

D-07.1_Email to USFS staff re LAND-2 Aesthetics Technical Report (PPT attached)

From: [Carissa Shoemaker](#)
To: ashley.blythehaverstock@usda.gov
Cc: [Shannon Luoma](#)
Subject: Lee Vining LAND-2 Aesthetics Technical Report
Date: Wednesday, July 17, 2024 10:28:00 AM
Attachments: [image001.jpg](#)

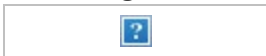
Hi Ashley,

Thanks for joining us at the Lee Vining PME discussion yesterday. As we discussed, the LAND-2 Aesthetics Technical Report can be found at this link, for reference: [LV_LAND-2_Tech_Report.pdf](#)

Let us know if you have any questions or issues accessing the file.

Thank you!

Carissa Shoemaker
Licensing Coordinator



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SOUTHERN CALIFORNIA EDISON Lee Vining Hydroelectric Project (FERC Project No. 1388)



VISUAL RESOURCE ASSESSMENT (LAND-2) DRAFT TECHNICAL REPORT



APRIL 2024

SOUTHERN CALIFORNIA EDISON

Lee Vining Hydroelectric Project
(FERC Project No. 1388)

VISUAL RESOURCE ASSESSMENT (LAND-2) DRAFT TECHNICAL REPORT

Southern California Edison
2244 Walnut Grove Avenue
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April 2024

Support from:

Kleinschmidt

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LIST OF ACRONYMS AND ABBREVIATIONS

FERC	Federal Energy Regulatory Commission
GIS	geographic information system
GPS	global positioning system
KOP	Key Observation Point
M/R	Modified/Roaded
PAD	Pre-Application Document
PM&E	Protection, Mitigation, and Enhancement
SCE	Southern California Edison
SIO	scenic integrity objectives
TWG	Technical Working Group
USGS 3DEP	U.S. Geological Survey 3D Elevation Program

DRAFT

1.0 INTRODUCTION

Southern California Edison (SCE) is the licensee of the Lee Vining Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) Project Number 1388, which includes three reservoirs (Ellery Lake, Tioga Lake, and Saddlebag Lake). The *LAND-2 Visual Resource Assessment Technical Study Plan* (Study Plan) details SCE's proposal for study objectives, study area, methods, and schedule for the effort. The Study Plan was filed with FERC on April 25, 2022 (SCE, 2022). This report describes the methods and results of the Visual Resource Assessment conducted consistent with the Study Plan.

1.1. STUDY GOALS AND OBJECTIVES

The goal of the Visual Resource Assessment is to characterize the existing visual resources of Project lands, document the associated visual quality and management objectives identified in the U.S. Forest Service (USFS) Land Management Plan for the Inyo National Forest (USFS, 2019), and document the existing visual character of Project facilities and features from affected viewsheds and representative Key Observation Points (KOPs).

The objectives of the study were to:

- Inventory, map, and describe existing Project infrastructure and operation, maintenance, and construction activities that may have the potential to affect visual resources of the Project Area.
- Document existing Protection, Mitigation, and Enhancement (PM&E) measures, including the existing Visual Resource Protection Plan (Section 4(e) Condition 11) implemented under the existing license.
- Obtain data and maps from the USFS geographic information system (GIS) and characterize existing visual resource inventories and management objectives associated with the Project lands as developed under the Land Management Plan for the Inyo National Forest (USFS, 2019). Summarize any available information pertaining to variety classes, sensitivity levels, distance zones, and Recreation Opportunity Spectrum classifications.
- Conduct a desktop viewshed analysis (via GIS data) and assess what portion and acreages of the Project lands and associated landscape are potentially visually affected by Project-related activities and based on the field assessment.
- Determine the number and location of KOPs in consultation with the Recreation and Land Use Technical Working Group (TWG) prior to the 2023 field season. In consultation with the USFS, KOPs have been identified from representative locations such as Project-related travel corridors and recreation sites within the identified viewshed areas for additional analysis.

- Map and assess the KOP locations to include documentation of the existing scenic character and potential use of the selected KOPs. Where applicable, incorporate KOP locations into 2023 user surveys associated with the REC-1 Recreation Use Assessment to determine frequency and duration of visits at the KOP locations.
- Prepare a study report that documents the study findings and characterizes the existing visual conditions as they relate to Project facilities and Project-related activities.

1.2. STUDY AREA

The study area includes key viewsheds and representative KOPs from which the Project facilities and features are visible. SCE consulted with the Recreation and Land Use TWG, including the USFS, to identify viewsheds and representative KOPs for assessment that may be affected by future Project operations, maintenance, or construction activities. Figure 1.2-1 and Section 2.0, *Methods*, provide information regarding the KOP locations.

