LAND 1 – ROAD AND TRAIL CONDITION ASSESSMENT TECHNICAL MEMORANDUM

KERN RIVER NO. 1 HYDROELECTRIC PROJECT
FERC PROJECT NO. 1930

PREPARED FOR:

December 2025

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LIST OF ACRONYMS

CMP	corrugated metal pipe
FERC	Federal Energy Regulatory Commission
Forest Service	United States Forest Service
FSH	Forest Service Handbook
GIS	geographic information system
GPS	global positioning system

KR1	Kern River No. 1
LAND 1 TSP	LAND 1 – Road and Trail Conditions Assessment Technical Study Plan
O&M	operation and maintenance
PAD	Pre-Application Document
Project	Kern River No. 1 Hydroelectric Project Relicensing, FERC Project No. 1930
SCE	Southern California Edison
SPD	Study Plan Determination
SQF	Sequoia National Forest
SR-178	State Route 178
TSP	Technical Study Plan

1.0 INTRODUCTION

This LAND 1 – Road and Trail Condition Assessment Technical Memorandum provides the methods and findings of the LAND 1 – Road and Trail Condition Assessment Technical Study Plan (LAND 1 TSP). The LAND 1 TSP was conducted in support of Southern California Edison's (SCE) Kern River No. 1 (KR1) Hydroelectric Project (Project) relicensing, Federal Energy Regulatory Commission (FERC) Project No. 1930. The LAND 1 TSP was included in SCE's Revised Study Plan submitted to FERC on February 13, 2024 (SCE 2024). In its March 14, 2024 Study Plan Determination (SPD), FERC approved the LAND 1 TSP without modifications (FERC 2024).

A desktop review of aerial imagery, existing geographic information system (GIS) road and trail data, and available operation and maintenance (O&M) records was conducted in June 2024. Following completion of this desktop review, a reconnaissance-level road and trail inventory was conducted in August 2024 to assess the current condition of all Project access roads and trails. As discussed in this report, all field reconnaissance efforts and data analyses associated with the LAND 1 TSP (SCE 2024) are complete.

2.0 STUDY OBJECTIVES

The objectives of the road and trail condition assessment study, as outlined in LAND 1 TSP (SCE 2024), include the following:

- Document current Project access road and trail conditions by conducting a reconnaissance-level inventory.
- Document SCE's current maintenance practices and frequency of use along Project access roads and trails.

3.0 STUDY AREA AND STUDY SITES

As defined in the KR1 Pre-Application Document (PAD), Project access roads and trails are those used for routine O&M of the Project (SCE 2023). As per the LAND 1 TSP the study area encompasses all Project access roads and trails identified in the PAD, which include eight roads (2.35 miles) and eleven trails (5.05 miles). These Project access roads and trails are identified in Table 3-1 (listed from downstream to upstream) and shown on Maps 3-1a–g.

4.0 METHODS

Study implementation followed the methods described in the LAND 1 TSP (SCE 2024).

4.1 STUDY PLAN VARIANCES

There are no variances from the LAND 1 TSP approved in FERC's SPD (FERC 2024).

4.2 DESKTOP ANALYSIS

A desktop analysis was conducted to characterize SCE's frequency of use along Project access roads and trails, frequency and type of maintenance activities, and location and size of culverts or other drainage features. Desktop GIS was used to compile data and develop annotated maps of available road features (i.e., culverts) for use during the reconnaissance-level condition assessment. Resources used to obtain information for the desktop analysis included the KR1 PAD (SCE 2023), aerial imagery, existing road and trail GIS data, and input from SCE O&M staff.

4.3 RECONNAISSANCE-LEVEL CONDITION ASSESSMENT

A reconnaissance-level condition assessment was conducted in August 2024 to characterize the current condition of Project access roads and trails relative to United States Forest Service (Forest Service) criteria for the assigned maintenance level (Forest Service 2005, 2014). Road and trail features identified in Table 4-1 were field-verified and/or collected during the August 2024 field assessment.

Project access roads and trails were surveyed by field personnel walking and/or slowly driving along each road/trail segment, periodically stopping to record general road/trail conditions, and documenting the condition of observed features. Features surveyed included culverts and other drainage features (i.e., water bars), erosion features, signs, riparian areas, and gates. Road and trail features were located using a Trimble Geo7X sub-meter Global Positioning System (GPS) unit. All GPS points collected in the field were assigned a unique feature ID, photographed, and georeferenced using the ArcGIS application Survey123. Condition and general observations were recorded in Survey123 for each feature.

Following the field visit, data collected in Survey123 was imported to Microsoft Excel and organized for reporting purposes. All data fields and photographs collected for each feature were reviewed for data quality assurance.

5.0 RESULTS SUMMARY

Results from the desktop analysis and August 2024 reconnaissance-level condition assessment are summarized below.

5.1 DESKTOP ANALYSIS

Preliminary road and trail information collected as part of the desktop analysis, including length, ownership, location relative to the FERC boundary, and Forest Service maintenance level; is summarized in Appendix A. As described in Section 4.1, the information obtained as part of the desktop analysis was then used to support the August 2024 reconnaissance-level condition assessment.

During the desktop analysis, information included in the KR1 PAD (SCE 2023) was verified to be accurate for all Project access roads and trails except Steel Flume Trail, which is shown in the wrong location. Specifically, current FERC Project boundary layers

(referenced in the KR1 PAD) indicate the Steel Flume Trail extends from State Route 178 (SR-178) up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment staff confirmed that the segment of the Steel Flume Trail from SR-178 up to the Powerhouse Trail no longer exists. Refer to Map 3-1c for the field verified location of the Steel Flume Trail.

5.1.1 Road and Trail Maintenance

SCE conducts maintenance on all Project access roads and trails to ensure continued access to Project facilities. During the desktop analysis, SCE O&M staff confirmed that road and trail maintenance is performed according to the maintenance regime in Section 2.6 of the KR1 PAD (SCE 2023):

> *Project access roads are regularly inspected during normal Project activities. Minor repairs are conducted on an as-needed basis and major repairs are implemented annually during the late summer / fall. Minor road maintenance generally includes debris removal; basic repairs, including filing of potholes; maintenance of erosion control features such as culverts, drains, ditches, and water bars; repair, replacement, or installation of access control structures such as posts, cables, rails, gates, and barrier rock; and repair/replacement of signage. Major road maintenance generally includes placement or replacement of culverts and other drainage features; grading, sealing, resurfacing, and road replacement. Vegetation management may also be conducted concurrently with road maintenance.*
>
> *Project access trails are regularly inspected during normal Project activities. Repairs are conducted on an as-needed basis typically during late summer/fall. Trail maintenance generally includes debris and rock removal; basic repairs including minor brushing; maintenance of erosion control features such as water bars; repair, replacement, or installation of access control structures such as barrier rock; and repair / replacement of signage. Vegetation management may also be conducted concurrently with trail maintenance.*

5.1.2 Forest Service Maintenance Levels

Forest Service maintenance levels are classifications assigned to National Forest System roads that characterize “the level of service provided by, and maintenance required for, a specific road” (Forest Service 2005). Forest Service trails are not subject to Forest Service road maintenance levels and associated maintenance prescription guidelines. The five Forest Service road maintenance levels as defined by Forest Service Handbook (FSH) 7709.58,10,12.3 are summarized below (Forest Service 2005, 2014).

- Management Level 1 is assigned to intermittent service roads that are closed to vehicular traffic. Basic custodial maintenance is performed to keep damage to

adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities.

- Maintenance Level 2 is assigned to roads open for use by high-clearance vehicles. Traffic is typically minor, consisting of specialized uses such as administrative/permitted activities or dispersed recreation.

- Maintenance Level 3 is assigned to roads that are open and maintained for travel by standard passenger cars at low travel speeds. Roads are typically single-lane with turnouts and spot surfacing.

- Maintenance Level 4 is assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double-lane and aggregate surfaced, but may include single-lane roads.

- Maintenance Level 5 is assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double-lane and paved, but may include aggregate surfaced roads.

Based on data collected during the desktop analysis, none of the Project access roads meet the moderate-to-high traffic volumes associated with Maintenance Levels 4 and 5, nor are any of the Project access roads closed to vehicular traffic (Management Level 1). All of the Project access roads are Maintenance Level 3, with the exception of Powerline Road and Dougherty Creek Road; these roads are less suitable for passenger vehicles and have a lower traffic volume, which are characteristic of Maintenance Level 2. Maintenance Level 3 roads are subject to the requirements of the Highway Safety Act and Manual of Uniform Traffic Control Devices, whereas Maintenance Level 2 roads are exempt.

Maintenance prescription guidelines for Level 2 and 3 roads as defined by FSH 7709.58,10,12.6, exhibit 01 (Forest Service 2005) are provided in Table 5-1.

5.2 RECONNAISSANCE-LEVEL CONDITION ASSESSMENT

The following section provides a summary of the following information:

- An overall condition assessment of all Project access roads and trails,

- A review of drainage features along Project access roads and trails,

- A review of locations experiencing erosion along Project access roads and trails, and

- A review of sensitive resources along Project access roads and trails.

Detailed road and trail feature information–including information about miscellaneous features such as signs, guardrails, and other safety features–are included in Appendix B, but are omitted from further discussion in this report.

5.2.1 Overall Condition

Road and trail conditions were categorized as “Good”, “Fair”, or “Poor” based on field observations, including erosion features, potholes, ruts, loose aggregate, missing aggregate, cracking debris, drainage feature classification, and excessive vegetation. These are defined as follows:

- **Good:** Most drainage features are designated as “No Apparent Concern” and functional; road/trail has adequate width to drive/walk safely; few erosion features may be present but are minor (small rills); little sign of surface deformation, including potholes, ruts, and wash boarding; no loose aggregate; sparse established vegetation in road/trail; road/trail is well-graded and does not need any maintenance/construction repairs.

- **Fair:** Most drainage features are designated as “No Apparent Concern” or “Potential Concern”; road/trail has adequate width to drive/walk safely; erosion features are present but consist of rills or minor drainage ditch erosion; some instances of surface deformation; sparse loose aggregate; vegetation may be present in some sections; road/trail may need some minor maintenance/construction repair; further monitoring may be necessary.

- **Poor:** Drainage features are not functioning as intended (standing water may be present) and need maintenance; sections of road/trail do not have adequate width for safe passage; major erosion concerns, including gully formation; road/trail surface deformation features are present and impact passage; loose aggregate is present; vegetation is established within road/trail; road/trail may have grading issues and needs maintenance/construction repairs; further monitoring is necessary.

Maps depicting Project access roads and trails, drainage features, and overall road/trail condition are provided in Appendix C. Representative photos depicting road and trail conditions are provided in Appendix D. While portions of some roads were observed to be in poor condition, all roads are maintained in accordance with their respective Forest Service Maintenance Level.

5.2.1.1 Roads

The overall condition of each of the eight Project access roads is summarized in Table 5-2.

5.2.1.2 Trails

The overall condition of each of the eleven Project access trails is summarized in Table 5-3.

5.2.2 Culverts and Other Drainage Features

A total of 41 drainage features were identified in the field, including 15 culverts and 26 miscellaneous drainage features such as water bars, slope drains, low-water crossings, drain inlets, and gutters. Based on conditions observed in the field, all drainage features were placed in one of the following categories:

- **No Apparent Concern:** Drainage feature appears to be functioning as designed; no major concerns with water conveyance due to sediment/detritus build-up or overgrown vegetation; no signs of erosion concerns including scouring; and no signs of structural issues including major rusting, holes, or other observed issues that would impact functioning of drainage feature.

- **Potential Concern:** Drainage feature shows some signs of not functioning as designed and warrants further monitoring and potential maintenance due to sediment/detritus build-up, overgrown vegetation, erosion concerns, and other observable structural issues.

- **Concern Likely:** Drainage feature is not functioning as designed and needs major maintenance or possible replacement due to sediment/detritus blockage, erosion concerns that are directing run-off away from drainage, and other observable structural issues.

Drainage concerns observed in the field included excess sediment/detritus in the inlet of culverts, sediment blockage at the outlet of culverts, and crushed/deteriorated corrugated metal pipe (CMP).

Additional information regarding the condition of each drainage feature is provided in Appendix B. Drainage feature locations are provided in Appendix C. Representative photos of drainage concern issues are provided in Appendix D.

5.2.2.1 Roads

Of the eight Project access roads, six included one or more drainage features. Powerline Road and Doughtery Creek Road did not include any drainage features. Table 5-4 summarizes the drainage classification of drainage features on each of the six roads.

5.2.2.2 Trails

All drainage features were located along roads except for one stream crossing and one seep along Lucas Creek Trail and a stream crossing along Stark Creek Trail (all classified as No Apparent Concern).

5.2.3 Erosion

A total of 91 locations experiencing erosion were identified in the field, including 31 road surface erosion features (i.e., chipped asphalt, alligator cracking, potholing) and 60 soil

erosion features (i.e., rills, gullies, slope instability). Based on conditions observed in the field, all erosion locations were placed in one of the following categories:

- **Low:** Erosion is discernable, but likely not introducing sediment to downstream drainages and waterways.
- **Moderate:** Erosion may be introducing sediment to downstream drainages and waterways, but does not currently pose a threat to the integrity of the road/trail prism.
- **High:** Erosion may potentially threaten the integrity of the road/trail prism if not addressed.

Most locations experiencing erosion observed in the field were minor-to-moderate; field staff did not observe any erosion that could result in a road or trail becoming impassible.

Additional information regarding the type and severity of each erosion location is provided in Appendix B. Representative photos of erosion are provided in Appendix D.

5.2.3.1 Roads

Erosion locations observed on Project access roads are summarized according to severity in Table 5-5.

5.2.3.2 Trails

Erosion locations observed on Project access trails are summarized according to severity in Table 5-6.

5.2.4 Sensitive Resources

Sensitive natural resources such as riparian areas were observed along many of the Project access roads and trails, including Democrat Gage Trail, Cow Flat Creek Trail, Lucas Creek Trail, Stark Creek Road, and Stark Creek Trail. Four stream crossings were identified in the field: Lucas Creek, which crosses Lucas Creek Trail at the beginning of the trail, and Stark Creek, which crosses Stark Creek Trail at the beginning of the trail as well as Stark Creek Road, which crosses twice within the final third of the road. Democrat Gage Trail travels adjacent to the Kern River, including portions of the trail that are located directly on the bank of the river.

Additional information regarding sensitive resources is provided in Appendix B. Representative photos are provided in Appendix D.

5.3 ROAD AND TRAIL USE

During the August 2024 field surveys, SCE staff and subcontractor crews were observed on several Project access roads. Neither SCE nor members of the public were observed utilizing any of the Project access trails during the surveys.

Refer to the REC 2 – Recreation Facility Use Assessment Interim Technical Memorandum for information related to use of Project Trails.

6.0 STUDY SPECIFIC CONSULTATION

The following study specific consultation was conducted:

- On June 24, 2024, SCE submitted a proposed approach to the Sequoia National Forest (SQF) for completion of the reconnaissance-level condition assessment for Project access roads and trails. On August 5, 2024, SQF provided concurrence for SCE's proposed approach via e-mail (personal electronic communication from Karen Miller, SQF Public Services Staff Officer, to Meg Richardson, KR1 Project Manager, August 5, 2024).

7.0 OUTSTANDING STUDY PLAN ELEMENTS

There are no outstanding study plan elements. The LAND 1 – Road and Trail Condition Assessment is complete.

8.0 REFERENCES

FERC (Federal Energy Regulatory Commission). 2024. Study Plan Determination for the Kern River No. 1 Hydroelectric Project. March 14.

Forest Service (United States Forest Service). 2005. Guidelines for Road Maintenance Levels. 7700-Transportation Management 0577 1205-SCTDC. December.

_____. 2014. Forest Service Manual (FSM) 7700. Travel management, Chapter 7730 – transportation system operation and maintenance. Amendment no. 7700-2014-1. Effective November 20, 2014.

SCE (Southern California Edison). 2023. Kern River No. 1 Hydroelectric Project, Pre-Application Document. May 5.

