or construction-related emissions to result in a cumulatively considerable net increase of ozone or particulate matter, for which the proposed project region is in non-attainment; and
- ▶ exposure of sensitive receptors to substantial pollutant concentrations from construction or operation of the project elements.

Construction and operation of the project would not result in other emissions, such as those leading to odors that would adversely affect a substantial number of people. Therefore, this impact will not be discussed in the EIR.

Greenhouse Gases and Climate Change

Cumulative greenhouse gas (GHG) emissions contribute to an increased greenhouse effect and global climate change, which results in sea level rise, changes in precipitation, habitat, temperature, occurrence of wildfires, air pollution levels, and changes in the frequency and intensity of weather-related-events. GHG emissions are attributable in large part to human activities. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70 percent of countywide GHG emissions; EDCAQMD 2019b). Other sources that contribute the most GHG emissions in the county include residential sources (approximately 20 percent of countywide GHG emissions)

and commercial/industrial sources (approximately 7 percent). The remaining sources of GHG emissions in the county are waste/landfill (approximately 3 percent) and agricultural (less than 1 percent).

Construction-related activities associated with the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion new conveyance lines and water treatment plant would generate greenhouse gas (GHG) emissions from activities including worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, graders, excavators). Operation of the water treatment plant and pumping of water from the new diversion at the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir would also use electricity that would result in GHG emissions, although this may be offset by reduction in pumping by changing the point of diversion. The EIR will assess the potential for construction and operation of the proposed project elements to:

- ▶ generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and
- ▶ conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, including *California's 2017 Climate Change Scoping Plan* (California Air Resources Board 2017).

Energy

PG&E provides electricity and natural gas to customers in El Dorado County. Gas supply and services on the west slope of El Dorado County are also provided by local propane companies.

Most project-related energy consumption would result from operation of construction equipment and vehicle trips associated with commute trips by construction workers and haul trucks supplying materials. Energy would be required to construct the new White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion, conveyance lines, and water treatment plant.

Energy would be consumed to operate the water treatment plant and pump water from the diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir to the new water treatment and conveyance facilities. The proposed additional points of diversion on the South Fork would reduce the amount of energy needed to meet future water demand in the District's service area, as this would allow more gravity-fed water conveyance as compared to the amount of energy needed to pump water from the existing Folsom Reservoir diversion to the District service area.

The EIR will assess the potential impacts from construction and operation of the proposed project related to:

- ▶ wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; and
- ▶ potential conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency, such as the state's *2008 Update, Energy Action Plan*, which focuses on the provisioning of renewable energy, demand reduction, energy efficiency, reducing VMT, increasing alternative fuels, and recycling (California Energy Commission and California Public Utility Commission 2008).

Noise and Vibration

Major sources of noise in the EID service area are generated from stationary activities (e.g., commercial and industrial uses), aircraft operations at the Placerville Airport, and traffic on major roadways and highways, such as U.S. 50. Noise-sensitive uses include residences and recreation uses along the South Fork.

Noise impacts would occur as a result of construction of facilities for the diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir. The specific location of the proposed water treatment plant is not currently known, but operation of the proposed conveyance lines would not generate substantial noise, if any. The new water treatment plant could result in some operational noise associated with the plant's equipment. The EIR will analyze:

- ▶ the potential for construction and operation of the water treatment plant and conveyance facilities to generate excessive groundborne vibration or result in a substantial increase in ambient noise levels that would exceed standards established by El Dorado County or the City of Placerville in their respective general plans or noise ordinances.

The diversion at El Dorado Diversion Dam and changes in operations at Jenkinson Lake would not require any construction activity or changes to operational activities that could generate noise. Therefore, the EIR would not discuss this impact further.

Wildfire

The project location is primarily characterized as within very high fire hazard severity zone with small areas of moderate or high fire hazard severity zones, such as in area around the City of Placerville (CAL FIRE 2007, 2009).

Implementation of the proposed modifications to Permit 21112 would include new water conveyance lines and a new water treatment plant and would not increase maintenance activities at existing facilities that would be utilized for the proposed project. The new conveyance lines would connect to the existing White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir, which may include mechanical equipment, combustion engines, or powerlines that could generate sparks or serve as an ignition source. However, the new conveyance lines would not exacerbate existing fire risks because they would not contain any of these types of features that could serve as an ignition risk. However, the new water treatment plant could include new powerlines and mechanical equipment.