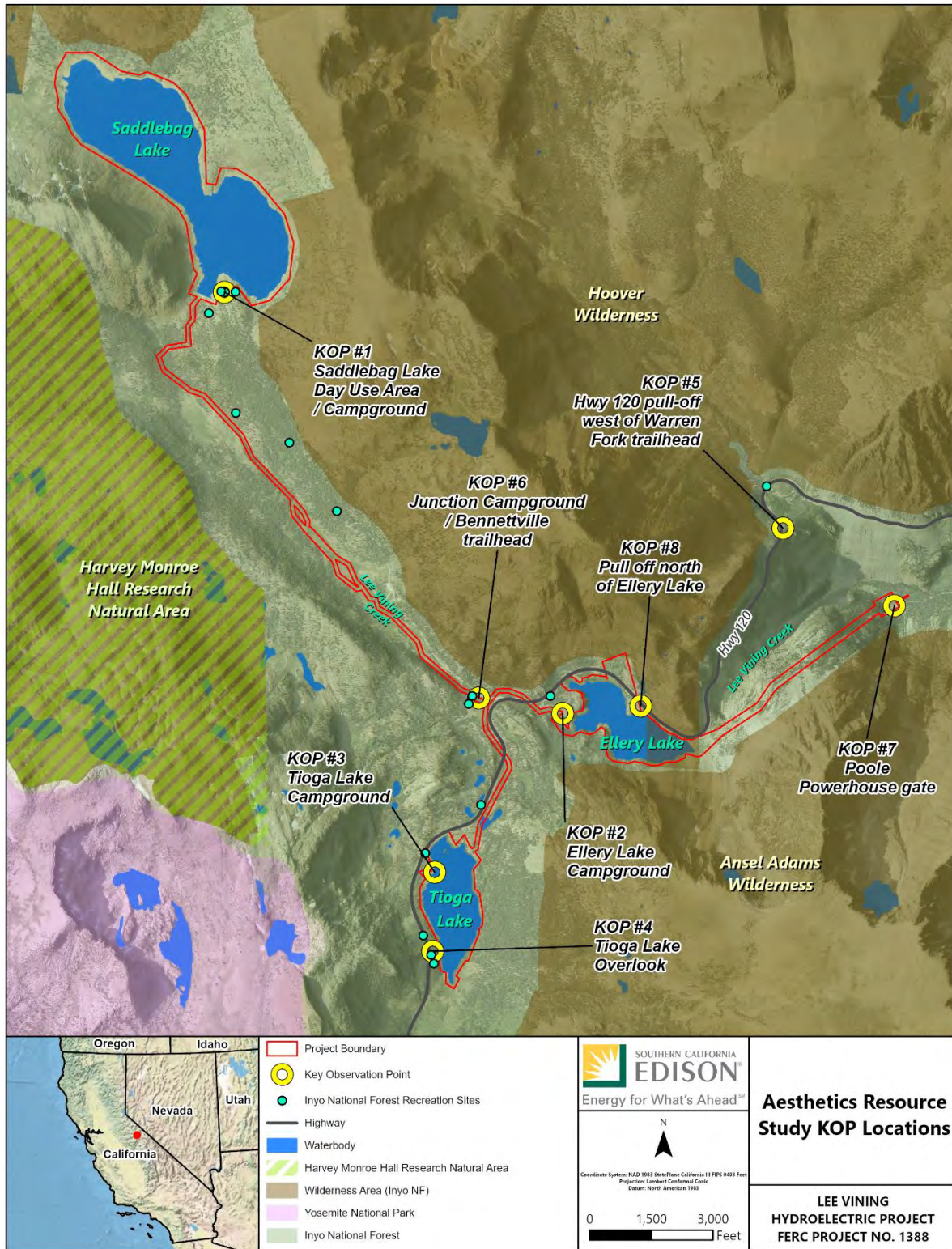


Figure1.2-1. Study Area and KOP Locations.

2.0 METHODS

2.1. KOP FIELD ASSESSMENT

Methods for this study followed those described in the Study Plan (SCE, 2022). Existing information regarding the visual character of the Project lands and facilities, including description and photographs of existing Project facilities, summary of relevant visual management objectives in the 2019 Inyo National Forest Land Management Plan, and pertaining to wild and scenic rivers and scenic highways within the Project vicinity was compiled and reviewed.

KOPs were selected in consultation with the Recreation and Land Use TWG during meetings in March 2023. A summary of the identified KOPs and rationale for selection is provided in Table 2.1-1; KOP locations are shown on Figure 1.2-1. The majority of the identified KOPs (KOP 1, 2, 3, 4, and 6) are also survey locations included in the REC-1 Recreation Use Assessment (to be conducted in spring/summer 2024), so that the sites can be assessed to determine frequency and duration of visits at the KOP locations.

Table 2.1-1. KOP Locations and Rationale

KOP	KOP Location	Rationale for Selection
KOP 1	Saddlebag Lake Day Use Area / Campground	High public-use area, views of Saddlebag Lake and Dam
KOP 2	Ellery Lake Campground	High public-use area, views of Ellery Lake and Rhinedollar Dam
KOP 3	Tioga Lake Campground	High public-use area, views of Tioga Lake and Dams
KOP 4	Tioga Lake Overlook	High public-use area, views of Tioga Lake and Dams
KOP 5	State Route 120 pull-off west of Warren Fork trailhead, where the powerhouse parking lot is visible	High public-use thoroughfare, potential views of Ellery Lake, Rhinedollar Dam, and Poole Powerhouse
KOP 6	Junction Campground / Bennettville Trailhead	High public-use area in the middle of the Project
KOP 7	Poole Powerhouse gate	View of the powerhouse from the public access road
KOP 8	Pull-off north of Ellery Lake	Industrial-looking area with old SCE cabin

KOP = Key Observation Point; SCE = Southern California Edison

SCE conducted a field inventory at each of the eight KOPs on August 9 and 10, 2023. At each site, the field team documented the site with photos and recorded aesthetic characteristics, including KOP site name, global positioning system (GPS) coordinates for the KOP, the date of each documentation, weather conditions, primary site use, landscape vegetation and features, cultural modifications, general visual character, unique visual characteristics, waters visible from the site, and impoundment elevation

and/or river flow. In addition, the field team evaluated views within specific distance zones (foreground, middleground, and background views), and obtained representative photographs of aesthetic character of the site. Viewing distances were generally characterized as:

- Immediate foreground/foreground—0 feet to approximately 0.5 mile;
- Middleground—approximately 0.5 mile to 4 miles; and
- Background—approximately 4 miles to horizon.

2.2. DESKTOP REVIEW AND ASSESSMENTS

SCE conducted a desktop review of existing GIS data obtained from the USFS to characterize existing visual resource inventories and management objectives associated with the Project lands as developed under the *Land Management Plan for the Inyo National Forest* (USFS, 2019). The information was then summarized using available data pertaining to variety classes, sensitivity levels, distance zones, and Recreation Opportunity Spectrum classifications to adequately communicate visual resources.

SCE conducted a desktop viewshed analysis to identify what portion and acreage of the Project lands and associated landscape would potentially be visually affected by Project-related features. The desktop viewshed analysis was performed by analyzing the most current publicly available elevation data, which is a 10-meter digital elevation model (DEM) published by the U.S. Geological Survey 3D Elevation Program (USGS 3DEP; USGS 2021). Vegetation height data was not readily available; therefore, SCE did not consider forest vegetation (e.g., tree height and location) in the viewshed analysis, but did consider the viewing height of the average person. The analysis was based on the DEM land elevation with an additional 5 feet and 5 inches, with no vegetation height or screening accounted for in the identification of potential viewsheds. Overall, this would reflect a greater viewing distance and availability of views than would be expected under existing conditions with presence of vegetation.

2.3. VARIANCES

There were no variances from the Study Plan (SCE, 2022).

Note the majority of the identified KOPs (KOP 1, 2, 3, 4, and 6) are also survey locations included in the REC-1 Recreation Use Assessment to determine frequency and duration of visits at the KOP locations. However, implementation of the 2023 Recreation Use Assessment Survey was delayed due to limited access to the Project Area during the study period and the study is planned for spring/summer 2024. Data regarding frequency and duration of recreation visitation to these KOP locations will be provided in the forthcoming Recreation Use Assessment Report.

3.0 STUDY RESULTS

3.1. VISUAL CHARACTER OF PROJECT FEATURES AND LANDS

The Project is located on Lee Vining and Glacier Creeks in the glacially carved upper Lee Vining Canyon, approximately 9 miles upstream of Mono Lake and the town of Lee Vining, California, and 1 mile north of the eastern entrance to Yosemite National Park. In the current FERC Project Boundary, approximately 96 percent (590.8 acres) of Project lands are owned by the USFS, and 4 percent (24.7 acres) are owned by SCE. Project facilities include three dams and reservoirs, an auxiliary dam, an underground flowline consisting of a pipeline and penstock, and a powerhouse (Figure 1.2-1). The principal Project features were constructed in the early 1920s and have been part of the landscape and scenic character of the Lee Vining Canyon for approximately 100 years.

Saddlebag Dam impounds the 297-acre Saddlebag Lake; Tioga Dam impounds the 73-acre Tioga Lake; and Rhinedollar Dam impounds the 61-acre Ellery Lake. Both Saddlebag Lake and Tioga Lake drain into Ellery Lake, which is the intake and regulating reservoir for the Poole Powerhouse. The intake structure is at Ellery Lake and includes an underground pipeline and penstock and the Poole Powerhouse. The Poole Powerhouse and the adjacent Triplex Cottage are reinforced concrete buildings constructed in the 1920s. It is located on Lee Vining Creek east (downstream) of Ellery Lake.