_____. 2024. Kern River No. 1 Hydroelectric Project (FERC Project No. 1930), Revised Study Plan. February 13.

TABLES

Table 3-1. Project Access Roads and Trails within the Study Area

Name	Length (miles)
Project Access Roads	
Democrat Dam Road[1]	0.93
Powerline Road	0.09
Flume No. 1 Road	0.08
Dougherty Creek Road	0.11
Stark Creek Road	0.82
Forebay Operations Area Road	0.13
Lower Powerhouse Road	0.09
Upper Powerhouse Road	0.10
Total	**2.35**
Project Access Trails	
Democrat Gage Trail[2]	0.30
Conduit No. 3 Trail	0.05
Cow Flat Creek Trail	0.13
Steel Flume Trail[3,4]	0.60
Lucas Creek Trail	0.52
Dougherty Creek Trail	0.45
Stark Creek Trail[2]	1.15
Adit 17 & 18 Trail[3]	0.67
Overflow Spillway Trail[3]	0.57
Skip Hoist/Forebay Trail[3]	0.57
Aerial Cable Upper Access Trail[2,4]	0.04
Total	**5.05**

Notes: [1] Democrat Dam Road is also referred to as Willow Spring Creek Road.
[2] Entirety of trail is outside the FERC Project boundary.
[3] A portion of the trail is outside the FERC Project boundary.
[4] Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from State Route 178 (SR-178) up to the United States Forest Service (Forest Service) trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment, staff confirmed that the segment of the Steel Flume Trail from SR-178 up to the Powerhouse Trail no longer exists; therefore that portion of the trail was not surveyed as part of the 2024 field reconnaissance. Instead, field technicians surveyed a contiguous section of the Powerhouse Trail (0.60-mile) extending south from Flume No. 2 (the upper terminus of the Cow Flat Creek Trail) to Conduit No. 6.
[5] Aerial Cable Upper Access Trail was not identified as a trail in the KR1 PAD. Consultation with SCE staff in 2024 confirmed that this trail is used for O&M.

Table 4-1. Project Access Road and Trail Features Included in Reconnaissance-Level Condition Assessment

Feature Type		Description
Road	**Trail**	
✓	✓	Land ownership/jurisdiction
✓	✓	Road/trail name
	✓	Location and condition of trailhead(s), if appropriate
✓	✓	Beginning and end points, and overall length
✓	✓	Average width
	✓	Average slope
	✓	Presence/absence of safety features such as handrails
✓		Surface type (e.g., paved, gravel, dirt)
✓	✓	Overall condition, including identification or issues pertaining to condition such as active erosion, potholes, ruts, loose aggregate, missing aggregate, cracking, debris, and excessive vegetation
✓		Location of natural resource features that may occur along Project access roads, such as stream crossings or riparian areas
✓	✓	Location, size, and condition of drainage and erosion control features such as culverts, water bars, and other drainage features
✓	✓	Location of areas experiencing erosion
✓		Location, type, and condition of signs (i.e., safety, traffic control, or informational)
✓	✓	Location and condition of access control features and barriers such as gates and other closure methods
	✓	Location of water crossings, if applicable
	✓	Observed public recreational use (e.g., hiking)
	✓	Resource concerns

Table 5-1. Level 2 and 3 Forest Service Maintenance Prescription Guidelines

Maintenance Type	Maintenance Level 2 Guidelines[1]	Maintenance Level 3 Guidelines[2]
General	As needed.	As needed.
Traveled way	Log out and brush as necessary to provide passage for planned traffic. Maintain road prism to provide for passage of high-clearance vehicles.	Maintain surface to provide travel by prudent drivers in standard passenger cars. Some surface roughness is tolerated. User comfort and convenience is a low priority. Maintain a traveled way crown or cross slope to provide adequate drainage. Replace the base course and surfacing as needed.
Shoulder	Maintain only as necessary for planned traffic.	Maintain existing shoulders commensurate with the traveled way.
Drainage	As necessary to keep drainage facilities functional and prevent unacceptable environmental damage.	As necessary to keep drainage facilities functional and prevent unacceptable environmental damage.
Roadway	Manage vegetative cover as needed for planned traffic. Remove and/or repair slides and/or slumps as needed for access with high clearance vehicles to control resource damage.	Maintain existing vegetative cover. Control the vegetation to provide sight distance. Repair and/or remove slides and slumps to provide passage by prudent drivers in standard passenger cars.
Roadside	Generally, no work is required.	Remove hazard trees and clean up litter.
Structure	Maintain all structures to provide for the passage of planned traffic.	Maintain all structures to provide for passage of planned traffic and to preserve structures for future use. Defer noncritical items and combine to provide for more economical project. For example, defective bridge rails, running planks, and bridge guideposts on a current basis. Defer the painting of bridge rails to a logical project cycle.
Traffic service	Install and maintain route markers; warning, regulatory, and guide signs; and other traffic control devices to provide for planned traffic and an appropriate traffic management strategy.	Install and maintain route markers; warning, regulatory, and guide signs; and other traffic devices to provide for planned traffic.

Source: Forest Service 2005

Notes: [1] Dougherty Creek Road and Powerline Road are maintenance level 2 roads.
[2] Democrat Dam Road, Flume No. 1 Road, Stark Creek Road, Forebay Operations Road, Lower Powerhouse Road, and Upper Powerhouse Road are maintenance level 3 roads.

Table 5-2. Overall Condition of Project Access Roads

Road Name	Overall Condition[1]
Democrat Dam Road	Fair
Powerline Road	Fair
Flume No. 1 Road	Fair
Dougherty Creek Road	Fair
Stark Creek Road	Fair
Forebay Operations Area Road	Fair
Lower Powerhouse Road	Fair
Upper Powerhouse Road	Good

Notes: [1] This column reflects the overall condition of each road; actual condition may vary for some segments of road. Refer to Appendix C for the condition of each segment along Project access roads.

Table 5-3. Overall Condition of Project Access Trails

Trail Name	Overall Condition[1]
Democrat Gage Trail	Good
Conduit No. 3 Trail	Good
Cow Flat Creek Trail	Good
Steel Flume Trail	Good
Lucas Creek Trail	Good
Dougherty Creek Trail	Good
Stark Creek Trail	Good
Adit 17 & 18 Trail	Fair
Overflow Spillway Trail	Poor
Skip Hoist/Forebay Trail	Fair
Aerial Cable Upper Access Trail	Fair

Notes: [1] This column reflects the overall condition of each trail; actual condition may vary for some segments of trail. Refer to Appendix C for the condition of each segment along Project access trails.

Table 5-4. Project Access Road Drainage Features and Classification

Road Name	Data ID	Description	Drainage Classification		
			No Apparent Concern	Potential Concern	Concern Likely
Democrat Dam Road	DD-1	Culvert, 10 inches		✓	
	DD-2	Culvert, 24 inches	✓		
	DD-3	Culvert, 10 inches			✓
	DD-4	Culvert, 24 inches			✓
	DD-5	Slope drain		✓	
	DD-6	Culvert, 12 inches	✓		
	DD-7	Culvert, 12 inches		✓	
Flume No. 1 Road	FN-1	Slope drain		✓	
Stark Creek Road	SC-1	Culvert, 12-inch CMP			✓
	SC-2	Culvert, 12-inch CMP		✓	
	SC-3	Culvert, 12-inch CMP		✓	
	SC-4	Culvert, 12-inch CMP	✓		
	SC-5	Culvert, 12-inch CMP	✓		
	SC-6	Culvert, 12-inch CMP		✓	
	SC-7	Culvert, 12-inch CMP			✓
	SC-8	Culvert, 12-inch CMP		✓	
	SC-9	Low-water crossing			✓
	SC-10	Water bar/slope drain	✓		
	SC-11	Water bar/slope drain	✓		
	SC-12	Low-water crossing	✓		
	SC-13	Slope drain	✓		
	SC-14	Slope drain	✓		
	SC-15	Water bar	✓		
Forebay Operations Area Road	FO-1	Drain inlet	✓		
	FO-2	Drain inlet	✓		
	FO-3	Drain inlet	✓		
Lower Powerhouse Road	LP-1	Drain outlet		✓	
	LP-2	Drain outlet	✓		

Road Name	Data ID	Description	Drainage Classification		
			No Apparent Concern	Potential Concern	Concern Likely
	LP-3	Drain outlet	✓		
	LP-4	Drain outlet	✓		
Upper Powerhouse Road	UP-1	Drain inlet	✓		
	UP-2	Drain inlet		✓	
	UP-3	Drain inlet	✓		
	UP-4	Drain inlet	✓		
	UP-5	Drain inlet	✓		
	UP-6	Drain inlet	✓		
	UP-7	Drain inlet	✓		
	UP-8	Curb and gutter	✓		

Key: CMP = corrugated metal pipe

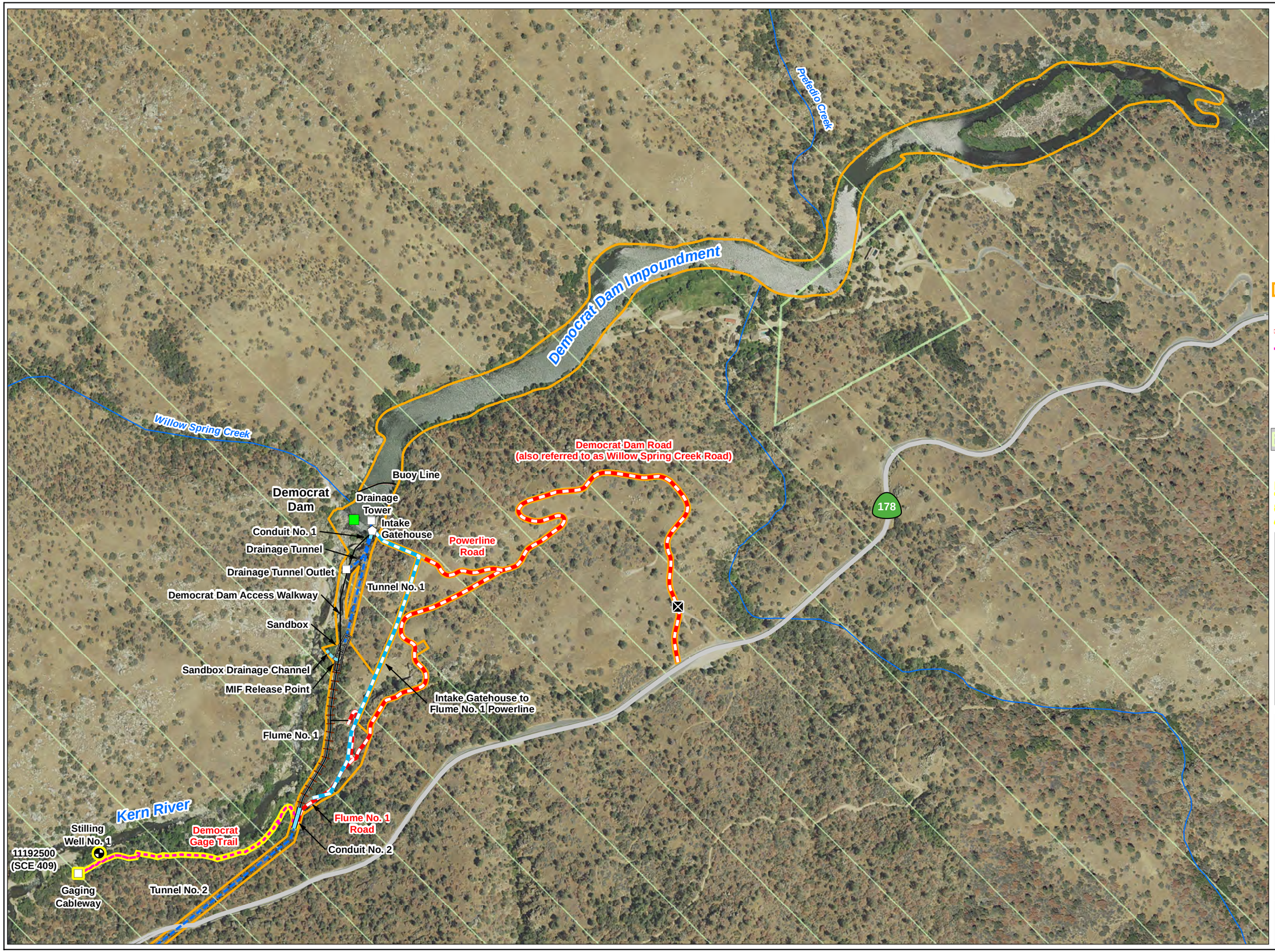
Table 5-5. Locations Experiencing Erosion on Project Access Roads

Road Name	Total No. of Locations Experiencing Erosion	Erosion Severity		
		Low	Moderate	High
Democrat Dam Road	23	2	6	15
Powerline Road	0	0	0	0
Flume No. 1 Road	3	0	3	0
Dougherty Creek Road	0	0	0	0
Stark Creek Road	4	0	0	4
Forebay Operations Area Road	5	0	3	2
Lower Powerhouse Road	4	0	2	2
Upper Powerhouse Road	1	0	0	1

Table 5-6. Locations Experiencing Erosion on Project Access Trails

Trail Name	Total No. of Erosion Features	Erosion Severity		
		Low	Moderate	High
Democrat Gage Trail	3	1	0	2
Conduit No. 3 Trail	1	0	0	1
Cow Flat Creek Trail	1	0	0	1
Steel Flume Trail	1	0	0	1
Lucas Creek Trail	3	3	0	0
Dougherty Creek Trail	0	0	0	0
Stark Creek Trail	2	0	1	1
Adit 17 & 18 Trail	13	0	10	3
Overflow Spillway Trail	17	1	2	14
Skip Hoist/Forebay Trail	10	0	3	7
Aerial Cable Upper Access Trail	0	0	0	0

MAPS



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Project Trail
- Other Road
- Gate

Other Features

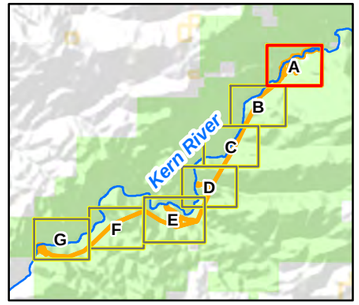
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead℠

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

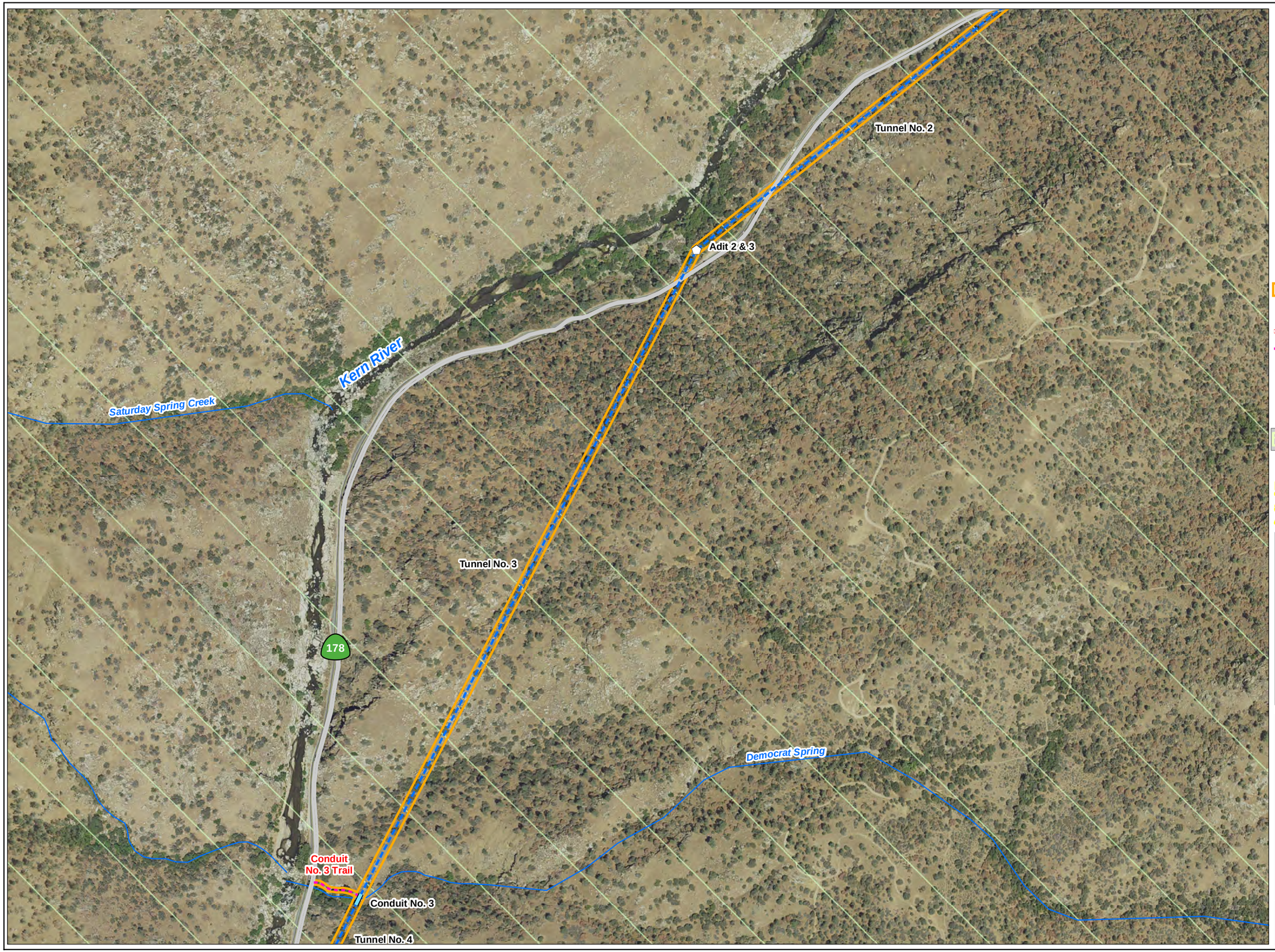
Map 3-1A

Roads and Trails within the Study Area

0 250 500
Feet

Projection: UTM Zone 11
Datum: NAD 83

Date: 7/16/2025



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Other Road
- Project Trail
- Gate