The EIR will assess the potential impacts from the proposed project associated with:

- ▶ impairment of an adopted emergency response plan or emergency evacuation plan during construction of the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion conveyance lines and water treatment plant; and
- ▶ the potential increase in wildfire ignition risk and resulting exposure of people to pollutant concentrations from a wildfire or to uncontrolled spread of wildfire from construction activities or operations at the water treatment plant, which could include powerlines and mechanical equipment.

Construction of the new conveyance lines could involve vegetation clearing and ground disturbance in sloped areas. The amount of vegetation cleared in these areas would not be substantial and remaining vegetation adjacent to the conveyance lines would be sufficient to retain soils and minimize the potential for downslope or downstream flooding or landslides as a result of post-fire slope instability, runoff, or other drainage changes. Additionally, best management practices to manage soil erosion and stormwater runoff would be implemented during construction activities, which would reduce the potential for downslope or downstream flooding or landslides as a result of post-fire slope instability, runoff, or other drainage changes during construction. This impact would be less than significant and will not be discussed further in the EIR.

The addition of new employees in the project area for operation of the new diversion facilities for the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir would not substantially increase activities that could increase the risk of wildfire ignition. Therefore, this impact would be less than significant and will not be discussed further in the EIR.

Operation of the proposed changes in EID's diversion of water at the El Dorado Diversion Dam and changes in operations at Jenkinson Lake would not include new facilities or increase maintenance activities at the existing facilities and, thus, would not impair an adopted emergency response plan or emergency evacuation plan. Similarly, operation of the new conveyance lines and water treatment plant would also not result in significant impacts on any emergency response plans or emergency evacuation plans. Therefore, these impacts will not be discussed further in the EIR.

Hazards and Hazardous Materials

Several hazardous waste sites are located in the EID service area and are generally located within developed areas, such as in Placerville and Diamond Springs, and along major highways or roadways, including US 50 and SR 49. These hazardous waste sites include leaking underground storage tanks, well water contamination, and former mine and sawmill operations (Department of Toxic Substance Control 2019, State Water Resources Control Board 2019).

Ultramafic and serpentine rocks are associated with naturally occurring asbestos (NOA). Asbestos occurrences and ultramafic rock outcropping are identified in portions of western El Dorado County (El Dorado County 2015).

Construction of the new diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir would include ground-disturbing activities for new conveyance pipelines and the water treatment plant. Ground-disturbing activities could be located in the vicinity of existing hazardous materials sites. Construction activities could include the use and transport of hazardous materials. The EIR will assess the potential impacts from constructing new conveyance lines and a water treatment plant as part of the proposed project related to:

- ▶ hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- ▶ hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, including the potential exposure of people to NOA during construction of the conveyance lines and water treatment plant;
- ▶ a significant hazard to the public or the environment as a result of being located on an existing hazardous materials site; and
- ▶ impairment or physical interference with an adopted emergency response plan or emergency evacuation plan.

The proposed modification of operations at the El Dorado Diversion Dam or at Jenkinson Lake would not involve construction activities, other ground-disturbing activities, or use of hazardous materials and, thus, would have no impact associated with creating a significant hazard. Therefore, the modification of operations at El Dorado Diversion Dam will not be discussed further in the EIR in terms of hazards impacts.

Land Use

The location of the proposed project is within rural El Dorado County and the City of Placerville. Portions of the proposed project are also located within the Eldorado National Forest. The types of land uses in the District's service area, throughout which the project elements are located, include undeveloped open space, rural residential areas, farmland, recreation and scenic uses, power production, and urban development. Several land use plans cover the area around the project elements, including the El Dorado County General Plan, Placerville General Plan, Eldorado National Forest Land Management Plan, and the El Dorado County River Management Plan.

The EIR will assess the potential impacts of the proposed project related to:

- ▶ conflicts with policies intended to mitigate environmental impacts in the El Dorado County River Management Plan, El Dorado County General Plan, Placerville General Plan, and Eldorado National Forest Land Management Plan, associated with the potential changes in flows in the South Fork between the El Dorado Powerhouse and Folsom Reservoir; and
- ▶ conflicts with policies intended to mitigate environmental impacts in the El Dorado County General Plan and Placerville General Plan from construction of new conveyance lines and the water treatment plant.