The Project facilities are rockfill/earthen dams with some areas of exposed concrete in earth tone colors. The various dams and concrete areas are similar in color to the surrounding rock boulders and mountains, and blend into the surrounding environment. The reinforced concrete Poole Powerhouse is beige in color, and is built directly next to, and flanked by, an exposed rock mountain and also blends into the landscape with similar earth tone colors.

The scenic character of the impoundments and creek areas are predominantly undeveloped shorelines with occasional recreation facilities and structures. The surrounding vegetation primarily includes evergreen trees and forests, shrubs, grasses and grasslands, and meadows and wetlands with nearby lakes and creeks. Vegetated areas are followed by barren rock, exposed rock boulders, and distant views of hills and mountains beyond. The lowland and surrounding mountain areas are covered in snow in winter.

Photo 1 provides a view of the overall Project Area, Photos 2 through 5 show representative views of the Project dams, and Photo 6 provides a view of the Poole Powerhouse. Photos 7 through 11 provide representative views of reservoirs and creeks within the existing FERC Project Boundary.



Photo 1. Overview of Project Area.



Photo 2. Saddlebag Dam.



Photo 3. Tioga Dam and Spillway.



Photo 4. Tioga Dam Outlet.



Photo 5. Rhinedollar Dam (Ellery Lake) and Spillway.



Photo 6. Poole Powerhouse (right) and Triplex Cottage (left).



Photo 7. Glacier Creek.



Photo 8. Lee Vining Creek below Rhinedollar Dam.



Photo 9. Saddlebag Lake.



Photo 10. Tioga Lake.



Photo 11. Ellery Lake.

3.2. INYO NATIONAL FOREST LAND MANAGEMENT PLAN

The 2019 *Inyo National Forest Land Management Plan* (USFS, 2019) provides a planning framework for the management of uses and resources associated with the Inyo National Forest (see Section 5.8, *Recreation Resources*, and Section 5.9, *Land Use*, of the Pre-Application Document [PAD] for more information). The Forest Service *Land Management Planning Handbook* (USFS, 2015) identifies scenic character as the combination of the physical, biological, and cultural images that gives an area its scenic identity and contributes to its sense of place. Scenic character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity. The *Inyo National Forest Land Management Plan* identifies desired conditions for scenic character (see Table 5.9-5 in Section 5.9, *Land Use*, of the PAD) and scenic integrity objectives (desired conditions) for the management and preservation of scenic character within the Inyo National Forest.

As described in the *Inyo National Forest Land Management Plan* (USFS, 2019), scenic integrity objectives describe the minimum thresholds for the management of the scenery resource, ranging from very high to low scenic integrity objectives. Scenic integrity objectives (SIO) describe the degree to which desired attributes of the scenic character are to remain and reflect changes in public perceptions and the importance of viewing scenery as well as integrating scenery resources with the overall management of the landscape.

The USFS measures scenic integrity in five levels (USFS, 2019):

- **Very High:** landscapes where the valued scenic character “is” intact with only minute, if any, deviations. The existing scenic character and sense of place is expressed at the highest possible level.
- **High:** landscapes where the valued scenic character appears unaltered. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the scenic character so completely and at such scale that they are not evident.
- **Medium:**¹ landscapes where the valued scenic character appears slightly altered. Noticeable deviations must remain visually subordinate to the scenic character being viewed.
- **Low:** landscapes where the valued scenic character appears moderately altered. Deviations begin to dominate the valued scenic character being viewed but they borrow valued attributes such as size, shape, edge effect, pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed, but compatible or complementary to the character within.
- **Very Low:**² landscapes where the valued scenic character appears heavily altered. Deviations may strongly dominate the valued scenic character. They may not borrow from valued attributes such as size, shape, edge effect, pattern of natural openings, vegetative type changes, or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.

For lands within the FERC Project Boundary, the USFS *Inyo National Forest Land Management Plan* predominantly identifies SIO as High (99.9 percent), with remaining lands identified as Medium and Very High³ (see Figure 3.2-1). For lands within a 0.5-mile buffer of the FERC Project Boundary, the USFS predominantly identifies SIO as High (61 percent) and Very High (38 percent), with remaining lands identified as Medium (see Figure 3.2-1). The *Inyo National Forest Land Management Plan* also identifies potential management approaches relative to vegetation management and consideration of scenic character, such as minimizing visible lines in landscape areas where vegetation is removed and cleared areas include edges reflect the visual character of naturally occurring vegetation openings.

¹ The *Inyo National Forest Land Management Plan* defines this category as “Moderate,” though the GIS data for scenic integrity objectives associated with the *Land Management Plan* defines this category as “Medium.” We will refer to this category as Medium.

² While the *Inyo National Forest Land Management Plan* defines this category, there are no lands designated as “Very Low” in the GIS data for scenic integrity objectives associated with the *Land Management Plan*.

³ Though small pieces of these designations cross into the current FERC Project Boundary, it appears that the intent of the data was for the entire FERC Project Boundary to be considered a “High” scenic integrity objective.