Other Features

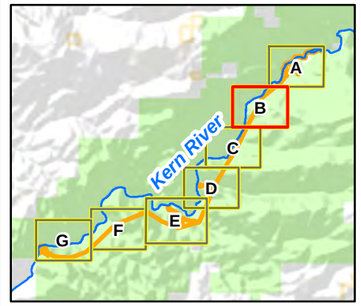
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map 3-1B

Roads and Trails within the Study Area

0 250 500
Feet

Projection: UTM Zone 11
Datum: NAD 83

Date: 7/16/2025

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Tunnel No. 4
Adit 4 & 5
Tunnel No. 5
Stilling Well No. 2
Cow Flat Creek Trail
11192000 o. 2 Cow Flat Creek (SCE 410)
Cow Flat Creek
Powerhouse Trail (USFS)
Tunnel No. 6
Kern River
Steel Flume Trail
Conduit No. 4
Flume No. 3
Conduit No. 5
Tunnel No. 7
Conduit No. 6
178
Tunnel No. 8

Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Project Trail
- Other Road
- Gate

Other Features

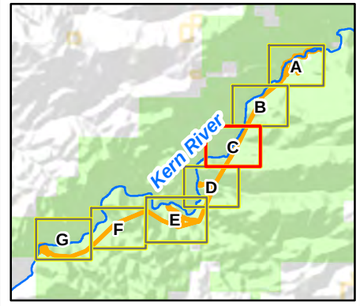
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from SR-178 up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment staff confirmed that the segment of the Steel Flume Trail from SR-178 up to the Powerhouse Trail no longer exists. The portion of Powerhouse Trail between Flume No. 2 and the intersection of Steel Flume Trail and Powerhouse Trail was also surveyed as part of the 2024 field reconnaissance surveys.”

SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

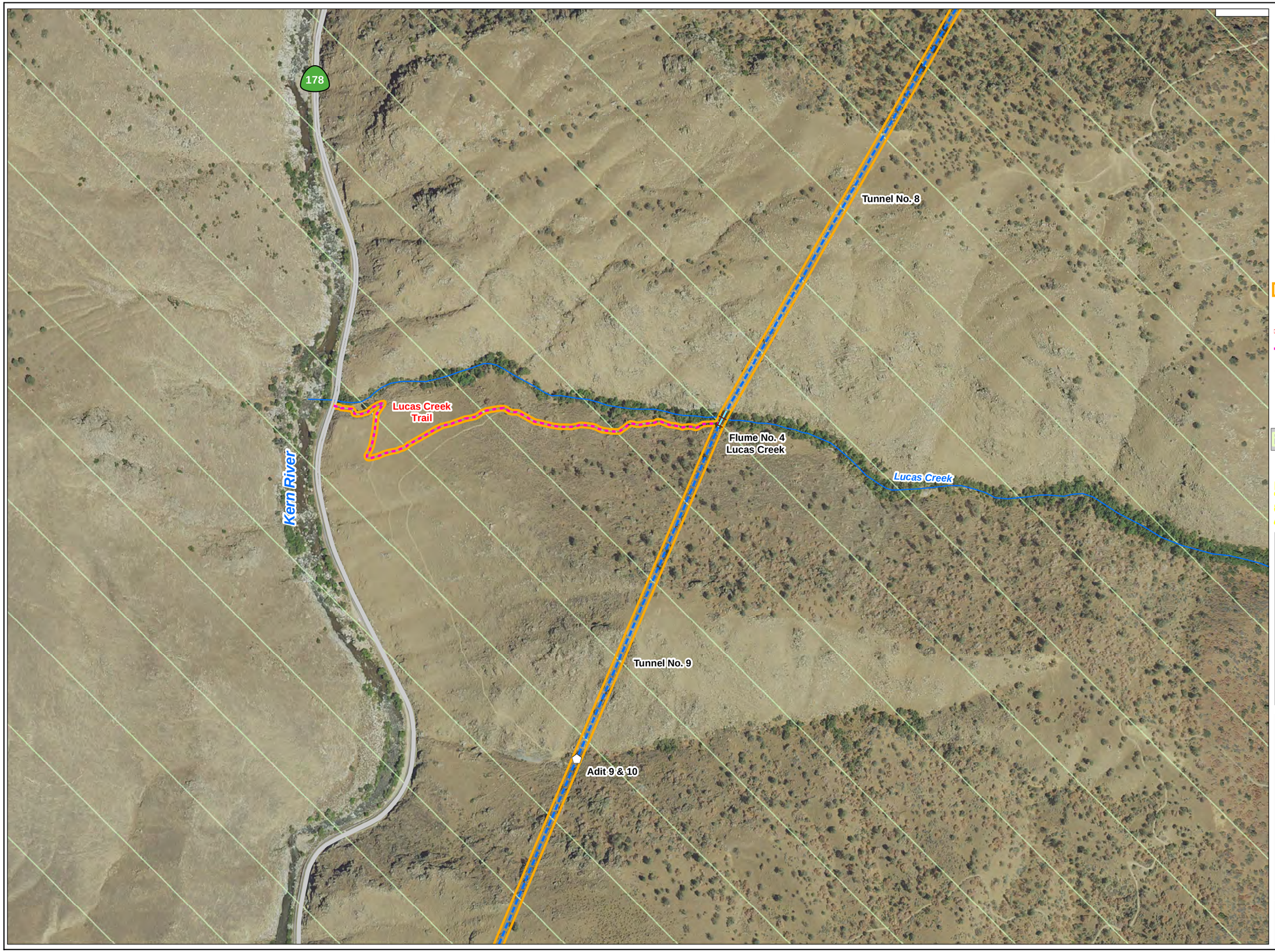
Map 3-1C

Roads and Trails within the Study Area

0 250 500
Feet

Date: 7/16/2025

Projection: UTM Zone 11
Datum: NAD 83



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Project Trail
- Other Road
- Gate

Other Features

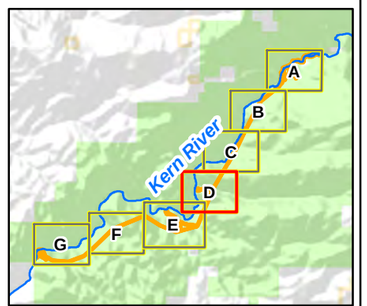
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead℠

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map 3-1D

Roads and Trails within the Study Area

0 250 500
Feet

Projection: UTM Zone 11
Datum: NAD 83

Date: 7/16/2025

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Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Other Road
- Project Trail
- Gate

Other Features

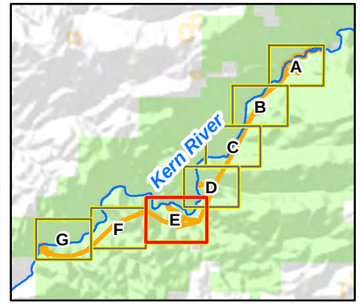
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

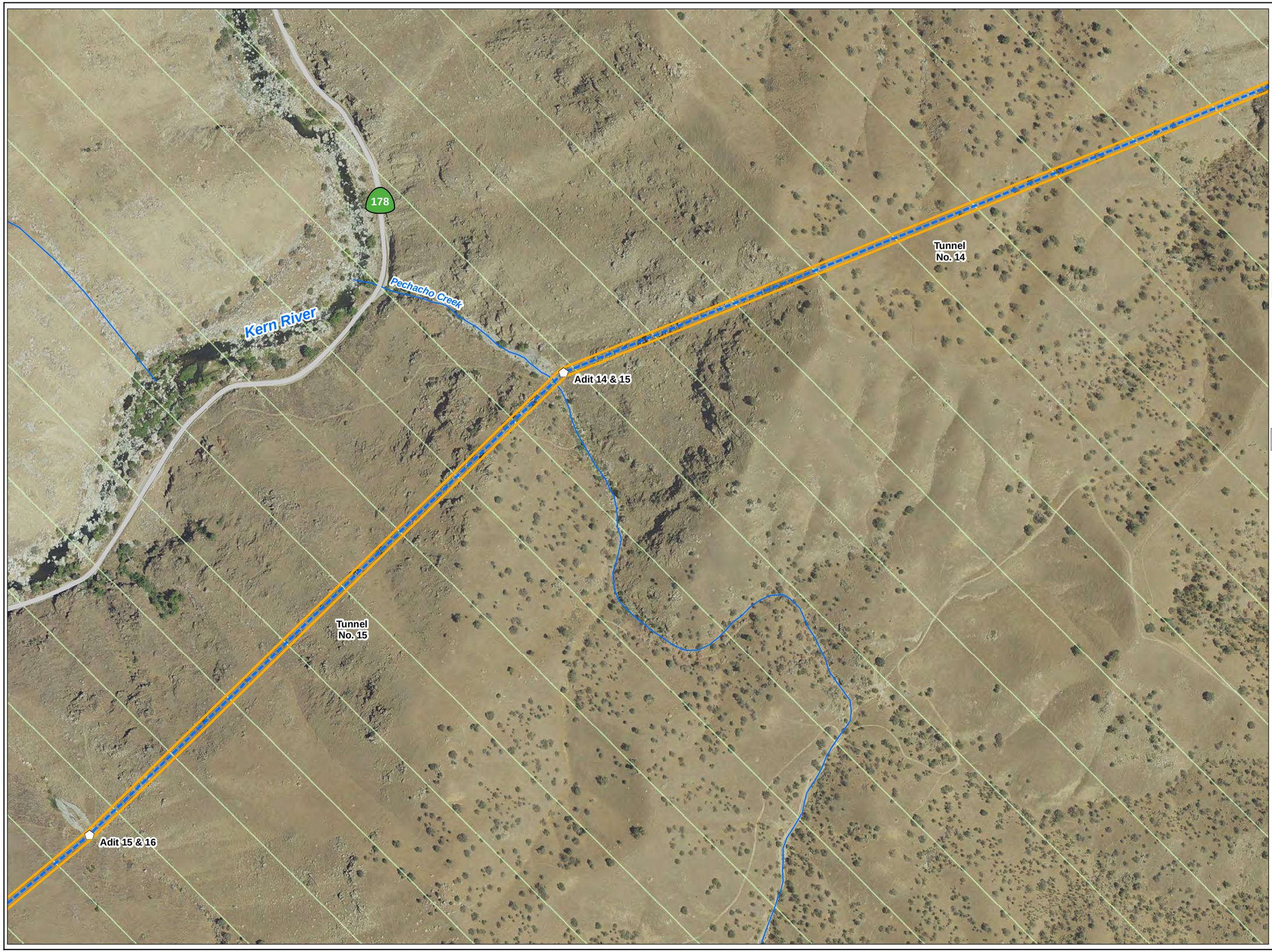
Map 3-1E

Roads and Trails within the Study Area

0 250 500
Feet

Projection: UTM Zone 11
Datum: NAD 83

Date: 7/16/2025



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Other Road
- Project Trail
- Gate

Other Features

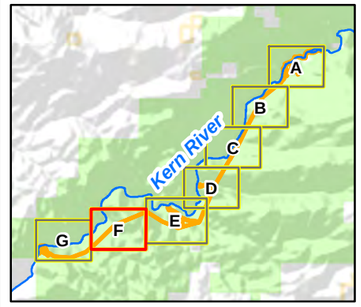
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map 3-1F

Roads and Trails within the Study Area

0 250 500
Feet

Date: 7/16/2025

Projection: UTM Zone 11
Datum: NAD 83

Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication / Powerline
- FERC Boundary

Transportation

- Project Road
- Project Trail
- Other Road
- Gate

Other Features

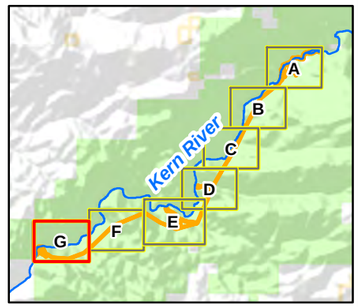
- Watercourse

Land Jurisdiction*

- U.S. Forest Service

*SOURCE: BLM 2021

NOTE: PROJECT FEATURES OUTSIDE OF THE CURRENT FERC BOUNDARY ARE SHOWN WITH YELLOW HALOS AND APPEAR ON MAPS A,C,E AND G



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map 3-1G

Roads and Trails within the Study Area

0 250 500
Feet

Projection: UTM Zone 11
Datum: NAD 83

Date: 7/25/2025

APPENDIX A

Project Access Road and Trail Summary Table

Table A-1. Project Access Road and Trail Summary Table

Road/Trail Name	Start		End		Overall Length		Width (feet)	Surface Treatment	Gated and/or Vehicular Access Blocked	Within FERC Boundary?	Land Ownership	Forest Service Road Maintenance Level
	Description	Coordinates	Description	Coordinates	Feet	Mile						
Democrat Dam Road[1]	Kern Canyon Road (SR-178)	35.523384, -118.668729	Democrat Dam Access Walkway	35.5223245968, -118.675000594	4,892	0.93	16	Paved/ Aggregate	Yes	Yes	Sequoia National Forest	3
Powerline Road	Willow Spring Creek Road	35.5247682915, -118.672102875	Intake Gatehouse to Flume No. 1 Powerline	35.5249312287, -118.673585362	484	0.09	16	Native	Yes	Yes	Sequoia National Forest	2
Flume No. 1 Road	Willow Spring Creek Road	35.5217919309, -118.674884897	Flume No. 1	35.5209904858, -118.675837648	412	0.08	20	Native	Yes	Yes	Sequoia National Forest	3
Dougherty Creek Road	Stark Creek Road	35.4727034778, -118.719618033	Dougherty Creek Trail	35.4717749875, -118.718106301	577	0.11	20	Native	Yes	Yes	Sequoia National Forest	2
Stark Creek Road	Kern Canyon Road (SR-178)	35.4756047733, -118.724413543	Flume No. 6 Stark Creek	35.4686503859, -118.719082599	4,338	0.82	20	Paved/ Aggregate	Yes	Yes	Sequoia National Forest	3
Forebay Operations Area Road	Kern Canyon Road (SR-178)	35.4583489188, -118.779675975	Forebay Operations Area	35.460077796, -118.779069319	670	0.13	10	Paved	Yes	Yes	Sequoia National Forest	3
Lower Powerhouse Road	Upper Powerhouse Road	35.4588625773, -118.77959485	Switchyard	35.4600866242, -118.779908892	483	0.09	20	Paved/ Aggregate	Yes	Yes	Sequoia National Forest	3
Upper Powerhouse Road	Kern Canyon Road (SR-178)	35.4586249214, -118.779608558	Powerhouse	35.4600384784, -118.779485283	521	0.1	40	Paved	Yes	Yes	Sequoia National Forest	3
Democrat Gage Trail	Flume No. 1 Road	35.5209904858, -118.675837648	Gaging Cableway	35.5199418583, -118.680068369	1,596	0.3	4	Native	Yes	No	Sequoia National Forest	N/A
Conduit No. 3 Trail	Kern Canyon Road (SR-178)	35.5052742119, -118.691011269	Conduit No. 3	35.5050416266, -118.690184194	273	0.05	4	Native	Yes	Yes	Sequoia National Forest	N/A
Cow Flat Creek Trail	Kern Canyon Road (SR-178)	35.5001230664, -118.693912431	Flume No. 2 Cow Flat Creek	35.4997878015, -118.693401099	694	0.13	4	Native	Yes	Yes	Sequoia National Forest	N/A
Steel Flume Trail[2]	Flume No. 2 Cow Flat Creek	35.4997878015, -118.693401099	Conduit No. 6	35.4951411739, -118.696197014	3,168	0.60	4	Native	Yes	Partially	Sequoia National Forest	N/A
Lucas Creek Trail	Kern Canyon Road (SR-178)	35.4837700935, -118.711328628	Flume No. 4 Lucas Creek	35.4836012188, -118.704000824	2,758	0.52	4	Native	Yes	Yes	Sequoia National Forest	N/A
Dougherty Creek Trail	Dougherty Creek Road	35.4717883698, -118.718120316	Flume No. 5 Dougherty Creek	35.4702782426, -118.711100605	2,351	0.45	4	Native	Yes	Yes	Sequoia National Forest	N/A
Stark Creek Trail	Stark Creek Road	35.4689692629, -118.718862229	Adit 13 & 14	35.4738234076, -118.733186386	6,081	1.15	4	Native	Yes	No	Sequoia National Forest	N/A
Adit 17 & 18 Trail	Forebay	35.4585238793, -118.775404466	Conduit No. 9	35.4570588294, -118.765789912	3,547	0.67	4	Native	Yes	Partially	Sequoia National Forest	N/A