The new water conveyance pipelines associated with the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion would be located so that it would not result in the physical division of an established community, as the facilities would be located to avoid isolation of communities, such as within existing easements or rights-of-way and/or underground. This impact would not be discussed further in the EIR.

Population and Housing

The population of El Dorado County, including portions of the City of Placerville, that is served by EID includes a mix of types of water users, including residential, commercial, agricultural, and public (e.g., schools, governmental facilities). Population growth estimates for the EID service area provided in EID's 2015 Urban Water Management Plan (UWMP) are developed based on population projections in the El Dorado County General Plan and known development proposals (see Table 1). The UWMP documents EID's water management planning efforts over a 25-year planning period.

Table 1 Historic and Projected Population in the EID Service Area

Year	Population
2010	107,470
2015	107,578
2020	113,118
2025	118,944
2030	125,069
2035	131,511
2040	138,283
2045	145,045

Source: EID 2016

The UWMP provides future estimates of the number of different types of customers for EID, including the number of residential units. EID anticipates residential growth during the 2015 UWMP planning horizon to increase by more than 13,600 additional dwelling units by 2035 and by more than 17,500 units by 2045 (see Table 2).

Table 2 Anticipated Residential Unit Growth in the EID Service Area over Existing Conditions

Residential Unit Type	2020	2025	2030	2035	2040	2045
Single Family	2,206	5,669	8,452	11,091	13,124	14,692
Multi Family	203	905	1,644	2,520	2,702	2,894
Total Residential Units	2,409	6,574	10,096	13,611	15,826	17,586

Source: EID 2016

An objective of the proposed project is to meet future water demand as identified in long-term water supply planning efforts. The District's intent is to provide more efficient delivery of water to meet the water needs of projected population growth. The EIR will refer to the CEQA documents related to the adopted local general plans for environmental impact analysis of growth inducement, as appropriate under CEQA. The EIR will therefore evaluate:

- ▶ whether the proposed project is consistent with the direction of adopted plans, particularly related to the level of planned future growth; and
- ▶ the potential for the new water conveyance pipelines and a new water treatment plant associated with the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion to displace existing people or housing, necessitating the construction of replacement housing elsewhere.

The changes in diversion/re-diversion that would occur with the proposed modification of operations at the El Dorado Diversion Dam and associated changes in operations at Jenkinson Lake would not result in physical changes that would displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Thus, the proposed project would have no impact related to displacement of people or housing, and the EIR would not discuss this impact further.

Agriculture and Forestry Resources

Agriculture and forestry resources are important throughout El Dorado County. As of 2016, 4,553 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, were located in the EID service area (California Department of Conservation no date, California Department of Conservation 2018). El Dorado County contains over 33,600 acres of land under a Williamson Act contract (DOC 2016). Additionally, the county contains an estimated 864,000 acres of forestland, of which 636,000 could be categorized as timberland (El Dorado County 2003). Section 130.21.010 of the El Dorado County Zoning Ordinance established several zoning designations in the county to support agricultural, forest land, and timberland uses: Planned Agricultural, Limited Agricultural, Agricultural Grazing, Timber Production, and Forest Resource.

The diversion at White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir has the potential to result in the construction of new facilities, such as raw and treated water conveyance pipelines and a new water treatment plant, which could remove from use or preclude the use of those lands for agricultural or forest resource purposes. The potential impacts on agriculture and forestry resources that will be addressed in the EIR include:

- ▶ conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) or forest land to non-agricultural or non-forest uses or involve other changes which, because of their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use; and
- ▶ conflicts with existing zoning or cause rezoning of lands zoned for agricultural use, a Williamson Act contract, forest land, timberland, or timberland zoned Timberland Production.

Public Services

Public services provided throughout the EID service area include fire protection, law enforcement, and schools. Fire protection services in the west slope of El Dorado County are provided by 10 separate fire districts and the California Department of Forestry and Fire Protection (CAL FIRE). CAL FIRE and the fire districts also provide emergency medical services (EMS) to the west slope. The El Dorado County Sheriff's Office provides law enforcement service to the unincorporated areas of the county (El Dorado County 2003). There are 15 school districts providing educational services to students in kindergarten through twelfth grade in the west slope of the county (El Dorado County Office of Education 2019).