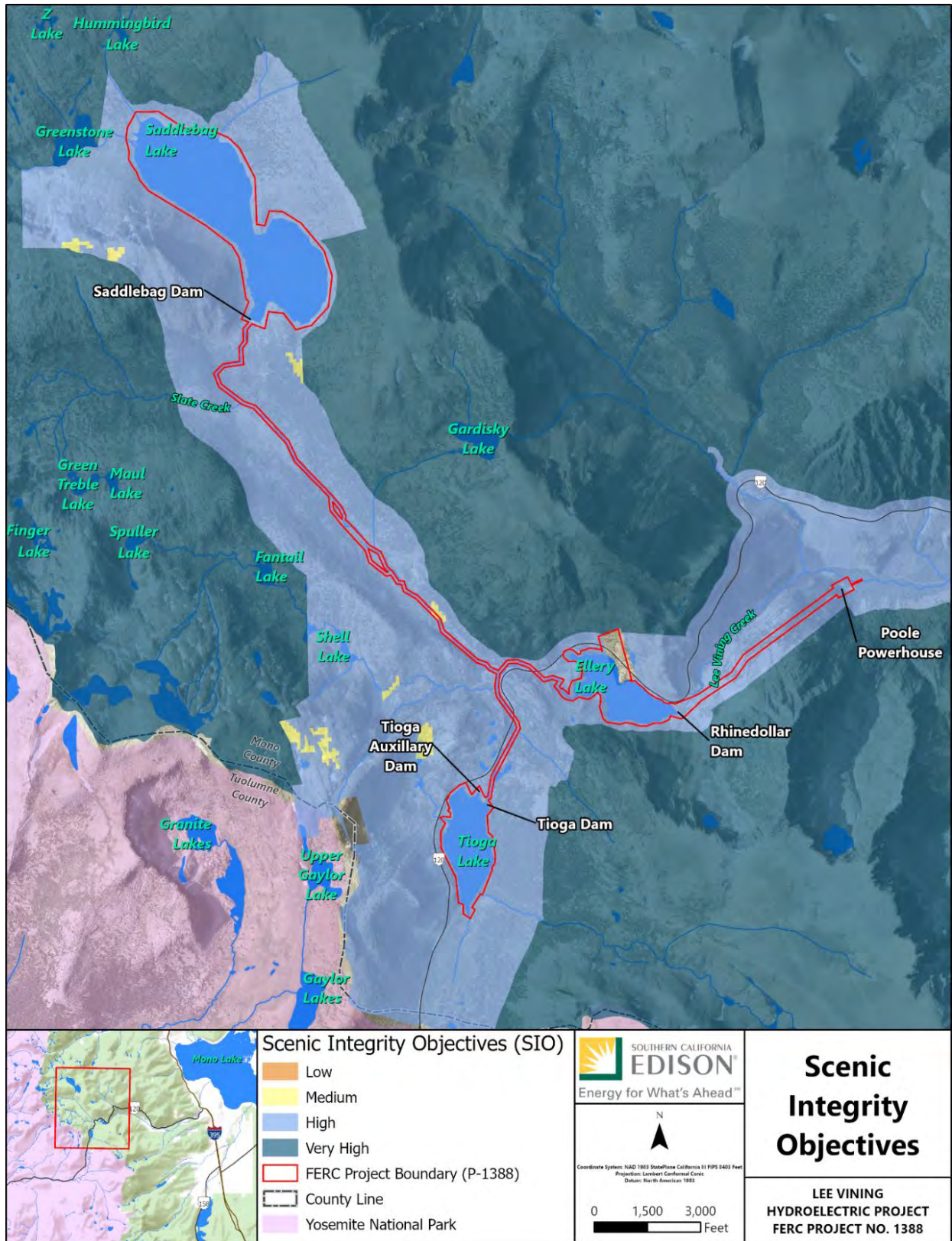


Figure 3.2-1. Inyo National Forest 2019 Land Management Plan Scenic Integrity Classifications for the Project Vicinity.

Recreation Opportunity Spectrums are designed to establish expectations and inform the management of settings when making decisions on facility and infrastructure design and development (USFS, 2019). Table 3.2-1 explains the physical, managerial, and social settings across each of these Recreation Opportunity Spectrums. As shown on Figure 3.2-2, for lands within the FERC Project Boundary, the USFS *Inyo National Forest Land Management Plan* Recreation Opportunity Spectrum classifications are primarily Modified/Roaded, while both Primitive and Semi-Primitive Non-Motorized each account for less than 1 percent of Project lands.

Table 3.2-1. Physical, Managerial, and Social Settings Across Recreation Opportunity Spectrums

Recreation Opportunity Spectrum	Physical Setting	Managerial Setting	Social Setting
Modified/Roaded	<p>Theme: Natural appearing with nodes and corridors of development such as campgrounds, trailheads, boat launches, and rustic, small-scale resorts</p> <p>Infrastructure:</p> <ul style="list-style-type: none"> • Access—Classified road system for highway vehicle use • Fishing sites—Rivers, lakes, reservoirs with some facilities • Camp/picnic sites—Identified dispersed and developed sites • Sanitation—Developed outhouses that blend with setting • Water supply—Often developed • Signing—Rustic with natural materials to more refined using a variety of materials such as fiberglass, metal, etc. • Interpretation—Simple roadside signs, some interpretive displays • Water crossing—Bridges constructed of natural materials 	<p>Opportunity to be with other users in developed sites; some obvious signs (information and regulation) and low to moderate likelihood of meeting Forest Service rangers</p>	<p>Moderate evidence of human sights and sounds; moderate concentration of users at campsites; little challenge or risk</p>
Primitive	<p>Theme: Remote, predominately unmodified, naturally evolving</p> <p>Infrastructure:</p> <ul style="list-style-type: none"> • Access—Non-motorized trails • Fishing sites—Rivers and lakes • Camp/picnic sites—Not developed or defined, leave no trace • Sanitation—No facilities, leave no trace • Water supply—Undeveloped natural • Signing—Minimal, constructed of rustic, natural materials • Interpretation—Through self-discovery and at trailheads 	<p>Few signs, few encounters with rangers</p>	<p>Very high probability of solitude; closeness to nature; self-reliance, high challenge, and risk; little evidence of people</p>

Recreation Opportunity Spectrum	Physical Setting	Managerial Setting	Social Setting
	<ul style="list-style-type: none"> Water crossing—Minimal, some bridges made of natural materials (wood) may exist but are rare 		
Semi-Primitive Non-Motorized	<p>Theme: Predominately natural/natural appearing; rustic improvements to protect resources</p> <p>Infrastructure:</p> <ul style="list-style-type: none"> Access—Non-motorized trails are present. Closed and temporary roads may be present but are not dominant on the landscape Fishing sites—Rivers, lakes, and reservoirs Camp/picnic sites—Not developed, leave no trace Sanitation—No facilities, leave no trace Water supply—Undeveloped natural Signing—Rustic constructed of natural materials Interpretation—Through self-discovery, at trailheads Water crossing—Rustic structures or bridges made of natural materials 	Minimum or subtle signing and regulations, some encounters with rangers	High probability of solitude, closeness to nature, self-reliance high to moderate challenge and risk; some evidence of others