Road/Trail Name	Start		End		Overall Length		Width (feet)	Surface Treatment	Gated and/or Vehicular Access Blocked	Within FERC Boundary?	Land Ownership	Forest Service Road Maintenance Level
	Description	Coordinates	Description	Coordinates	Feet	Mile						
Overflow Spillway Trail	Forebay Operations Area Lot	35.4602169072, -118.778362792	Adit 17 & 18 Trail	35.4578003034, -118.773366917	3,021	0.57	4	Native	Yes	Partially	Sequoia National Forest	N/A
Skip Hoist/Forebay Trail	Forebay Operations Area Lot	35.4598739793, -118.778747077	Forebay	35.4585238793, -118.775404466	3,055	0.57	4	Native	Yes	Partially	Sequoia National Forest	N/A
Aerial Cable Upper Access Trail	Skip Hoist Upper Landing	35.4581157268, -118.775998606	Aerial Cable Upper Mount	35.4577644514, -118.776063753	234	0.04	4	Native	Yes	Partially	Sequoia National Forest	N/A

Notes: [1] Democrat Dam Road is also referred to as Willow Spring Creek Road.
[2] Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from SR-178 up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment, staff confirmed that the segment of the Steel Flume Trail from SR-178 up to the Powerhouse Trail no longer exists; therefore that portion of the trail was not surveyed as part of the 2024 field reconnaissance. Instead, field technicians surveyed a contiguous section of the Powerhouse Trail (0.60-mile) extending south from Flume No. 2 (the upper terminus of the Cow Flat Creek Trail) to Conduit No. 6.

Key: FERC = Federal Energy Regulatory Commission
N/A = Not Applicable

APPENDIX B

Project Access Road and Trail Condition Assessment Features

Table B-1. Democrat Dam Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Democrat Dam Road	35.5227052737, -118.674251825	DD-1	Drainage feature	Culvert, 10" CMP	Potential Concern	–	Inlet pipe is bent and approximately 50% buried in sediment. Outlet pipe extends from hillside and is intact. Some rust is present. No erosion concerns were observed.
Democrat Dam Road	35.5229259399, -118.673559762	DD-2	Drainage feature	Culvert, 24" CMP	No Apparent Concern	–	Culvert drains a stream channel with evidence of ordinary high-water mark features (stained rock, abrupt changes in vegetation/sediment size). Inlet and outlet are free from sediment and in good condition. No erosion concerns were observed.
Democrat Dam Road	35.5236455694, -118.67383871	DD-3	Drainage feature	Culvert, 10" CMP	Concern Likely	–	Inlet is approximately 80% buried. Outlet discharges into a deteriorated steel slope drain. Minor erosion is present upstream of inlet. Gully erosion is present for approximately 80 feet below culvert.
Democrat Dam Road	35.5247324834, -118.672143454	DD-4	Drainage feature	Culvert, 12" steel	Concern Likely	–	Rusty steel pipe culvert (~12", not corrugated) with minor sediment accumulation at the inlet. Roadway is cracked along culvert path. Pipe is squished at outlet with substantial rust corrosion. Gully erosion is present along right side of roadway.
Democrat Dam Road	35.523770788, -118.674019181	DD-5	Drainage feature	Slope drain	Potential Concern	–	Steel slope drain in good condition with minor sediment accumulation at top of drain. Drain discharges into vegetated hillslope; no soil erosion was observed below drain.
Democrat Dam Road	35.5227052737, -118.674251825	DD-6	Drainage feature	Culvert, 12" CMP	No Apparent Concern	–	CMP in good condition. No sediment/debris accumulation observed. Some erosion is present along left shoulder near culvert.
Democrat Dam Road	35.5229259399, -118.673559762	DD-7	Drainage feature	Culvert, 12" CMP	Potential Concern	–	Inlet is approximately 30% buried. Small puddle of water is present upstream, which was trickling into the culvert. Culvert outlet (right side) is approximately 5% buried.
Democrat Dam Road	35.5225013845, -118.674798123	DD-8	Erosion	Road surface erosion	–	Low	Approximately 10 square feet of shallow potholes along right side of road.
Democrat Dam Road	35.5228840334, -118.673710733	DD-9	Erosion	Road surface erosion	–	Low	Shallow potholes, chipping, and loose aggregate along approximately 30'-40' of roadway.
Democrat Dam Road	35.5232552972, -118.673660288	DD-10	Erosion	Road surface erosion	–	Moderate	Potholes (1"-2" deep) along approximately 20'-30’ of roadway. Loose aggregate is scattered along side of road. Cracking through center of roadway is also present at this location.
Democrat Dam Road	35.5234513486, -118.673726875	DD-11	Erosion	Road surface erosion	–	Moderate	Alligator cracking and potholing (approximately 5 square feet).
Democrat Dam Road	35.5236511998, -118.673949031	DD-12	Erosion	Road surface erosion	–	Moderate	Alligator cracking and potholing (approximately 2' x 4').
Democrat Dam Road	35.5240026708, -118.67389582	DD-13	Erosion	Road surface erosion	–	Low	Chipped/missing asphalt along 2-4' of left edge of roadway.
Democrat Dam Road	35.5241152837, -118.673660457	DD-14	Erosion	Gullying	–	High	Gully erosion present along several hundred feet of roadway below culvert. Gully is up to 2 feet deep/2-4 feet wide in certain locations.

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Democrat Dam Road	35.5255853482, -118.670973985	DD-15	Erosion	Soil erosion	–	Moderate	Low-to-moderate soil erosion on right side of road, which is concentrated at the natural depression at this location. Rilling is present along majority of road shoulder along the inside bend, with the largest rill/small gully approximately 5' x 1' with a depth of ~1-2". Alligator cracking also present along the inner radius of bend in road.
Democrat Dam Road	35.5255443788, -118.671481419	DD-16	Erosion	Road surface erosion	–	Moderate	Roadway is cracked for approximately 40-50' of roadway, with some localized chipping on left edge of road
Democrat Dam Road	35.5256334494, -118.671823211	DD-17	Erosion	Road surface erosion	–	Moderate	Right side of road is deteriorated along bend in road. Some localized potholing is present. Rill erosion is also present along left side of roadway.
Democrat Dam Road	35.5260899361, -118.670499936	DD-18	Erosion	Gullying	–	Moderate	Small gully on left side of road that extends into vegetated hillslope for approximately 50'.
Democrat Dam Road	35.5224236663, -118.674863816	DD-19	Erosion	Road surface erosion	–	Moderate	4' x 1' pothole and cracked asphalt in center of roadway.
Democrat Dam Road	35.5262397625, -118.669459401	DD-20	Erosion	Road surface erosion	–	Moderate	Pothole/missing asphalt on left side of road, approximately 2' x 6'.
Democrat Dam Road	35.5255619108, -118.668735182	DD-21	Erosion	Road surface erosion	–	Low	Alligator cracks/minor potholes prevalent throughout this portion of road. Minor soil erosion present along left side of road around bend.
Democrat Dam Road	35.5238542328, -118.668774838	DD-22	Erosion	Road surface erosion	–	Low	Small pothole with road base exposed.
Democrat Dam Road	35.5236221874, -118.66876191	DD-23	Erosion	Road surface erosion	–	Moderate	Pothole on right side of road, some soil erosion along roadside swale.
Democrat Dam Road	35.5222970419, -118.674891629	DD-24	Erosion	Road surface erosion	–	High	Substantial chipping/loss of roadway on left side of road along entirety of retaining wall (approximately 50').
Democrat Dam Road	35.521815669, -118.67494895	DD-25	Erosion	Soil erosion	–	Moderate	Slope instability at this location with erosion/soil creep.
Democrat Dam Road	35.5218218883, -118.674809036	DD-26	Erosion	Road surface erosion	–	Moderate	Substantial potholes on both sides of road, each encroaching on ~20% of the width of the roadway. Rilling is also occurring on left side of roadway above pothole.
Democrat Dam Road	35.5219624243, -118.674732282	DD-27	Erosion	Road surface erosion	–	Moderate	Small road collapse (~2' deep) along approximately 10' of left edge of roadway. Drainage channel on left side of road is exhibiting low to moderate erosion below this point.
Democrat Dam Road	35.5223131874, -118.674557064	DD-28	Erosion	Gullying	–	Moderate	Wide/moderately shallow gully (1-2 feet wide, several inches deep) is present along left drainage channel along road.
Democrat Dam Road	35.5224405921, -118.674461366	DD-29	Erosion	Road surface erosion	–	Low	Minor to moderate cracks/potholes are prevalent throughout this general location. Minor soil erosion is present on right side of hillside.
Democrat Dam Road	35.5227679945, -118.674117163	DD-30	Erosion	Soil erosion	–	Moderate	Boulders on hillside along right side of road appear to be moving downhill. Fresh soil is exposed, erosion appears to be active.

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Democrat Dam Road	35.5242391917, -118.668743878	DD-31	Gate	Locked gate	–	–	Locked green gate in good condition with signage stating "NOTICE NO TRESPASSING OR LOITERING FORBIDDEN BY LAW". Gate is in good condition except for minor bend at bottom of gate arm. Locking mechanism includes individual locks with a sliding latch.
Democrat Dam Road	35.5234659255, -118.668769966	DD-32	Miscellaneous	Guardrail	–	–	Steel post + thick cable guardrail in good condition
Democrat Dam Road	35.5233650348, -118.668787372	DD-33	Miscellaneous	Guardrail	–	–	Steel post + thick cable guardrail in good condition
Democrat Dam Road	35.522759632, -118.674051492	DD-34	Miscellaneous	Other	–	–	Unknown shaft/adit.
Democrat Dam Road	35.5235358169, -118.67371432	DD-35	Miscellaneous	Other	–	–	Unknown shaft/adit.
Democrat Dam Road	35.5260571108, -118.670876123	DD-36	Miscellaneous	Stockpile	–	–	Gravel stockpile at right road shoulder. Minor alligator cracking present throughout this location.
Democrat Dam Road	35.5245841395, -118.668897924	DD-37	Miscellaneous	Barbed wire fence	–	–	Barbed wire fence along both sides of road.
Democrat Dam Road	35.5244543349, -118.668887558	DD-38	Sign	Forest Service sign	–	–	Forest Service sign with road number ("28S68") in fair condition. Stickers appear to be peeling slightly/sign is slightly sun-bleached, but sign is still legible.

Table B-2. Flume No. 1 Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Flume No. 1 Road	35.5211573246, -118.675685633	FN-1	Drainage feature	Slope drain	Potential Concern	–	Steel slope drain in good condition. Moderate rilling is present above drain.
Flume No. 1 Road	35.5211241375, -118.675717203	FN-2	Erosion	Soil erosion	–	Low	Minor to moderate slope instability along the slope between the roadway and the flume.
Flume No. 1 Road	35.5210343518, -118.675784895	FN-3	Erosion	Soil erosion	–	Low	Localized slope failure, approximately 2' x 5'.
Flume No. 1 Road	35.5210026545, -118.675841988	FN-4	Erosion	Road surface erosion	–	Low	Gap in road surface adjacent to flume walkway, approximately 2' x 4'.

Table B-3. Dougherty Creek Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Dougherty Creek Road	35.4725390224, -118.719645913	DC-1	Miscellaneous	Railroad ties	–	–	Railroad ties, unknown function.
Dougherty Creek Road	35.4723654702, -118.719425157	DC-2	Miscellaneous	Railroad ties	–	–	Railroad ties, unknown function.
Dougherty Creek Road	35.472313941, -118.719133916	DC-3	Miscellaneous	Railroad ties	–	–	Railroad ties, unknown function. Remnant slope drain inlet is located at the Stark Creek Road side of the railroad ties.
Dougherty Creek Road	35.472758952, -118.719536103	DC-4	Miscellaneous	Railroad ties	–	–	Railroad ties, unknown function. Remnant slope drain inlet is located at the Stark Creek Road side of the railroad ties.
Dougherty Creek Road	35.4725189849, -118.719584728	DC-5	Miscellaneous	Concrete pad	–	–	Remnant concrete pad

Table B-4. Stark Creek Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Stark Creek Road	35.4754111345, -118.723684212	SC-1	Drainage feature	Culvert, 12" CMP	Concern Likely	–	Inlet on the right discharges to a steel slope drain on the left. Pipe is intact, but outlet is plugged with sediment and overgrown with vegetation. Top of slope drain is buried in sediment. No evidence of significant erosion at discharge point.
Stark Creek Road	35.4745316366, -118.722320618	SC-2	Drainage feature	Culvert, 12" CMP	Potential Concern	–	24" grated metal drain inlet on the right discharging from 12" CMP/steel slope drain on the left. Minor vegetation accumulation in the inlet. Outlet is free from sediment/debris. While the culvert is in good condition, erosion is present on hillside below culvert.
Stark Creek Road	35.4742525256, -118.721672751	SC-3	Drainage feature	Culvert, 12" CMP	Potential Concern	–	24" grated metal drain inlet on the right discharging from 12" CMP/steel slope drain on the left. Inlet is partially buried by vegetative debris/pinecones. Outlet is ~50% plugged with hardened mud. Slope drain is also plugged with hardened mud near the outlet/partially hidden by grass. Erosion is present below culvert.
Stark Creek Road	35.473977599, -118.7209329	SC-4	Drainage feature	Culvert, 12" CMP	No Apparent Concern	–	24" grated metal drain inlet on the right discharging from 12" CMP/steel slope drain on the left. Inlet is partially buried by vegetative debris/pinecones. Culvert outlet and slope drain are free from sediment/debris. No signs of erosion present.
Stark Creek Road	35.4735804262, -118.720384894	SC-5	Drainage feature	Culvert, 12" CMP	No Apparent Concern	–	24" grated metal drain inlet on the right discharging from 12" CMP/steel slope drain on the left. Very minor sediment accumulation in slope drain/inlet. Outlet is free from sediment/debris. No signs of erosion present.
Stark Creek Road	35.4731559913, -118.719673548	SC-6	Drainage feature	Culvert, 12" CMP	Potential Concern	–	24" grated metal drain inlet on the right discharging from 12" CMP/steel slope drain on the left. Inlet, outlet, and slope drain are free from sediment/debris; however, slope drain appears to have been dislodged by approximately 30 degrees. No signs of erosion present.
Stark Creek Road	35.4718385975, -118.719469639	SC-7	Drainage feature	Culvert, 12" CMP	Concern Likely	–	24" grated drain inlet on the left. Outlet could not be located and is most likely completely buried. Outlet is likely located near two pins (likely for a slope drain) embedded into the ground, which is where the GPS point was collected.
Stark Creek Road	35.4704604021, -118.718708794	SC-8	Drainage feature	Culvert, 12" CMP	Potential Concern	–	24" grated metal drain inlet on the right discharging from 12" CMP outlet on the left. Outlet is ~75% buried. Minor scouring present below outlet.
Stark Creek Road	35.4712942769, -118.718671412	SC-9	Drainage feature	Low water crossing	Concern Likely	–	Low water crossing at Stark Creek consisting of an approximately 50' by 12' cement slab atop three 36" CMPs. The upstream (left) side of the easternmost CMP is severely compressed. Small curb on the downstream (right) side of the crossing is deteriorated. Accumulated vegetative debris (tumbleweeds) is present upstream of the CMPs. Minor sediment/debris accumulation is present within the CMPs at the downstream side. Riparian vegetation is present in the channel but is not encroaching into the roadway.
Stark Creek Road	35.4710299951, -118.718476951	SC-10	Drainage feature	Water bar/slope drain	No Apparent Concern	–	Asphalt water bar on roadway draining to slope drain on the left side of the road, both in good condition with minor debris accumulation in slope drain. No signs of erosion present.
Stark Creek Road	35.4695709657, -118.718310192	SC-11	Drainage feature	Water bar/slope drain	No Apparent Concern	–	Asphalt water bar on roadway draining to slope drain on the left side of the road, both in good condition with minor debris accumulation in slope drain. No signs of erosion present.