Construction activities associated with the White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion would generate temporary employment. The increase in temporary and permanent employment would not be substantial and would not result in a substantial increase in demand for public services, including fire and police protection, schools, parks, or other public facilities, such that the proposed project would require new or physically altered governmental facilities or adversely affect service ratios, response times, or other performance objectives. Maintenance at the El Dorado Diversion Dam, Forebay Reservoir, Jenkinson Lake, Hazel Creek Tunnel, El Dorado Canal, and other existing facilities would continue to occur as it is currently undertaken. Maintenance of the new raw water and treated water pipelines would be limited to occasional exercising (i.e., opening and closing) of valves to ensure they are operating correctly. The pipelines would not be accessed for routine maintenance. These project components would not require additional employees; however, several additional employees would be required for operation of the new water treatment plant. These impacts of the proposed project would be less than significant, and therefore will not be discussed further in the EIR.

Mineral Resources

Mineral land classification reports and maps have been prepared for portions of El Dorado County. The Mineral Resource Zone (MRZ) system developed subsequent to the Surface Mining and Reclamation Act of 1975 characterizes both the location and known or presumed economic value of underlying mineral resources. In general, the majority of the county's important mineral resource deposits are concentrated in the western third of the county (El Dorado County 2003). Areas underlain by mineral deposits, classified MRZ-2, are located in a north-south trending band through the county, including near Placerville as well as in other small pockets of throughout the western portion of the county.

Implementation of the proposed project could construct new facilities that are located within a locally important or known mineral resource area identified in the El Dorado County General Plan or in the Mineral Land Classification of El Dorado County, California (El Dorado County 2004).

The EIR would assess potential impacts from the proposed project related to:

- ▶ direct loss of availability of a known or locally important mineral resource from the construction of White Rock Powerhouse Penstock or Slab Creek Dam/Reservoir diversion facilities, such as pipelines and a water treatment plant.

The proposed modification of operations at El Dorado Diversion Dam and Jenkinson Lake would not include any physical changes and would have no impact on the availability of a known or locally important mineral resource. Therefore, this impact will not be discussed further in the EIR.

Cumulative Impacts

Cumulative impacts may arise from potential increases in the number of diversion points on the South Fork for consumptive use under EID's Permit 21112 and construction of new conveyance lines and a new water treatment plant. Alterations in the location of where EID diverts water for consumptive use may also affect operations of facilities belonging to other water providers and hydropower suppliers, including SMUD and PG&E. SMUD and PG&E operate several facilities along the South Fork in the project area and are also required to meet minimum water quality and flow objectives for aquatic resources in the South Fork. The Draft EIR will address cumulative effects of the proposed project in combination with other related water planning efforts in the region and construction activities near the proposed conveyance lines and water treatment plant, including effects related to surface water hydrology, water quality, and fisheries.

Other Information to Be Included in the EIR

In addition to the potential significant environmental effects of the proposed project and feasible mitigation measures to address those impacts, the Draft EIR will include other information required either by CEQA or relevant to the decision at hand.

Alternatives Analysis

As required by CEQA Guidelines Section 15126(d), the Draft EIR will evaluate a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic project objectives and would avoid or substantially reduce a significant impact of the proposed project.

Effects Found Not to be Significant

Pursuant to CEQA Guidelines Section 15128, the Draft EIR will identify environmental effects found not to be significant and, therefore, not addressed in detail in the document. Reasons why each possible effect is not significant will be briefly discussed.

Indirect Effects from Growth

An objective of the proposed project is to provide a reliable and safe water supply to accommodate the currently contemplated future land use development and population growth of the area, as reflected in adopted general plans. This population growth and associated buildout could result in environmental impacts. These impacts would be considered indirect impacts of the proposed modifications to Permit 21112, as fulfillment of the existing water right through more efficient conveyance and delivery of water would accommodate growth. The EIR would discuss the potential for population growth and buildout to:

- ▶ Adversely affect drainage, water quality, and flooding;
- ▶ Substantially adversely affect terrestrial and aquatic biological resources and sensitive habitats;
- ▶ Require construction of additional recreation facilities, resulting in environmental impacts;
- ▶ Damage or destroy cultural or tribal cultural resources;
- ▶ Result in increased erosion or exacerbation of geologic hazards;
- ▶ Substantially damage scenic resources or degrade the existing visual character or quality of public views;
- ▶ Require construction of additional utilities infrastructure, resulting in environmental impacts;
- ▶ Increase transportation VMT;
- ▶ Increase air pollutant and GHG emissions and energy use;
- ▶ Generate noise;

-
- ▶ Increase the risk of wildfire and other hazards;
 - ▶ Require construction of additional facilities to provide public services, resulting in environmental impacts;
 - ▶ Convert agricultural or forest land to non-agricultural and non-forest uses; and
 - ▶ Preclude recovery of mineral resources.