Source: USFS, 2019



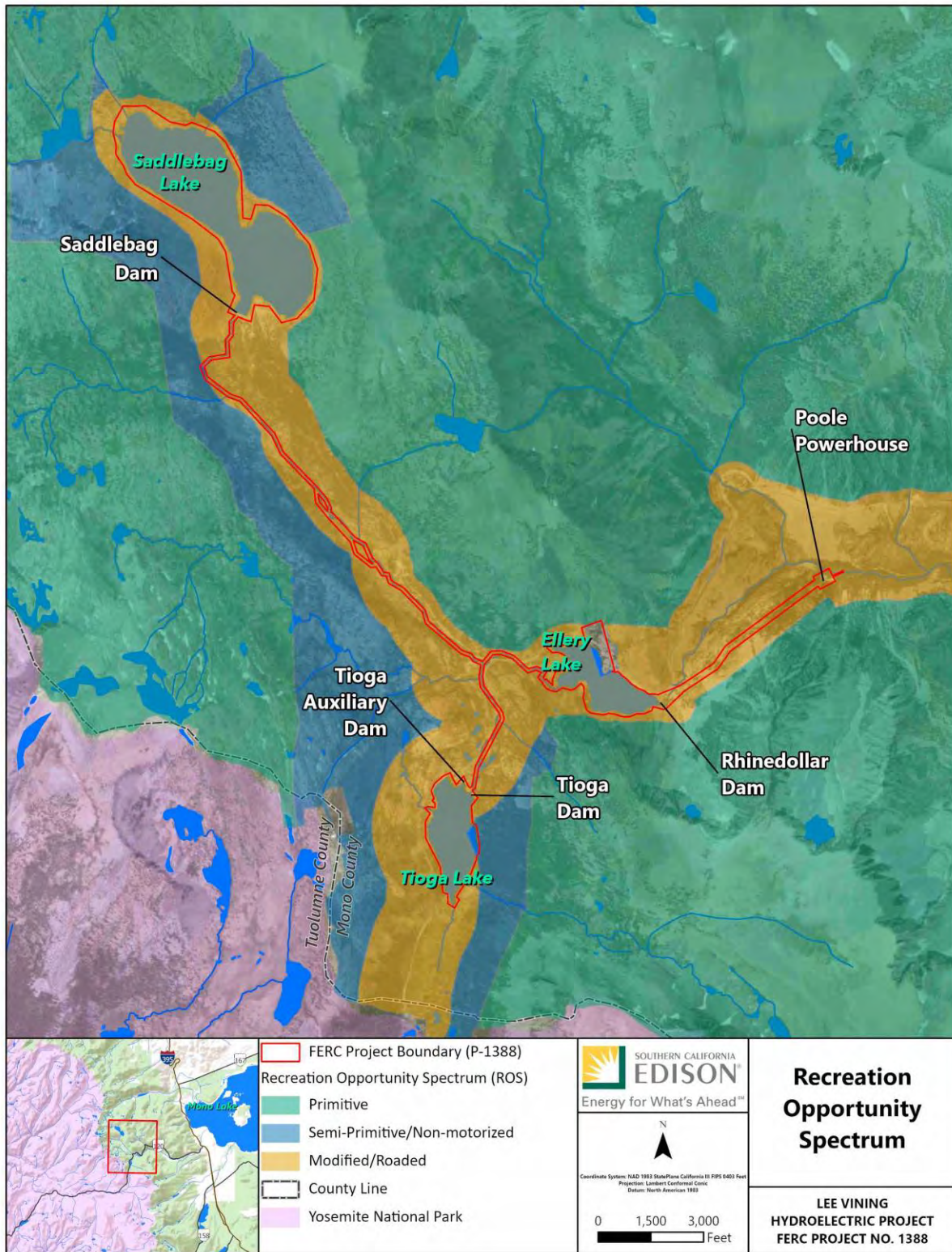


Figure 3.2-2. Inyo National Forest 2019 Land Management Plan Recreation Opportunity Spectrum for the Project Vicinity.

3.3. WILD AND SCENIC RIVERS AND SCENIC HIGHWAYS/BYWAYS

No rivers in the FERC Project Boundary are currently included in the National Wild and Scenic Rivers System; however, the 2019 Inyo National Forest Land Management Plan (USFS, 2019) has recently identified over 75 miles of river in the Mono Basin as eligible for inclusion in the National Wild and Scenic Rivers System, including all of Lee Vining Creek (see Section 5.8, *Recreation Resources* of the Lee Vining PAD for more information; SCE, 2021).

The Project is located along State Route 120, which runs west to east across the central part of California from Interstate 5 in the San Joaquin Valley near Lathrop through Yosemite National Park—where at 9,943 feet it is the highest mountain pass (Tioga Pass) in California—to its end at U.S. Route 6 near Mono Lake. The 64 miles of State Route 120 running through Yosemite National Park has been designated as the Tioga Road / Big Oak Flat Road National Scenic Byway by the Federal Highway Administration (USDOT, n.d.). The 12 miles of State Route 120 extending from the eastern boundary of Yosemite National Park, through the Project, to U.S. Highway 395 which runs north–south through the community of Lee Vining has also been designated a National Forest Scenic Byway on February 8, 1990, and is commonly known as the Lee Vining Canyon Scenic Byway (USDOT, n.d.). State Route 120 is typically closed in winter due to snowpack and inclement weather conditions (Caltrans, 2024).

3.4. KEY OBSERVATION POINTS CHARACTERIZATION

Table 2.1-1 provides a summary of the identified KOPs, and Figure 1.2-1 denotes the KOP locations. Aesthetic Inventory Data Forms are included as Appendix A. A narrative description and photographs with 360-degree mid-level view representation of the eight KOPs is provided below in the inventory results. At least three 360-degree sets of photo views were taken at each KOP: a lower, middle, and upper view. The lower, middle, and upper level 360-degree view photographs are included in Appendix B, and middle view photographs are included below.

3.4.1. KOP 1—SADDLEBAG LAKE DAY USE AREA / CAMPGROUND

Predominant views within the Saddlebag Lake Day Use Area / Campground KOP Saddlebag Lake in the foreground, middleground, and background views of mountains. Saddlebag Dam can be seen in the far-off distance. Development consists of the reservoir (Saddlebag Lake), Saddlebag Dam, an old USFS building, and a metal storage container. The area has low rolling hills with semi-vegetated flat faces and terrain that are subtle brown color variations with little contrast and generally mute tones. The day use area provides more color variety with human-made structures such as vehicles and trailers. Vegetation includes trees in the foreground, with shrubs and more trees in the middleground. Viewing distances extend from foreground to middleground views.



Photo 12. KOP 1 Saddlebag Lake Day Use Area / Campground View North.



Photo 13. KOP-1 Saddlebag Lake Day Use Area / Campground View Northeast.



Photo 14. KOP-1 Saddlebag Lake Day Use Area / Campground View East.



Photo 15. KOP-1 Saddlebag Lake Day Use Area / Campground View Southeast.



Picture 16. KOP-1 Saddlebag Lake Day Use Area / Campground view South



Picture 17. KOP-1 Saddlebag Lake Day Use Area / Campground view Southwest



Photo 18. KOP-1 Saddlebag Lake Day Use Area / Campground View West.



Photo 19. KOP-1 Saddlebag Lake Day Use Area / Campground View Northwest.

3.4.2. KOP 2—ELLERY LAKE CAMPGROUND

The Ellery Lake Campground was chosen during consultation as a KOP due to it being a high public-use area and a location that provides views of Ellery Lake. The Ellery Lake Campground is located on the western edge of Ellery Lake. Ellery Lake and State Route 120 are visible from the KOP location. The natural scenery has high and low ranges of rounded mountains and canyons. The topography includes soft, steep mountain slopes

and the Lee Vining Creek inlet. The vegetation is primarily sparse grasses, trees, and shrubs. The main visual feature is the inlet with bright green islands on the lake and rock outcroppings with sparse vegetation sprinkled with brown rocks and minimal grass, trees, and shrubs on the shoreline that provide unique feature views. Coniferous trees with some greenery and mixed curved and straight brown tree trunks line the non-vegetated areas. The inlet water is still and dark blue and semi-clear with dark brown and green shallow spots along the shoreline. Adjacent scenery has moderate overall visible quality. Viewing distances are predominantly foreground to middleground views.



Photo 20. KOP 2 Ellery Lake Campground View North.



Photo 21. KOP 2 Ellery Lake Campground View Northeast.



Photo 22. KOP 2 Ellery Lake Campground View East.



Photo 23. KOP 2 Ellery Lake Campground View Southeast.



Photo 24. KOP 2 Ellery Lake Campground View South.



Photo 25. KOP 2 Ellery Lake Campground View Southwest.



Photo 26. KOP 2 Ellery Lake Campground View West.



Photo 27. KOP 2 Ellery Lake Campground View Northwest.

3.4.3. KOP 3—TIOGA LAKE CAMPGROUND

The KOP location at the Tioga Lake Campground was chosen due to high public-use and views of Tioga Lake and the dams. It consists of level and open grassy areas with a view of Tioga Lake, mid-level mountains, and the Tioga main and auxiliary dams in the distance. Rounded rock outcrops are surrounded by semi-thick forest and a deep canyon beyond the dams. There is a green, grassy meadow on the south side of the lake with some variety of coniferous trees visible on the way up the mountain tops. Vegetation is sparse at the top of the mountains with white snow poking through brown and green soils through the mountains. Water visible from the KOP site includes Tioga Lake and the Glacier Creek inlet to the south. Additionally, the campground is within sight, which provides additional color contrast, as well as State Route 120 / Tioga Pass Road. Viewing distances are predominantly foreground to middleground and extend to background views.