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Stark Creek Road	35.4691690074, -118.718440806	SC-12	Drainage feature	Low water crossing	No Apparent Concern	–	At-grade cement low-water crossing (Stark Creek), approximately 10' by 70'. Minor cracking/chipping present. Riparian vegetation is absent at this crossing. No signs of erosion observed.
Stark Creek Road	35.468507784, -118.719400167	SC-13	Drainage feature	Slope drain	No Apparent Concern	–	Steel slope drain on right side of road conveying seep water from flume into Stark Creek. Water was present at the time of the survey.
Stark Creek Road	35.4686312942, -118.719093412	SC-14	Drainage feature	Slope drain	No Apparent Concern	–	Steel slope drain conveying flow from upper parking area. Drain is in good condition, but some erosion is present to the right (looking downstream) of the drain.
Stark Creek Road	35.4754096274, -118.724273244	SC-15	Drainage feature	Water bar	No Apparent Concern	–	Asphalt water bar with minor cracking. No signs of soil erosion present.
Stark Creek Road	35.4755599614, -118.72443097	SC-16	Erosion	Road surface erosion	–	Moderate	Cracked asphalt, approximately 30' x 40'.
Stark Creek Road	35.474304141, -118.721919613	SC-17	Erosion	Road surface erosion	–	Moderate	Low/moderate severity cracking along approximately 150 feet of roadway along steep portion of road.
Stark Creek Road	35.4738949016, -118.720837458	SC-18	Erosion	Road surface erosion	–	Moderate	Alligator cracking/minor potholing/overall surface deterioration along approximately 50 feet of roadway.
Stark Creek Road	35.4749949365, -118.723837161	SC-19	Erosion	Road surface erosion	–	Moderate	Alligator cracking covering approximately 10-15% of the flat pullout area. Weeds are starting to grow through cracks.
Stark Creek Road	35.4754396945, -118.724221966	SC-20	Gate	Gate	–	–	Rusty gate in fair condition with daisy chained locks. Gate is rusty and slightly bent but still works. No parking sign on gate.
Stark Creek Road	35.4745692091, -118.723707674	SC-21	Gate	Gate	–	–	Unlocked metal gate for cattle control with sliding latch enclosure mechanism. Gate includes Forest Service signage stating "Please! CLOSE THE GATE". The gate is moderately rusted, including the latch, which is still functional but required some force to open and close. Users appear to be wrapping wire around the gate as an alternative enclosure method.
Stark Creek Road	35.4685533751, -118.719296833	SC-22	Miscellaneous	Railroad ties	–	–	Railroad ties, unknown function.
Stark Creek Road	35.4754020689, -118.724459017	SC-23	Sign	Forest Service sign	–	–	Forest Service "no camping" sign in good condition.
Stark Creek Road	35.4753900102, -118.72424408	SC-24	Sign	Unknown	–	–	Rusty, unmarked metal sign in poor condition.
Stark Creek Road	35.4745837732, -118.723851562	SC-25	Sign	Unknown	–	–	Rusty metal sign in poor condition. Lettering is illegible.

Table B-5. Forebay Operations Area Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Forebay Operations Area Road	35.4600810195, -118.779015214	FO-1	Drainage feature	Drain inlet	No Apparent Concern	–	Drain inlets in parking lot.
Forebay Operations Area Road	35.460034033, -118.778925162	FO-2	Drainage feature	Drain inlet	No Apparent Concern	–	Drain inlets in parking lot.
Forebay Operations Area Road	35.4601340832, -118.778775815	FO-3	Drainage feature	Drain inlet	No Apparent Concern	–	Drain inlets in parking lot.
Forebay Operations Area Road	35.4585048976, -118.779482913	FO-4	Erosion	Road surface erosion	–	Low	Relatively shallow pothole, ~2' x 4'. Entirety of road surface is slightly deteriorated (shallow cracks) from highway to gate.
Forebay Operations Area Road	35.4587095903, -118.779405162	FO-5	Erosion	Road surface erosion	–	Low	Asphalt curb on left side of road is cracking/loose (~4')
Forebay Operations Area Road	35.4588953295, -118.779379723	FO-6	Erosion	Road surface erosion	–	Moderate	Gap in asphalt curb on left side of road (~4')
Forebay Operations Area Road	35.4596260277, -118.779293019	FO-7	Erosion	Road surface erosion	–	Moderate	Gap in curb along approximately 20'-25'. Wet cement appears to have been placed here at some point.
Forebay Operations Area Road	35.460402112, -118.778714494	FO-8	Erosion	Road surface erosion	–	Low	Asphalt curb on left side of road is cracking/loose (~4')
Forebay Operations Area Road	35.4586834823, -118.779412965	FO-9	Gate	Gate	–	–	Metal gate in fair condition, locked w/ daisy chained padlocks on chain. Signage states "NOTICE TRESSPASSING/LOITERING FORBIDEN BY LAW SO CALIF EDISON CO". Gate post on left side of road is slumping, edge of gate is resting on asphalt curb along left side of road.
Forebay Operations Area Road	35.4593743056, -118.779357703	FO-10	Miscellaneous	Other	–	–	Exit point to stairs leading to Highway 178

Table B-6. Lower Powerhouse Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Lower Powerhouse Road	35.4598159471, -118.779736502	LP-1	Drainage feature	Drain outlet	Potential Concern	–	Damaged drain outlet along retaining wall.
Lower Powerhouse Road	35.4591363125, -118.779812863	LP-2	Drainage feature	Drain outlet	No Apparent Concern	–	Double 12" steel drain outlet in good condition.
Lower Powerhouse Road	35.4589398656, -118.77973287	LP-3	Drainage feature	Drain outlet	No Apparent Concern	–	8" PVC drain outlet in good condition.
Lower Powerhouse Road	35.4600097452, -118.779744007	LP-4	Drainage feature	Drain outlet	No Apparent Concern	–	Drain outlet embedded in grouted concrete. Grout is slightly cracked.
Lower Powerhouse Road	35.459988924, -118.779885839	LP-5	Erosion	Road surface erosion	–	Low	Tire ruts, approximately 10' x 20'
Lower Powerhouse Road	35.4595115459, -118.779990951	LP-6	Erosion	Road surface erosion	–	Moderate	Cracked asphalt
Lower Powerhouse Road	35.459435072, -118.779935062	LP-7	Erosion	Soil erosion	–	Moderate	Rill/gully, approximately 6" deep and 10' long
Lower Powerhouse Road	35.4599760262, -118.779745223	LP-8	Erosion	Road surface erosion	–	Low	Alligator cracking
Lower Powerhouse Road	35.4590889656, -118.779667823	LP-9	Miscellaneous	Guardrail	–	–	Riprap + guardrail in good condition
Lower Powerhouse Road	35.459345857, -118.779810139	LP-10	Miscellaneous	Guardrail	–	–	Riprap + guardrail in good condition
Lower Powerhouse Road	35.459482431, -118.779875301	LP-11	Miscellaneous	Guardrail	–	–	Riprap + guardrail in good condition
Lower Powerhouse Road	35.4595461349, -118.779868162	LP-12	Miscellaneous	Guardrail	–	–	Riprap + guardrail in good condition
Lower Powerhouse Road	35.4599417619, -118.779684202	LP-13	Miscellaneous	Guardrail	–	–	Riprap + guardrail in good condition
Lower Powerhouse Road	35.4597382922, -118.779925905	LP-14	Miscellaneous	Stockpile	–	–	Gravel stockpile, ~20x60
Lower Powerhouse Road	35.4597039423, -118.779811402	LP-15	Miscellaneous	Other	–	–	Unknown 4.5” pipes with mesh outlet in fair condition
Lower Powerhouse Road	35.4595752685, -118.779818121	LP-16	Miscellaneous	Other	–	–	Unknown 4.5” pipes with mesh outlet in fair condition
Lower Powerhouse Road	35.4595026691, -118.779957595	LP-17	Miscellaneous	Guardrail	–	–	Wooden retaining wall + steel guardrail in good condition
Lower Powerhouse Road	35.459421031, -118.779901908	LP-18	Miscellaneous	Guardrail	–	–	Wooden retaining wall + steel guardrail in good condition

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Lower Powerhouse Road	35.4591699721, -118.779829976	LP-19	Miscellaneous	Other	–	–	White 4.5” drainpipe in good condition
Lower Powerhouse Road	35.4590515421, -118.779760739	LP-20	Miscellaneous	Other	–	–	White 4.5” drainpipe in good condition
Lower Powerhouse Road	35.4589150694, -118.779699215	LP-21	Miscellaneous	Other	–	–	White 4.5” drainpipe in good condition
Lower Powerhouse Road	35.4594272581, -118.779887586	LP-22	Miscellaneous	Other	–	–	Paved to gravel transition

Table B-7. Upper Powerhouse Road Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Upper Powerhouse Road	35.4593026549, -118.77956249	UP-1	Drainage feature	Drain inlet	No Apparent Concern	–	Little to no debris accumulation is present in catch basin.
Upper Powerhouse Road	35.4591947891, -118.779668748	UP-2	Drainage feature	Drain inlet	Potential Concern	–	Trash and sediment is starting to accumulate. Outlet might be plugged.
Upper Powerhouse Road	35.4589402559, -118.779545506	UP-3	Drainage feature	Drain inlet	No Apparent Concern	–	Some sediment accumulation in catch basin.
Upper Powerhouse Road	35.4589436003, -118.779598401	UP-4	Drainage feature	Drain inlet	No Apparent Concern	–	Some sediment accumulation in catch basin.
Upper Powerhouse Road	35.4589311649, -118.779653892	UP-5	Drainage feature	Drain inlet	No Apparent Concern	–	Some sediment accumulation in catch basin.
Upper Powerhouse Road	35.4597792101, -118.779613481	UP-6	Drainage feature	Drain inlet	No Apparent Concern	–	Receives flow from swale in parking lot.
Upper Powerhouse Road	35.4600472546, -118.779560351	UP-7	Drainage feature	Drain inlet	No Apparent Concern	–	Receives flow from curb and gutter in parking lot.
Upper Powerhouse Road	35.4600194885, -118.779563027	UP-8	Drainage feature	Curb and gutter	No Apparent Concern	–	Curb and gutter along north side of parking area in good condition.
Upper Powerhouse Road	35.4587485906, -118.779619933	UP-9	Erosion	Road surface erosion	–	Moderate	Road fill is washed out above retaining wall
Upper Powerhouse Road	35.4592476554, -118.779611987	UP-10	Gate	Gate	–	–	Locked Gate
Upper Powerhouse Road	35.4594441389, -118.779572192	UP-11	Gate	Gate	–	–	2 locked pedestrian entrances, one vehicle sliding gate with locked entry + key lock for vehicle entry. Both in good condition.
Upper Powerhouse Road	35.4588096637, -118.77959336	UP-12	Gate	Gate	–	–	Automated swinging gate in good condition
Upper Powerhouse Road	35.4594361129, -118.779716315	UP-13	Miscellaneous	Guardrail	–	–	Guardrail + chain link fence in good condition
Upper Powerhouse Road	35.4592524692, -118.779682987	UP-14	Miscellaneous	Guardrail	–	–	Guardrail + chain link fence in good condition
Upper Powerhouse Road	35.4590353961, -118.779626038	UP-15	Miscellaneous	Guardrail	–	–	Guardrail + chain link fence in good condition
Upper Powerhouse Road	35.4590423244, -118.779543323	UP-16	Miscellaneous	Drainpipe	–	–	Drainpipe in retaining wall in fair condition.
Upper Powerhouse Road	35.4589929727, -118.779540451	UP-17	Miscellaneous	Drainpipe	–	–	Drainpipe in retaining wall in fair condition.
Upper Powerhouse Road	35.458940335, -118.779544294	UP-18	Miscellaneous	Drainpipe	–	–	Drainpipe in retaining wall in fair condition.

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Upper Powerhouse Road	35.458906695, -118.779550424	UP-19	Miscellaneous	Drainpipe	–	–	Drainpipe in retaining wall in fair condition.
Upper Powerhouse Road	35.4588455382, -118.779555835	UP-20	Miscellaneous	Drainpipe	–	–	Drainpipe in retaining wall in fair condition.
Upper Powerhouse Road	35.458784633, -118.779557882	UP-21	Miscellaneous	Drainpipe	–	–	Drainpipe in retaining wall in fair condition.
Upper Powerhouse Road	35.4587283745, -118.779612176	UP-22	Miscellaneous	Other	–	–	Light post in good condition
Upper Powerhouse Road	35.4586558128, -118.779627286	UP-23	Miscellaneous	Other	–	–	Gabion baskets in good condition
Upper Powerhouse Road	35.4588944357, -118.779629488	UP-24	Miscellaneous	Other	–	–	White "X" for survey location (Psomas)

Table B-8. Democrat Gage Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Democrat Gage Trail	35.5209121733, -118.675992489	DG-1	Erosion	Soil erosion	–	Moderate	Low to moderate rilling/gullying present starting at the rocks below the end of the flume, extending downslope for approximately 50 feet. Vegetation in this area is also overgrown, and the trail is difficult to locate.
Democrat Gage Trail	35.5208049626, -118.676254239	DG-2	Erosion	Soil erosion	–	High	Bank failure extending into the established trail along approximately 10 feet of trail (right side). Vegetation within this portion of trail is also overgrown.
Democrat Gage Trail	35.5203948297, -118.676758547	DG-3	Erosion	Soil erosion	–	Moderate	Rill/small gully (approximately 4" deep) running through the center of the trail for approximately 70 feet.

Table B-9. Conduit No. 3 Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Conduit No. 3 Trail	35.5051275504, -118.6901367	CO-1	Erosion	Soil erosion	–	Moderate	Fire affected, mild erosion to the west

Table B-10. Cow Flat Creek Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Cow Flat Creek Trail	35.4998058486, -118.693942146	CF-1	Erosion	Soil erosion	–	Moderate	Soil instability along upslope of trail for approximately 70 feet.
Cow Flat Creek Trail	35.4997742932, -118.693368884	CF-2	Miscellaneous	Wire railing	–	–	Wire rail (poor condition) appears to be fire damaged. Lower span is broken and upper span toward gage is tied with caution tape.
Cow Flat Creek Trail	35.4966455591, -118.69596896	CF-3	Miscellaneous	Hollow/ephemeral drainage	–	–	No erosion present.
Cow Flat Creek Trail	35.498461974, -118.694467634	CF-4	Miscellaneous	Hazard	–	–	Narrow/hazardous portion of trail. Width of ~1 foot with steep drop straight down to highway.