Significant and Irreversible Environmental Changes

Pursuant to CEQA Guidelines Section 15126.2(d), the Draft EIR will identify significant irreversible environmental changes that would be caused by the proposed project. These changes may include, for example, uses of nonrenewable resources, provision of access to previously inaccessible areas, or accidents that could change the environment in the long term.

REFERENCES

- California Air Resources Board. 2017 (November). *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
- California Department of Conservation. 2016 (December). *The California Land Conservation Act of 1965 2016 Status Report*. Available: https://www.conservation.ca.gov/dlrp/wa/Pages/stats_reports.aspx. Accessed April 23, 2019.
- . 2018 (August). El Dorado County Important Farmland 2016. Available: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/ElDorado.aspx>. Accessed April 18, 2019.
- . No date. Table A-6, El Dorado County, 2014-2016 Land Use Conversion. Available: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/ElDorado.aspx>. Accessed April 18, 2019.
- California Department of Forestry and Fire Protection. 2007 (November). Fire Hazard Severity Zones in SRA, El Dorado County.
- . 2009 (March). Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE, El Dorado County.
- California Department of Transportation. 2019. California Scenic Highway Mapping System, El Dorado County. Available: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed April 24, 2019.
- California Energy Commission and California Public Utilities Commission. 2008 (February). *2008 Update, Energy Action Plan*. Available: <https://www.energy.ca.gov/2008publications/CEC-100-2008-001/CEC-100-2008-001.PDF>. Accessed May 3, 2019.
- Central Valley Regional Water Quality Control Board (CVRWQCB). 2018. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, Fifth Edition: the Sacramento River Basin and The San Joaquin River Basin. https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf. Accessed August 27, 2019.
- Department of Toxic Substance Control. 2019. Envirostor. Available: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=el+dorado+county>. Accessed May 19, 2019.
- Department of Water Resources. 2016 (December). California's Groundwater, Working Toward Sustainability, Bulletin 118 Interim Update 2016.
- El Dorado County. 2003 (May). *El Dorado County General Plan Draft Environmental Impact Report*. Available: [https://www.edcgov.us/Government/planning/pages/draft_environmental_impact_report_\(deir\).aspx](https://www.edcgov.us/Government/planning/pages/draft_environmental_impact_report_(deir).aspx). Accessed April 23, 2019.

-
- . 2014. El Dorado County General Plan. Available:
https://www.edcgov.us/Government/planning/Pages/adopted_general_plan.aspx. Accessed December 26, 2017.
- . 2015 (January). Asbestos Review Areas, Western Slope, County of El Dorado, California. Available:
<https://edcgov.us/Government/AirQualityManagement/documents/asbestos%20review%20map%201-22-15.pdf>. Accessed May 19, 2019.
- El Dorado County Air Quality Management District. 2019a. Air Quality Plans. Available:
https://www.edcgov.us/Government/AirQualityManagement/Pages/air_quality_plans.aspx. Accessed May 1, 2019.
- . 2019b. Climate Change. Available:
https://edcgov.us/Government/AirQualityManagement/Pages/climate_change.aspx. Accessed May 28, 2019.
- El Dorado County Office of Education. 2019. Districts and School Listings. Available: <http://edcoe.org/districts-and-schools/districts-and-schools-listings>. Accessed May 28, 2019.
- El Dorado Irrigation District. 2009. *Acquisition, Permanent Repair, and Operation of the El Dorado Hydroelectric Project and Acquisition of 17,000 Acre-Feet Per Year of New Consumptive Water Draft Environmental Impact Report*, Volume I: Chapters 1-4.
- . 2016 (June). *2015 Urban Water Management Plan*.
- State Water Resources Control Board. 2019. Geotracker. Available:
<https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=el+dorado+county%2C+ca>. Accessed May 19, 2019.
- U.S. Department of Agriculture, Soil Conservation Service and Forest Service. 1974 (April). *Soil Survey of El Dorado Area, California*.
- U.S. Geological Survey. 2019. U.S. Quaternary Faults. Available:
<https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>. Accessed May 19, 2019.

This page intentionally left blank.