Photo 28. KOP 3 Tioga Lake Campground View North.



Photo 29. KOP 3 Tioga Lake Campground View Northeast.



Photo 30. KOP 3 Tioga Lake Campground View East.



Photo 31. KOP 3 Tioga Lake Campground View Southeast.



Photo 32. KOP 3 Tioga Lake Campground View South.



Photo 33. KOP 3 Tioga Lake Campground View Southwest.



Photo 34. KOP 3 Tioga Lake Campground View West.



Photo 35. KOP 3 Tioga Lake Campground View Northwest.

3.4.4. KOP 4—TIOGA LAKE OVERLOOK

The Tioga Lake Overlook was selected due to it being a high-use public area with views of the Project. The Tioga Lake Overlook has Tioga Lake, dams, mountains, and forests in view. There are low meadows to the east with mountains and forest. The roadside's sheer face provides a unique geological feature while vegetation consists of dense forest with low heights to sparse trees the higher the view up the mountain. There are meadows

along the lake edge. There are also wet areas to the east. The Tioga Lake Campground is in view, as well as both dams. This KOP location has visitor information signage. Viewing distances are predominantly foreground to middleground and extend to background views.



Photo 36. KOP 4 Tioga Lake Overlook View North.



Photo 37. KOP 4 Tioga Lake Overlook View Northeast.



Photo 38. KOP 4 Tioga Lake Overlook View East.



Photo 39. KOP 4 Tioga Lake Overlook View Southeast.



Photo 40. KOP 4 Tioga Lake Overlook View South.



Photo 41. KOP 4 Tioga Lake Overlook View Southwest.



Photo 42. KOP 4 Tioga Lake Overlook View West.



Photo 43. KOP 4 Tioga Lake Overlook View Northwest.

3.4.5. KOP 5—STATE ROUTE 120 PULL-OFF WEST OF WARREN FORK TRAILHEAD

The State Route 120 pull-off KOP is located west of the Warren Fork trailhead, where the powerhouse parking lot is visible. It was chosen by Stakeholders due to its high public-use throughfare, potential view of Ellery Lake, Rhinedollar Dam, and Poole Powerhouse. The views seen from the KOP include the highway, steep and long curved canyon walls and high mountain peaks, and Lee Vining Creek. Detailed features of mixed green forest,

grasses, and shrubs in the canyons are dominant and exceptionally striking. The Rhinedollar Dam spillway can be seen from this site in the very far distance (northwest in photos) with a waterfall below the spillway. The cliffs are sheer and run along the highway with high and low vertical topography and an abundance of long-distance mountain views. The mountains have remnants of white snow, brown rocks, and soil mixed with bright green vegetation. Sparse bright green shrubs and trees grow along the canyon drainage. Parts of the Project facilities can be seen, including distribution lines and the substation. The transmission lines⁴ running from Poole Powerhouse to Lee Vining are also visible. There is a rock face along the roadside that blocks a far distance view. Viewing distances are primarily foreground and middleground and extend to background views.



Photo 44. KOP 5 State Route 120 Pull-off West of Warren Fork Trailhead View North.

⁴ There are no primary transmission lines associated with the Project. The existing transmission line from Poole Powerhouse to Lee Vining was removed from the Project's license in 2001.



Photo 45. KOP 5 State Route 120 Pull-off West of Warren Fork View Northeast.



Photo 46. KOP 5 State Route 120 Pull-off West of Warren Fork View East.



Photo 47. KOP 5 State Route 120 Pull-off West of Warren Fork View Southeast.



Photo 48. KOP 5 State Route 120 Pull-off West of Warren Fork View South.



Photo 49. KOP 5 State Route 120 Pull-off West of Warren Fork View Southwest.



Photo 50. KOP 5 State Route 120 Pull-off West of Warren Fork View West.



Photo 51. KOP 5 State Route 120 Pull-off West of Warren Fork View Northwest.

3.4.6. KOP 6—JUNCTION CAMPGROUND AND BENNETTVILLE TRAILHEAD

The Junction Campground and Bennettville Trailhead KOP location was chosen due to it being a high-use area that is in the middle of the Project Area. The KOP's views include the entrance road for the campground, the Lee Vining Creek segment, and State Route 120 / Tioga Pass Road. Rolling hills sloping southeast to northwest, mountains with gray and brown rock outcrops, lines of rich green coniferous vegetation, and bright white lines and chunks of snow melt are in view from the KOP. Open meadows are closer in view to the southeast with green grass and scattered trees immediately to the northwest. Some views provide more tightly packed mixed green tree populations, while in other views the trees are further apart with green grass meadows between the forested landscapes. Water visible from this KOP includes a segment of Lee Vining Creek. There are also segments of Lee Vining Creek that meander through the site. Land use patterns and cultural features include the campground itself, a bridge, and State Route 120 / Tioga Pass Road. Viewing distances are predominantly foreground to midground views.



Photo 52. KOP 6 Junction Campground and Bennettville Trailhead View North.



Photo 53. KOP 6 Junction Campground and Bennettville Trailhead View Northeast.



Photo 54. KOP 6 Junction Campground and Bennettville Trailhead View East.



Photo 55. KOP 6 Junction Campground and Bennettville Trailhead View Southeast.



Photo 56. KOP 6 Junction Campground and Bennettville Trailhead View South.



Photo 57. KOP 6 Junction Campground and Bennettville Trailhead View Southwest.



Photo 58. KOP 6 Junction Campground and Bennettville Trailhead View West.



Photo 59. KOP 6 Junction Campground and Bennettville Trailhead View Northwest.

3.4.7. KOP 7—POOLE POWERHOUSE GATE

The Poole Powerhouse Gate KOP is located on the access road to Poole Powerhouse and substation. The powerhouse and substation are directly in face view at this KOP, which is why it was selected for the study. This KOP also includes views of the outlet to Lee Vining Creek, the tailrace, maintenance building, Triplex Cottage, transmission/distribution lines, and the substation. The natural landscape includes

mountains, steep rock edges, and a variety of vegetative types. There is a sheer rock face behind the powerhouse with mixed tree species. Viewing distances are predominantly foreground views.



Photo 60. KOP 7 Poole Powerhouse Gate View North.



Photo 61. KOP 7 Poole Powerhouse Gate View Northeast.



Photo 62. KOP 7 Poole Powerhouse Gate View East.



Photo 63. KOP 7 Poole Powerhouse Gate View Southeast.



Photo 64. KOP 7 Poole Powerhouse Gate View South.



Photo 65. KOP 7 Poole Powerhouse Gate View Southwest.



Photo 66. KOP 7 Poole Powerhouse Gate View West.



Photo 67. KOP 7 Poole Powerhouse Gate View Northwest.