Table B-11. Steel Flume Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Steel Flume Trail	35.4951598062, -118.696409101	SF-1	Erosion	Soil erosion	–	Moderate	Soil sloughing from left slope is burying trail
Steel Flume Trail	35.495152083, -118.696310037	SF-2	Miscellaneous	Downed tree	–	–	Downed tree approximately 1.5 feet in diameter, blocking trail.
Steel Flume Trail	35.4941657152, -118.697203468	SF-3	Miscellaneous	Hollow/ephemeral drainage	–	–	Minor erosion and evidence of sediment transport is present.

Table B-12. Lucas Creek Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Lucas Creek Trail	35.4838112141, -118.710953885	LC-1	Drainage feature	Stream crossing	No Apparent Concern	–	Stream crossing at Lucas Creek. No water was present at the time of the survey. Stream width is approximately 4'.
Lucas Creek Trail	35.4836348287, -118.704039827	LC-2	Drainage feature	Seep	No Apparent Concern	–	Water is seeping from flow line and draining toward Lucas Creek.
Lucas Creek Trail	35.4837911749, -118.710482051	LC-3	Erosion	Soil erosion	–	Low	Minor washout along trail. Trail is still accessible over rocks.
Lucas Creek Trail	35.483491836, -118.706973074	LC-4	Erosion	Soil erosion	–	Low	Minor sloughing on trail. Soil is loose, trail compaction is poor.
Lucas Creek Trail	35.4834431068, -118.706154614	LC-5	Erosion	Soil erosion	–	Low	Small rock fall/sloughing
Lucas Creek Trail	35.4838317066, -118.710989764	LC-6	Miscellaneous	Barbed wire	–	–	Barbed wire spanning trail
Lucas Creek Trail	35.4837192474, -118.711052201	LC-7	Miscellaneous	Barbed wire	–	–	Barbed wire spanning (possibly) correct trail. Unclear whether trail crosses Lucas Creek or at this location. Barbed wire appears unpassable.
Lucas Creek Trail	35.4836534715, -118.704140879	LC-8	Miscellaneous	Downed tree	–	–	Approx 18” diameter tree blocking trail
Lucas Creek Trail	35.4835005339, -118.707109306	LC-9	Miscellaneous	Other	–	–	Rusty metal pipe on left side of trail (unknown function), approximately 4-5 feet exposed

Table B-13. Dougherty Creek Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Dougherty Creek Trail	35.4706688549, -118.71205582	DT-1	Miscellaneous	Downed tree	–	–	Downed tree (not currently obstructing trail)

Table B-14. Stark Creek Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Stark Creek Trail	35.4689446483, -118.719019295	ST-1	Drainage feature	Stream crossing	No Apparent Concern	–	Streambed material varies from large boulders to cobbles and sand. Trail is not well-defined at this crossing.
Stark Creek Trail	35.4716961806, -118.725409774	ST-2	Erosion	Soil erosion	–	Low	Minor sloughing onto trail.
Stark Creek Trail	35.4705857923, -118.726514142	ST-3	Erosion	Soil erosion	–	Moderate	Small landslide scar (approximately 15' x 30'); trail is still accessible.
Stark Creek Trail	35.4730760422, -118.730966863	ST-4	Miscellaneous	Barbed wire fence	–	–	Barbed wire fencing along right side of trail
Stark Creek Trail	35.473490478, -118.731889843	ST-5	Miscellaneous	Barbed wire fence	–	–	End of barbed wire fence
Stark Creek Trail	35.4736142514, -118.731951619	ST-6	Miscellaneous	Barbed wire fence	–	–	Barbed wire
Stark Creek Trail	35.4737868827, -118.732578413	ST-7	Miscellaneous	Barbed wire fence	–	–	End of barbed wire
Stark Creek Trail	35.4709286852, -118.72340979	ST-8	Miscellaneous	Hollow/ephemeral drainage	–	–	No ordinary high-water mark features are present, but flow is likely concentrated at this location during rain events. No erosion present.
Stark Creek Trail	35.4710811844, -118.723732479	ST-9	Miscellaneous	Hollow/ephemeral drainage	–	–	No ordinary high-water mark features are present, but flow is likely concentrated at this location during rain events. No erosion present.
Stark Creek Trail	35.4704981828, -118.726628541	ST-10	Miscellaneous	Hollow/ephemeral drainage	–	–	No ordinary high-water mark features are present, but flow is likely concentrated at this location during rain events. No erosion present. Seepage water from adit is present.
Stark Creek Trail	35.4721474065, -118.728797692	ST-11	Miscellaneous	Hollow/ephemeral drainage	–	–	No ordinary high-water mark features are present, but flow is likely concentrated at this location during rain events. No erosion present. Adit tailings are present.
Stark Creek Trail	35.4728378005, -118.730897258	ST-12	Miscellaneous	Hollow/ephemeral drainage	–	–	No ordinary high-water mark features are present, but flow is likely concentrated at this location during rain events. Minor erosion present.
Stark Creek Trail	35.4705179208, -118.726652058	ST-13	Overgrown vegetation	Large riparian tree	–	–	Spans approximately 40 feet of trail. Trail is accessible, but veg may require trimming if equipment access is needed.

Table B-15. Adit 17 and 18 Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Adit 17 & 18 Trail	35.4582471111, -118.774643237	AD-1	Erosion	Soil erosion	–	Low	Slope instability somewhat localized at this location but is present throughout trail section.
Adit 17 & 18 Trail	35.4588943553, -118.768200084	AD-2	Erosion	Soil erosion	–	Moderate	Moderate slumping on right side of trail
Adit 17 & 18 Trail	35.4584077467, -118.766925692	AD-3	Erosion	Soil erosion	–	Low	Moderate erosion on trail left, moderate to severe erosion on trail right ~20-30 feet from GPS point.
Adit 17 & 18 Trail	35.4572313389, -118.766003145	AD-4	Erosion	Soil erosion	–	Low	Minor localized soil erosion/slope instability.
Adit 17 & 18 Trail	35.4581592802, -118.774070921	AD-5	Erosion	Soil erosion	–	Low	Minor channelized erosion on left side of trail with denuded vegetation.
Adit 17 & 18 Trail	35.458004656, -118.773633217	AD-6	Erosion	Soil erosion	–	Moderate	Localized active erosion, rill/small gully feature on right side of trail with sediment deposition.
Adit 17 & 18 Trail	35.4579162196, -118.773522043	AD-7	Erosion	Soil erosion	–	Low	Minor localized soil erosion/slope instability.
Adit 17 & 18 Trail	35.4578237468, -118.773430869	AD-8	Erosion	Soil erosion	–	Moderate	Erosion scar with denuded vegetation along substantial portion of slope right of trail, sediment deposition is present at base of trail.
Adit 17 & 18 Trail	35.4580156723, -118.771982376	AD-9	Erosion	Soil erosion	–	Low	Small hole in trail
Adit 17 & 18 Trail	35.4580331252, -118.771748311	AD-10	Erosion	Soil erosion	–	Low	Minor creep/slumping along both sides of trail
Adit 17 & 18 Trail	35.4585975716, -118.769539692	AD-11	Erosion	Soil erosion	–	Low	Channelized erosion on left side of trail
Adit 17 & 18 Trail	35.458866163, -118.768380627	AD-12	Erosion	Soil erosion	–	Low	Channelized erosion on left side of trail
Adit 17 & 18 Trail	35.4581823353, -118.7741987	AD-13	Erosion	Rock fall	–	Low	Minor rock fall; trail still passable
Adit 17 & 18 Trail	35.4585231642, -118.775361395	AD-14	Gate	Locked pedestrian gate	–	–	Locked (padlock) gate chain-link in good condition with signage stating "DANGER SWIFT WATER WILL BE RELEASED" and "NO TRESSPASSING AUTHORIZED PERSONNEL ONLY"
Adit 17 & 18 Trail	35.457692888, -118.772985329	AD-15	Miscellaneous	Other	–	–	Tailings from tunnel/adit
Adit 17 & 18 Trail	35.4577113217, -118.772428681	AD-16	Miscellaneous	Hollow/ephemeral drainage	–	–	Ephemeral drainage/hollow
Adit 17 & 18 Trail	35.4577017074, -118.772678083	AD-17	Overgrown vegetation	Shrub	–	–	Small shrub in center of trail

Table B-16. Overflow Spillway Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Overflow Spillway Trail	35.4602019795, -118.77836421	OS-1	Erosion	Soil erosion	–	Moderate	Loose soil, broken retaining wall chunks. Trail is not well-defined.
Overflow Spillway Trail	35.4601208379, -118.778183378	OS-2	Erosion	Soil erosion	–	Moderate	Soil at start of trail is loose, soil is slumping. Vegetation is overgrown in this area, trail is not well-established.
Overflow Spillway Trail	35.4583892859, -118.773349706	OS-3	Erosion	Soil erosion	–	Moderate	Small slope failure scar, approximately 2' x 4'
Overflow Spillway Trail	35.4585220424, -118.773458388	OS-4	Erosion	Soil erosion	–	Moderate	More characteristic slope instability for this section of trail, which is present for approximately 60% of slope in this area.
Overflow Spillway Trail	35.4584749719, -118.773351131	OS-5	Erosion	Soil erosion	–	Moderate	Localized slope failure characteristic of this trail section.
Overflow Spillway Trail	35.4586335188, -118.773340419	OS-6	Erosion	Soil erosion	–	Moderate	Slumping that is characteristic of this section of trail. Active erosion is present for approximately 80'
Overflow Spillway Trail	35.4588757628, -118.773639028	OS-7	Erosion	Soil erosion	–	Moderate	Small slope failure. Rocks embedded in soil are displaced slightly
Overflow Spillway Trail	35.4590086289, -118.773973977	OS-8	Erosion	Soil erosion	–	Moderate	Slumping/small slope failure scar, characteristic of this section of trail.
Overflow Spillway Trail	35.4601275343, -118.77572061	OS-9	Erosion	Soil erosion	–	Moderate	Minor slope failure on left side of trail next to possible retaining wall feature
Overflow Spillway Trail	35.4602425119, -118.777718426	OS-10	Erosion	Soil erosion	–	Moderate	Slope failure on slope, scar approximately 6' x 4'
Overflow Spillway Trail	35.4602171984, -118.777594333	OS-11	Erosion	Soil erosion	–	Moderate	Soil between switchbacks is slumping with signs of active erosion. Trail is partially buried in this location
Overflow Spillway Trail	35.4600967121, -118.777390771	OS-12	Erosion	Soil erosion	–	Low	Slope instability. Erosion appears recent.
Overflow Spillway Trail	35.460127761, -118.777274524	OS-13	Erosion	Soil erosion	–	Low	Right side of trail slumping.
Overflow Spillway Trail	35.4602077852, -118.776819622	OS-14	Erosion	Soil erosion	–	High	Landslide scar cutting into trail with approximately 1' of ground surface remaining between edge of trail and large boulder.
Overflow Spillway Trail	35.4578402979, -118.773369653	OS-15	Erosion	Soil erosion	–	Moderate	Slumping is localized at this location, approximately 10' radius. Slope erosion is persistent throughout this area.
Overflow Spillway Trail	35.4582708739, -118.773482158	OS-16	Erosion	Soil erosion	–	Moderate	Localized active erosion, rill/small gully feature on right side of trail with sediment deposition.
Overflow Spillway Trail	35.4582710098, -118.773252305	OS-17	Erosion	Soil erosion	–	Moderate	Slumping/creep, characteristic of majority of this section of trail.
Overflow Spillway Trail	35.4601655882, -118.778027964	OS-18	Miscellaneous	Barbed wire fence	–	–	Dilapidated barbed wire fence.

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Overflow Spillway Trail	35.4601410217, -118.777023289	OS-19	Miscellaneous	Retaining wall	–	–	Erosion/undercutting present on upper (right) side of retaining wall - left side OK. Minor rock scrambling under spillway pipe.
Overflow Spillway Trail	35.4598417448, -118.774553346	OS-20	Miscellaneous	Rock wall	–	–	Rock wall feature in fair condition
Overflow Spillway Trail	35.4599358487, -118.774722291	OS-21	Miscellaneous	Rock wall	–	–	End of rock wall feature
Overflow Spillway Trail	35.4602357313, -118.777554181	OS-22	Overgrown vegetation	Shrub	–	–	Shrub blocking trail
Overflow Spillway Trail	35.4600920792, -118.777550759	OS-23	Overgrown vegetation	Shrub	–	–	Shrub partially blocking trail
Overflow Spillway Trail	35.4601435994, -118.777222536	OS-24	Overgrown vegetation	Shrub	–	–	Shrub partially blocking trail
Overflow Spillway Trail	35.4581867696, -118.773172417	OS-25	Overgrown vegetation	Shrub	–	–	Shrub partially blocking trail, almost not worth collecting
Overflow Spillway Trail	35.4584696432, -118.773213322	OS-26	Overgrown vegetation	Shrub	–	–	Shrubs growing within trail. Entire trail in this section is overgrown with grass and occasional shrubs
Overflow Spillway Trail	35.4589835096, -118.773894052	OS-27	Overgrown vegetation	Shrub	–	–	Shrubs growing adjacent to trail
Overflow Spillway Trail	35.4592435626, -118.774159508	OS-28	Overgrown vegetation	Shrub	–	–	Several shrubs partially blocking trail along ~40' of trail until bend. Slope instability persistent throughout.
Overflow Spillway Trail	35.4599429433, -118.774959422	OS-29	Overgrown vegetation	Shrub	–	–	Overgrown vegetation persistent along trail along this section of trail
Overflow Spillway Trail	35.4599968822, -118.775280552	OS-30	Overgrown vegetation	Shrub	–	–	Overgrown brushy veg; trail is rocky/hard to identify in this section
Overflow Spillway Trail	35.4602289326, -118.775711774	OS-31	Overgrown vegetation	Shrub	–	–	Vegetation is overgrown throughout entire steep portion of trail, but erosion is less severe in this section of trail

Table B-17. Skip Hoist/Forebay Trail Features

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Skip Hoist/Forebay Trail	35.4580492809, -118.776339744	SH-1	Erosion	Soil erosion	–	Moderate	Boulders are sliding downhill. Grade is extremely steep along this trail. Trail is uncompacted throughout.
Skip Hoist/Forebay Trail	35.4597348785, -118.778709206	SH-2	Erosion	Soil erosion	–	Low	Minor, localized erosion on cut slope.
Skip Hoist/Forebay Trail	35.4581718319, -118.776318783	SH-3	Erosion	Soil erosion	–	Moderate	More displacement of boulders along uphill side of trail. Slope instability is persistent throughout trail.
Skip Hoist/Forebay Trail	35.4582093809, -118.776421905	SH-4	Erosion	Soil erosion	–	Moderate	Erosion is somewhat localized at this location, but still more or less characteristic of entire trail.
Skip Hoist/Forebay Trail	35.4582616223, -118.776456248	SH-5	Erosion	Soil erosion	–	Moderate	Localized slumping at this location.
Skip Hoist/Forebay Trail	35.4583321638, -118.776596901	SH-6	Erosion	Soil erosion	–	Moderate	Slope instability is localized on upslope portion around this switchback; soil is particularly loose in this location. Rocks that appear to be placed as slope stabilization are generally in place, a few may be traveling downhill.
Skip Hoist/Forebay Trail	35.4582593841, -118.776699948	SH-7	Erosion	Soil erosion	–	Moderate	Localized slope instability. Fresh, very loose colluvium covering trail at this location.
Skip Hoist/Forebay Trail	35.4583279432, -118.776821666	SH-8	Erosion	Soil erosion	–	Moderate	Longitudinal erosional feature (channelized, denuded veg) spanning 4 trail sections. Sediment deposition present on trail at approximate base of erosion scar.
Skip Hoist/Forebay Trail	35.4588650672, -118.777629352	SH-9	Erosion	Soil erosion	–	Low	Areas of minor localized erosion on cut slope of trail. Trail surface begins to improve slightly around this location (i.e. trail is compacted, notably less slope instability is present)
Skip Hoist/Forebay Trail	35.4592793543, -118.778094446	SH-10	Erosion	Soil erosion	–	Low	Localized/recent erosion on cut slope of trail extending upslope for 5-10 feet.
Skip Hoist/Forebay Trail	35.458270491, -118.775713691	SH-11	Gate	Gate	–	–	Locked gate to spillway area in good condition with signage stating "DANGER SWIFT WATER RELEASED AT INTERVALS" and "NO TRESSPASSING AUTHORIZED PERSONNEL ONLY"
Skip Hoist/Forebay Trail	35.458217545, -118.775786653	SH-12	Miscellaneous	Other	–	–	Light post in good condition
Skip Hoist/Forebay Trail	35.4581325725, -118.775972605	SH-13	Miscellaneous	Other	–	–	Light post in good condition
Skip Hoist/Forebay Trail	35.4580187485, -118.776083052	SH-14	Miscellaneous	Other	–	–	Light post in good condition
Skip Hoist/Forebay Trail	35.4579367106, -118.776150143	SH-15	Miscellaneous	Other	–	–	Light post in good condition
Skip Hoist/Forebay Trail	35.4596545822, -118.778721712	SH-16	Miscellaneous	Unknown drainage feature	–	–	Rocks appear to be placed intentionally around switchback, possibly for drainage purposes, although it is not clear. Minor rilling in soil is present below rocks.
Skip Hoist/Forebay Trail	35.4578262763, -118.776110332	SH-17	Miscellaneous	Other	–	–	Cable box for Skip Hoist