3.4.8. KOP 8—PULL-OFF NORTH OF ELLERY LAKE

The Ellery Lake pull-off KOP was suggested by Stakeholders because it is an industrial-looking area with an old SCE building, known as the “Operator’s Cabin.” Views include mountain peaks in the distant view and views of Ellery Lake. Project facilities in view include the Operator’s Cabin, transmission/distribution poles and lines, and State Route 120 / Tioga Pass Road. The Operator’s Cabin is wooden and provides an historic

looking feature. Natural diverse rock outcrops surround Ellery Lake with steep slopes, rocky terrain, and sheer mountain walls. The rock outcrops are mixed in color, ranging from red tones to brown to gray that slope into the lake bowl with white snow on the peaks. There are minimal green trees and shrubs in the lower canyon. Viewing distances are primarily foreground and middleground views.



Photo 68. KOP 8 Pull-off North of Ellery Lake View North with Operator's Cabin.



Photo 69. KOP 8 Pull-off North of Ellery Lake View Northeast with Operator's Cabin.



Photo 70. KOP 8 Pull-off North of Ellery Lake View East.



Photo 71. KOP 8 Pull-off North of Ellery Lake View Southeast.



Photo 72. KOP 8 Pull-off North of Ellery Lake View South.

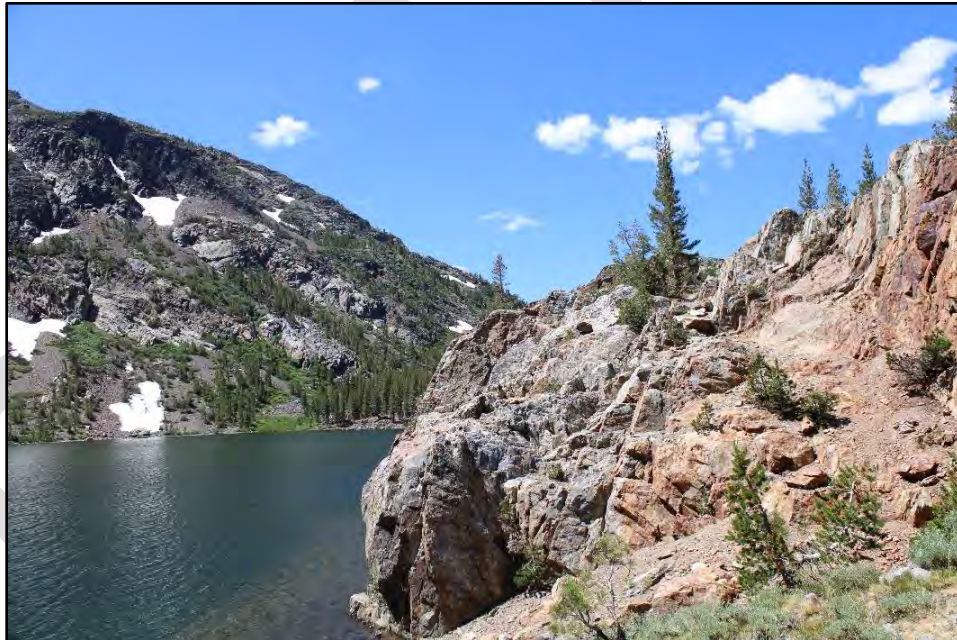


Photo 73. KOP 8 Pull-off North of Ellery Lake View Southwest.



Photo 74. KOP 8 Pull-off North of Ellery Lake View West.



Photo 75. KOP 8 Pull-off North of Ellery Lake View Northwest.

3.5. VIEWSHED ANALYSIS

As described in Section 2.0, *Methods*, a viewshed analysis was conducted in GIS software to assess the visibility of each Project facility. The viewshed analysis was performed by analyzing the most current publicly available elevation data, which is a 10-meter DEM published by the USGS 3DEP (USGS 2021). Due to limited available vegetation type and height information, SCE did not consider vegetation (i.e., potential

influence of vegetation and tree height screening of views) in the viewshed analysis and assumed an average individual's viewing height of 5 feet 5 inches. Therefore, this would overall reflect a greater viewing distance and availability of views than would be expected under existing conditions with presence of vegetation.

Based on the viewshed analysis, four Project facilities were determined to be visible from four KOPs: Saddlebag Dam would be visible from KOP 1—Saddlebag Lake Day Use Area / Campground, both Tioga Auxiliary Dam and Tioga Dam would be visible from KOP 3—Tioga Lake Campground and KOP 4—Tioga Lake Overlook, and Poole Powerhouse would be visible from KOP 7—Poole Powerhouse Gate. Rhinedollar Dam is not visible from any KOP location (Table 3.5-1). All Project facilities are located in a USFS-designated “High” Scenic Integrity Objective area (Figure 3.2-1), and a USFS-designated “Modified/Roaded” Recreation Opportunity Spectrum area (Figure 3.2-2). Appendix B provides photographs taken from each of the KOPs.

Table 3.5-2 provides the area of land that each Project facility is visible from based on the viewshed assessment, and Figures 3.5-1 through 3.5-4 provide a visual representation of these areas. The only highway within a 0.5-mile vicinity of the FERC Project Boundary is State Route 120. Poole Powerhouse, Rhinedollar Dam, Tioga Dam, and Tioga Auxiliary Dam are visible along Mile 0.60, Mile 0.30, Mile 1.29, and Mile 0.98 of the highway, respectively. Saddlebag dam is not visible from the highway within a 0.5-mile buffer of the FERC Project Boundary.

Table 3.5-1. Visual Resource Information by Facility for the Lee Vining Hydroelectric Project

Project Facility	KOP Viewshed ^a	SIO ^b	ROS ²
Poole Powerhouse	KOP 7	H	MR
Rhinedollar Dam	N/A	H	MR
Saddlebag Dam	KOP 1	H	MR
Tioga Auxiliary Dam	KOP 3, KOP 4	H	MR
Tioga Dam	KOP 3, KOP 4	H	MR

H = high; KOP = Key Observation Point; MR = Modified/Roaded; N/A = data not available; ROS = Recreation Opportunity Spectrum; SIO = scenic integrity objectives

^a Denotes facility visibility from KOP Locations

^b Source: Inyo National Forest Land Management Plan (USFS, 2019)

Table 3.5-2. Extent of Visibility of Each Project Facility^a

Project Facility	Viewshed Area (acres within FERC Project Boundary)	Viewshed Area (acres within a 0.5-mile buffer of FERC Project Boundary)
Poole Powerhouse	6.2	415.3
Rhinedollar Dam	54.8	1,066.0
Saddlebag Dam	102.3	595.7
Tioga Auxiliary Dam	77.8	927.8
Tioga Dam	58.2	711.6

FERC = Federal Energy Regulatory Commission

^a Based on viewshed analysis utilizing 10-meter DEM (USGS 3DEP; USGS 2021); not including vegetation (i.e., potential influence of vegetation and tree height screening of view), and assuming a person viewing average standing height of 5'5".