Road/Trail Name	Coordinates	Data ID	Feature Type	Feature Description	Drainage Classification	Erosion Severity	Comment
Skip Hoist/Forebay Trail	35.4596957892, -118.778561716	SH-18	Miscellaneous	Barbed wire fence	–	–	Remnant barbed wire fence
Skip Hoist/Forebay Trail	35.4578784918, -118.776218591	SH-19	Miscellaneous	Other	–	–	Start of dirt trail from Skip Hoist platform
Skip Hoist/Forebay Trail	35.4578933549, -118.776284403	SH-20	Miscellaneous	Other	–	–	~15' rock protection fence (Trimble point taken at center)
Skip Hoist/Forebay Trail	35.4579218361, -118.776256296	SH-21	Miscellaneous	Other	–	–	Cable crossing point
Skip Hoist/Forebay Trail	35.4582074606, -118.776612303	SH-22	Miscellaneous	Other	–	–	Cable crossing point
Skip Hoist/Forebay Trail	35.4588542703, -118.777484677	SH-23	Miscellaneous	Other	–	–	Skip hoist pulley
Skip Hoist/Forebay Trail	35.4591527065, -118.777750284	SH-24	Miscellaneous	Other	–	–	Skip hoist pulley
Skip Hoist/Forebay Trail	35.4593485108, -118.778022741	SH-25	Miscellaneous	Other	–	–	Skip hoist pulley
Skip Hoist/Forebay Trail	35.4596967332, -118.778406827	SH-26	Miscellaneous	Other	–	–	Remnant skip hoist pulley

APPENDIX C

Project Access Road and Trail Condition Assessment Maps

Willow Spring Creek
Democrat Dam
Buoy Line
Drainage Tower
Intake Gatehouse
Conduit No. 1
Drainage Tunnel
Drainage Tunnel Outlet
Democrat Dam Access Walkway
Sandbox
Sandbox Drainage Channel
MIF Release Point
Flume No. 1
Tunnel No. 1
Tunnel No. 2
Intake Gatehouse to Flume No. 1 Powerline
Democrat Dam Road (also referred to as Willow Spring Creek Road)
Powerline Road
Flume No. 1 Road
Conduit No. 2
Kern River
Stilling Well No. 1
11192500 (SCE 409)
Gaging Cableway
Democrat Gage Trail
178

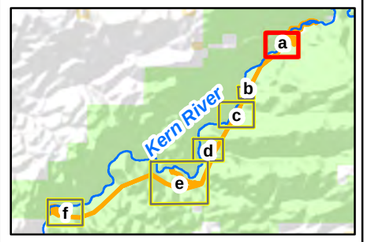
Facilities
- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication/ Powerline
- FERC Boundary

Transportation
- Other Road
- Gate

Other Features
- Watercourse

Conditions
- Drainage - No Apparent
- Drainage - Potential Concern
- Drainage - Concern Likely
- Road/Trail Condition - Good
- Road/Trail Condition - Fair
- Road/Trail Condition - Poor

Note: Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from SR 178 up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment staff confirmed that the segment of the Steel Flume Trail from SR 178 up to the Powerhouse Trail no longer exists. The field-verified Steel Flume Trail is the portion of the Powerhouse Trail within the current FERC Project Boundary



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead™

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

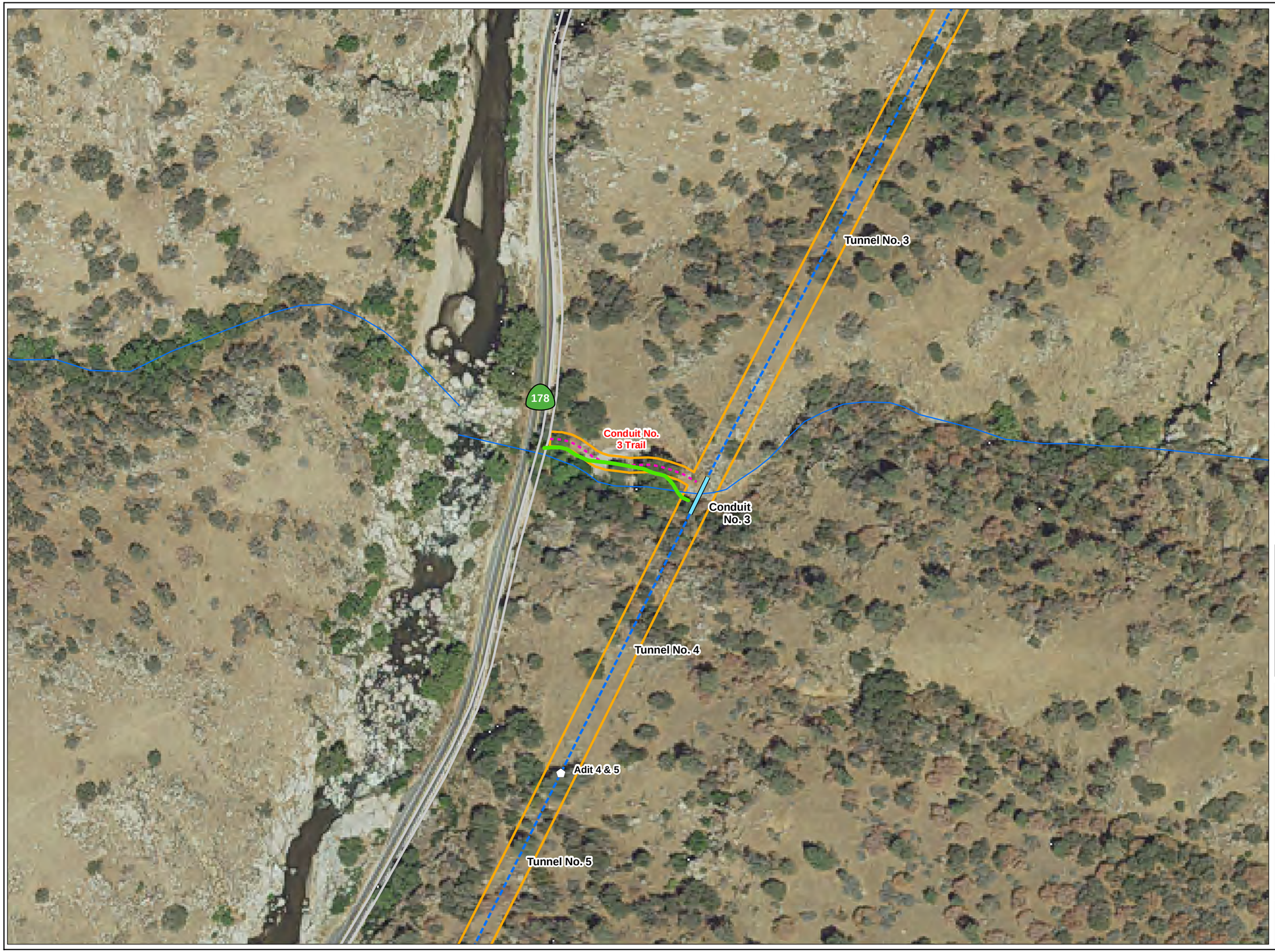
Map C-1a

Project Access Roads and Trails Condition Assessment

0 250 500
Feet

Date: 7/25/2025

Projection: UTM Zone 11
Datum: NAD 83



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication/ Powerline
- FERC Boundary

Transportation

- Other Road
- Gate

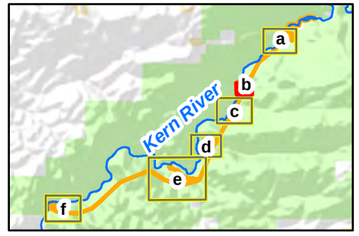
Other Features

- Watercourse

Conditions

- Drainage - No Apparent
- Drainage - Potential Concern
- Drainage - Concern Likely
- Road/Trail Condition - Good
- Road/Trail Condition - Fair
- Road/Trail Condition - Poor

Note: Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from SR 178 up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment staff confirmed that the segment of the Steel Flume Trail from SR 178 up to the Powerhouse Trail no longer exists. The field-verified Steel Flume Trail is the portion of the Powerhouse Trail within the current FERC Project Boundary



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map C-1b

Project Access Roads and Trails Condition Assessment

0 115 230
Feet

Projection: UTM Zone 11
Datum: NAD 83

Date: 7/25/2025

Tunnel No. 5
Cow Flat Creek Trail
Stilling Well No. 2
Flume No. 2 Cow Flat Creek
Cow Flat Creek
Powerhouse Trail (USFS)
Tunnel No. 6
178
Kern River
Steel Flume Trail
Conduit No. 4
Flume No. 3
Conduit No. 5
Tunnel No. 7
Conduit No. 6
Tunnel No. 8

Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication/ Powerline
- FERC Boundary

Transportation

- Other Road
- Gate

Other Features

- Watercourse

Conditions

- Drainage - No Apparent
- Drainage - Potential Concern
- Drainage - Concern Likely
- Road/Trail Condition - Good
- Road/Trail Condition - Fair
- Road/Trail Condition - Poor

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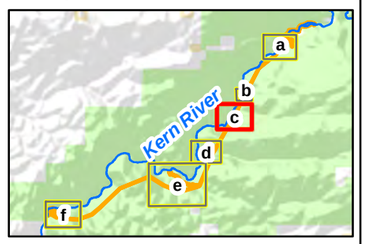

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Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

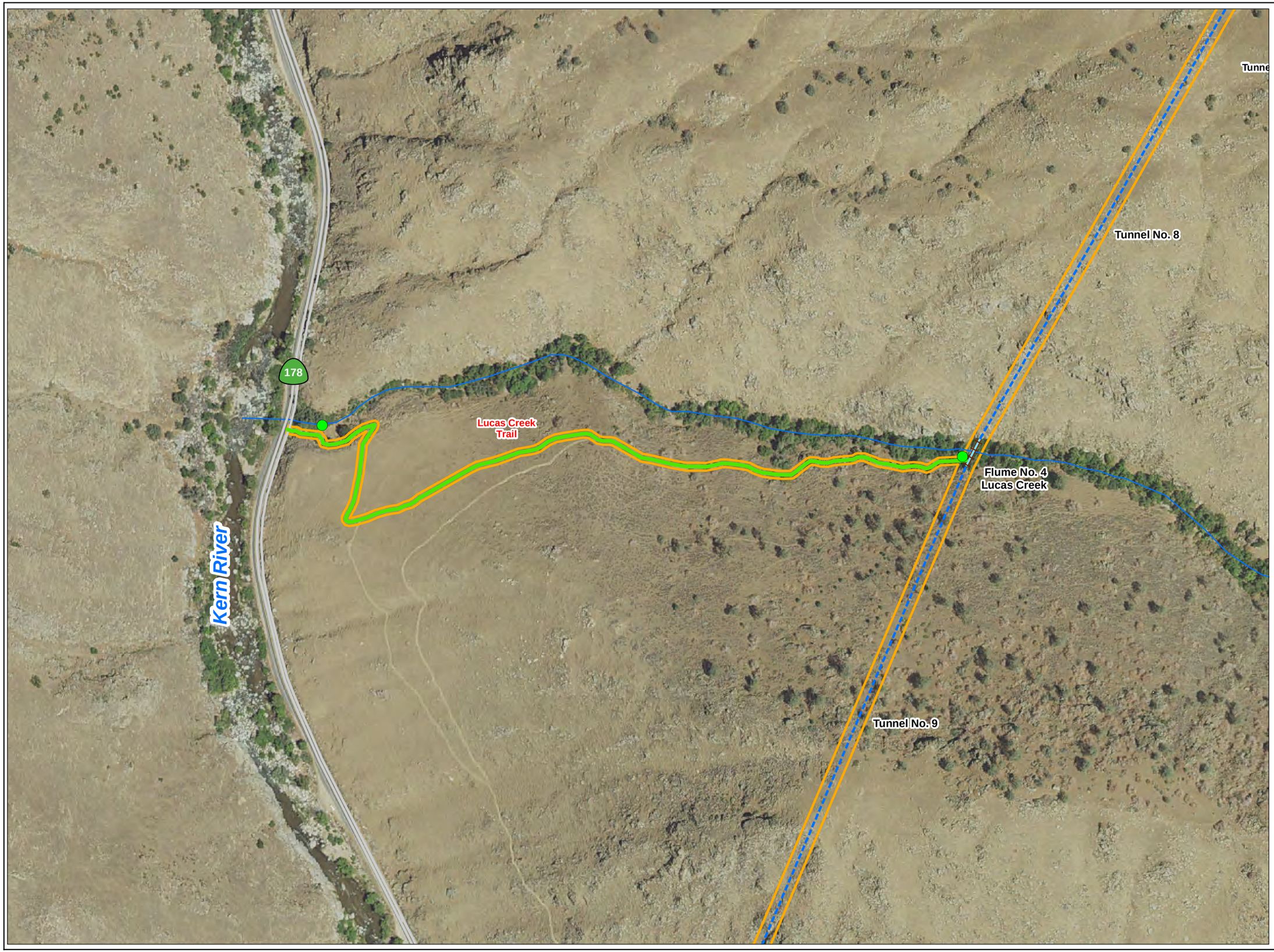
Map C-1c

Project Access Roads and Trails Condition Assessment

0 260 520
Feet

Date: 7/25/2025

Projection: UTM Zone 11
Datum: NAD 83



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication/ Powerline
- FERC Boundary

Transportation

- Other Road
- Gate

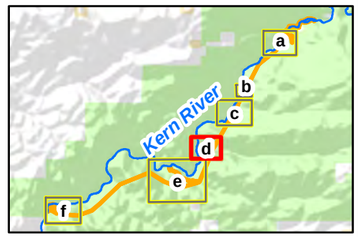
Other Features

- Watercourse

Conditions

- Drainage - No Apparent
- Drainage - Potential Concern
- Drainage - Concern Likely
- Road/Trail Condition - Good
- Road/Trail Condition - Fair
- Road/Trail Condition - Poor

Note: Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from SR 178 up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment staff confirmed that the segment of the Steel Flume Trail from SR 178 up to the Powerhouse Trail no longer exists. The field-verified Steel Flume Trail is the portion of the Powerhouse Trail within the current FERC Project Boundary



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map C-1d

Project Access Roads and Trails Condition Assessment

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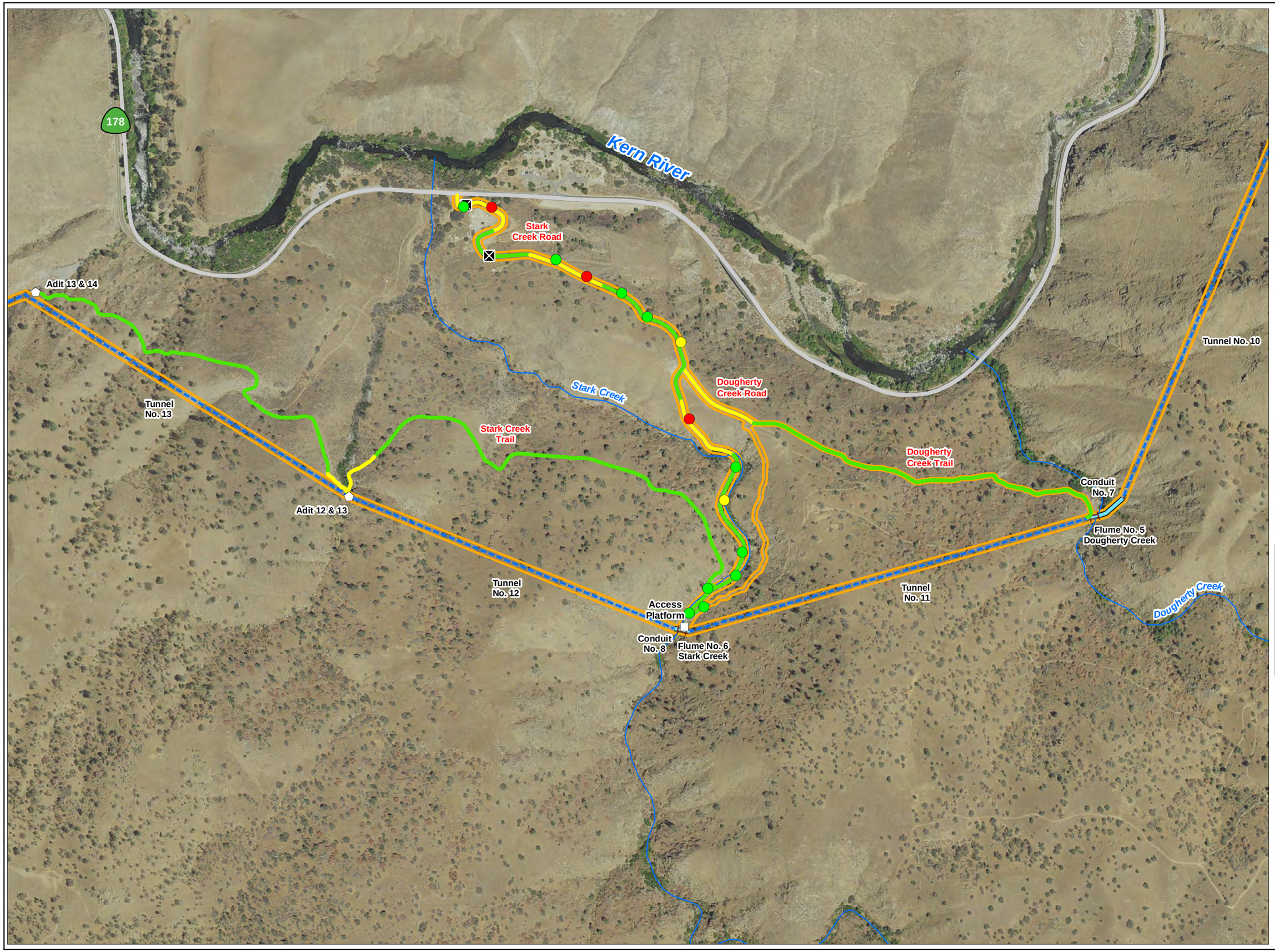
Feet

Date: 7/25/2025

Projection: UTM Zone 11
Datum: NAD 83



Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication/ Powerline
- FERC Boundary

Transportation

- Other Road
- Gate

Other Features

- Watercourse

Conditions

- Drainage - No Apparent
- Drainage - Potential Concern
- Drainage - Concern Likely
- Road/Trail Condition - Good
- Road/Trail Condition - Fair
- Road/Trail Condition - Poor

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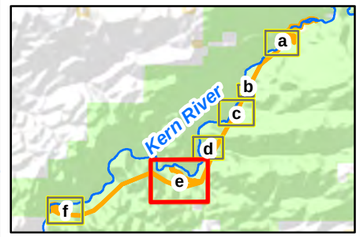

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Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map C-1e

Project Access Roads and Trails Condition Assessment

0 430 860
Feet

Date: 7/25/2025

Projection: UTM Zone 11
Datum: NAD 83

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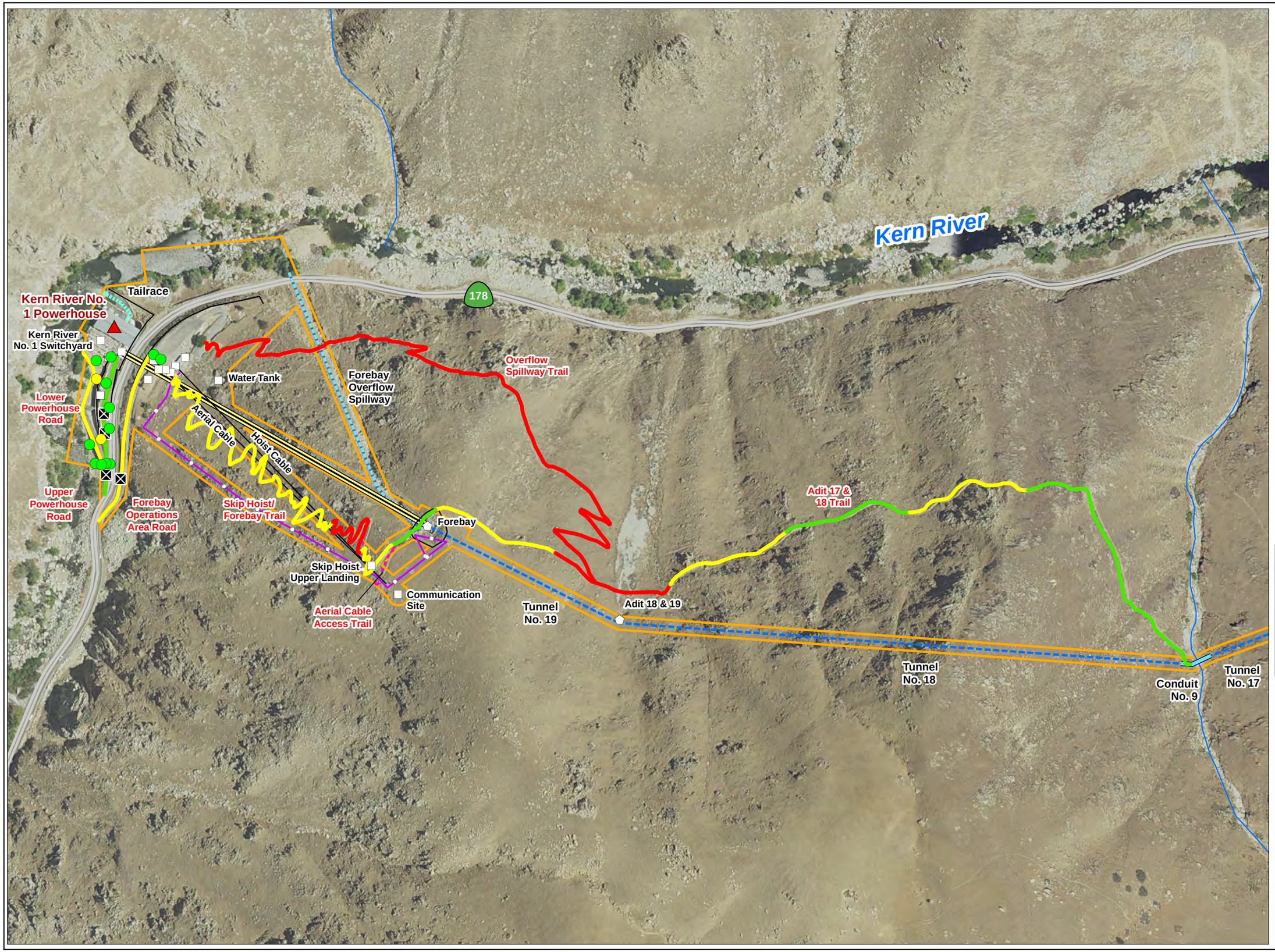


Facilities

- Dam
- Powerhouse
- Water Conveyence Feature
- Tunnel
- Flume
- Conduit
- Sandbox
- Penstock
- Spillway
- Tailrace
- Gage
- Ancillary Facility
- Ancillary Feature
- Powerline
- Communication/ Powerline
- FERC Boundary

Transportation

- Other Road
- Gate

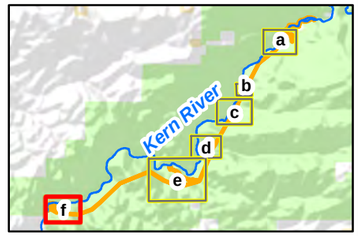
Other Features

- Watercourse

Conditions

- Drainage - No Apparent
- Drainage - Potential Concern
- Drainage - Concern Likely
- Road/Trail Condition - Good
- Road/Trail Condition - Fair
- Road/Trail Condition - Poor

Note: Current FERC Project boundary layers (referenced in the PAD) indicate the Steel Flume Trail extends from SR 178 up to the Forest Service trail called “Powerhouse Trail” and continues southeast along the Powerhouse Trail to Flume No. 3. However, during the field reconnaissance condition assessment staff confirmed that the segment of the Steel Flume Trail from SR 178 up to the Powerhouse Trail no longer exists. The field-verified Steel Flume Trail is the portion of the Powerhouse Trail within the current FERC Project Boundary



SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead™

Kern River No. 1 Hydroelectric Project
FERC Project No. 1930

Map C-1f

Project Access Roads and Trails Condition Assessment

0 260 520
Feet

Date: 7/25/2025

Projection: UTM Zone 11
Datum: NAD 83

APPENDIX D

Representative Photographs of Project Access Road and Trail Conditions

Table D-1. Photo Index

Photo No.	Road/Trail Name	Description
1	Adit 17/18 Trail	Example of hillslope erosion present within steep, grassy trails.
2	Conduit No. 3 Trail	Burned soil following the July 2024 Borel Fire.
3	Cow Flat Creek Trail	Damage to infrastructure sustained following the July 2024 Borel Fire.
4	Democrat Dam Road	Example of road surface erosion present throughout this road.
5	Democrat Dam Road	Gullying present along several hundred feet of roadway below culvert.
6	Democrat Dam Road	Gully along shoulder extending into vegetated hillslope
7	Democrat Gage Trail	Bank failure along trail and overgrown vegetation
8	Forebay Operations Area Road	Gap in curb along approximately 20-25 feet of roadway.
9	Lower Powerhouse Road	Broken drainpipe (elbow; see red arrow).
10	Lower Powerhouse Road	Tire ruts within the lower turnout area.
11	Overflow Spillway Trail	Example of overgrown vegetation that is typical of this trail.
12	Overflow Spillway Trail	Trail is poorly defined and unmaintained.
13	Skip Hoist/Forebay Trail	Example of soil erosion characteristic of this trail
14	Stark Creek Road	Low to moderate cracking along approximately 150 feet of roadway.
15	Stark Creek Road	Upstream side of low-water crossing along Stark Creek. Accumulated vegetative debris obscured the CMP underneath the cement slab, but the easternmost CMP appeared to be crushed.
16	Stark Creek Road	Example of steel slope drain in good condition, which are present throughout Stark Creek Road.

Photo D-1. August 27, 2024. Adit 17 & 18 Trail. Example of hillslope erosion present within steep, grassy trails.

Photo D-2. August 25, 2024. Conduit No. 3 Trail. Burned soil following the July 2024 Borel Fire.

Photo D-3. August 26, 2024. Democrat Dam Road. Example of road surface erosion present throughout this road.

Photo D-4. August 26, 2024. Democrat Dam Road. Gullying present along several hundred feet of roadway below culvert.

(a) **(b)**

Photo D-5. August 26, 2024. Democrat Dam Road. Gully along shoulder extending into vegetated hillslope.

Photo D-6. August 26, 2024. Democrat Gage Trail. Bank failure along trail and overgrown vegetation.

Photo D-7. August 27, 2024. Forebay Operations Area Road. Gap in curb along approximately 20-25 feet of roadway.

Photo D-8. August 26, 2024. Lower Powerhouse Road. Broken drainpipe (elbow; see red arrow).

Photo D-9. August 26, 2024. Lower Powerhouse Road. Tire ruts within the lower turnout area.

Photo D-10. August 27, 2024. Overflow Spillway Trail. Example of overgrown vegetation that is typical of this trail.

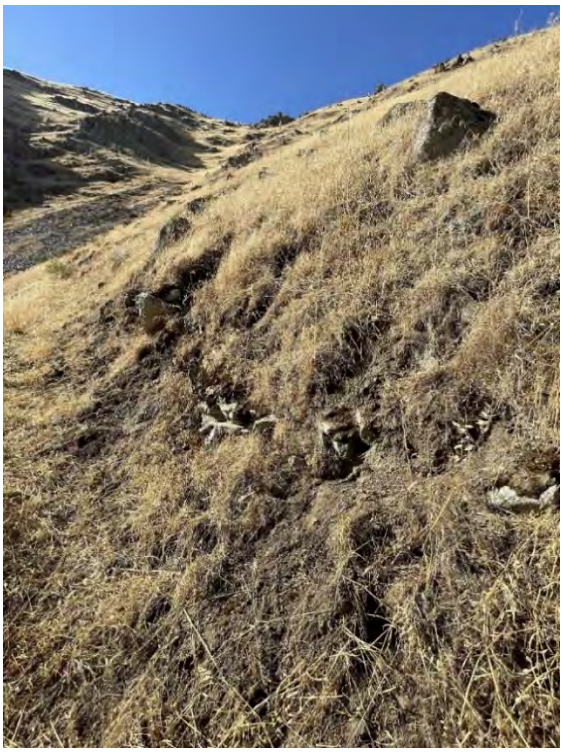


Photo D-11. August 27, 2024. Overflow Spillway Trail. Trail is poorly defined and unmaintained.

Photo D-12. August 27, 2024. Skip Hoist/Forebay Trail. Example of soil erosion characteristic of this trail.

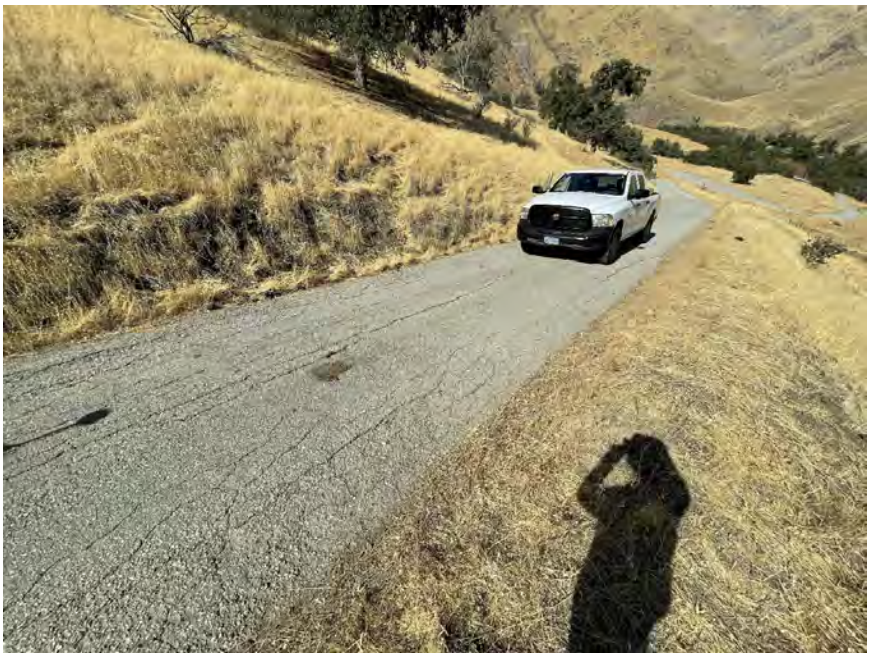


Photo D-13. August 26, 2024. Stark Creek Road. Low to moderate cracking along approximately 150 feet of roadway.

Photo D-14. August 26, 2024. Stark Creek Road. Upstream side of low-water crossing along Stark Creek. Accumulated vegetative debris obscured the CMP underneath the cement slab, but the easternmost CMP appeared to be crushed.

Photo D-15. August 26, 2024. Stark Creek Road. Example of steel slope drain in good condition, which are present throughout Stark Creek Road.