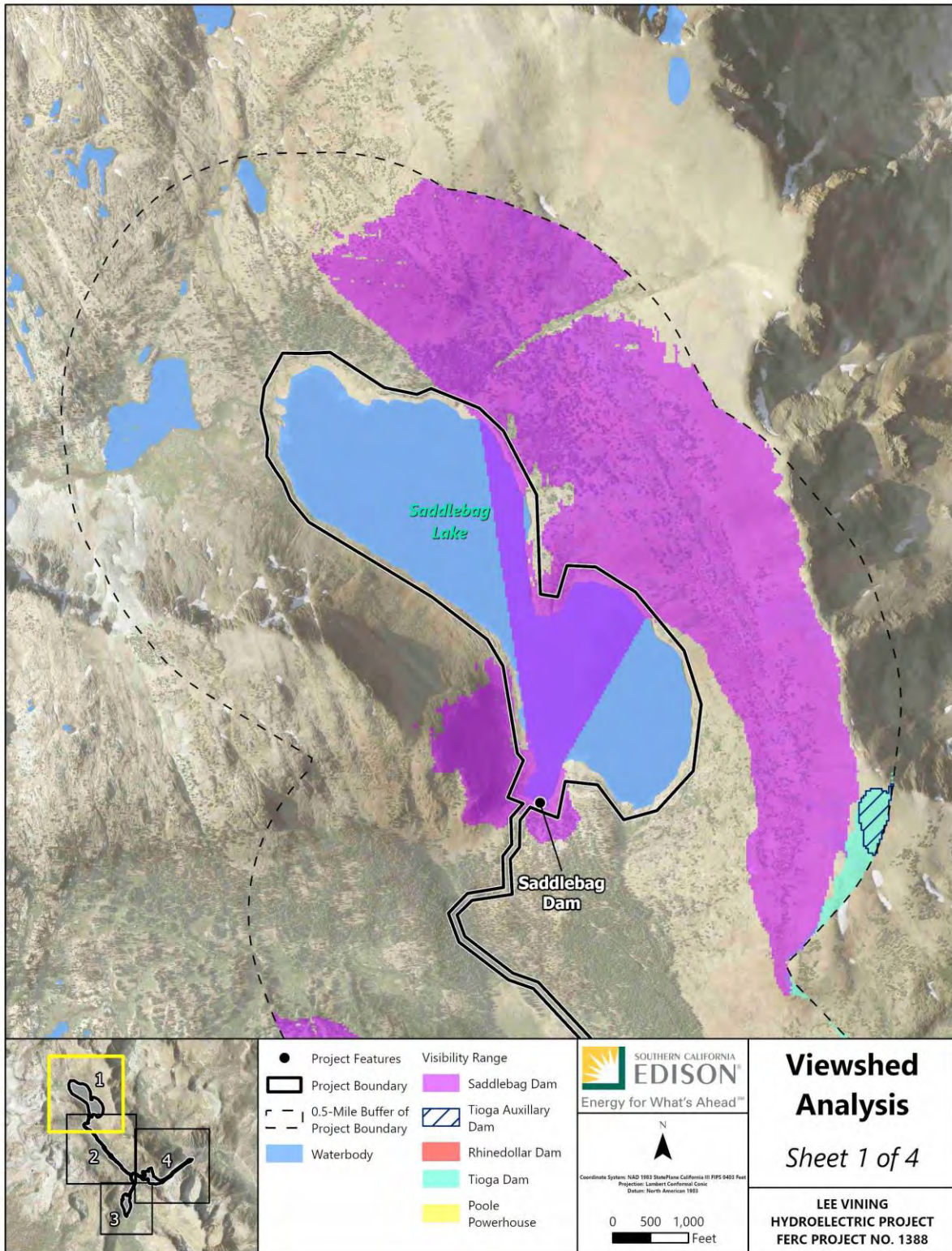


Figure 3.5-1. Extent of Visibility of Project Facilities.

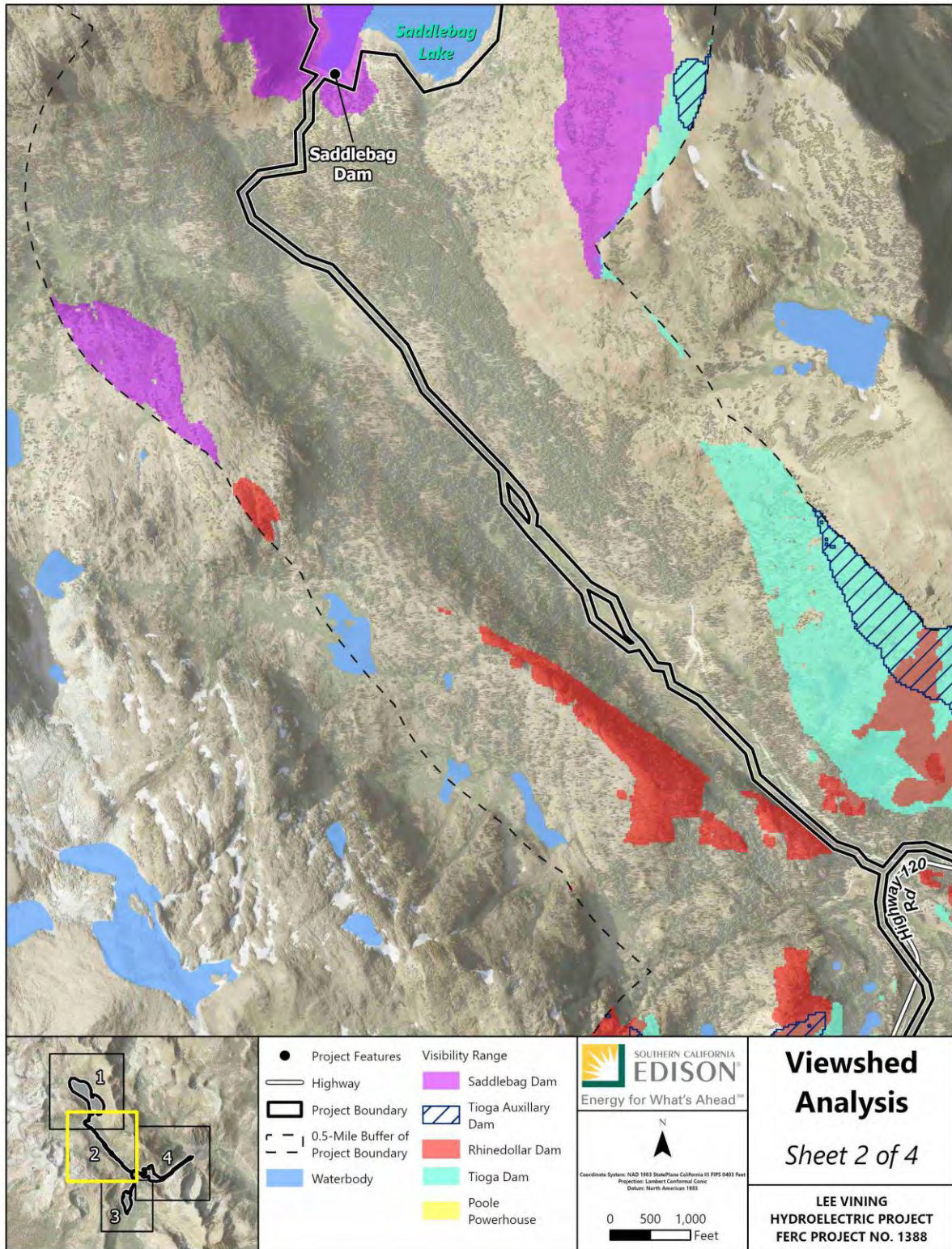


Figure 3.5-2. Extent of Visibility of Project Facilities.

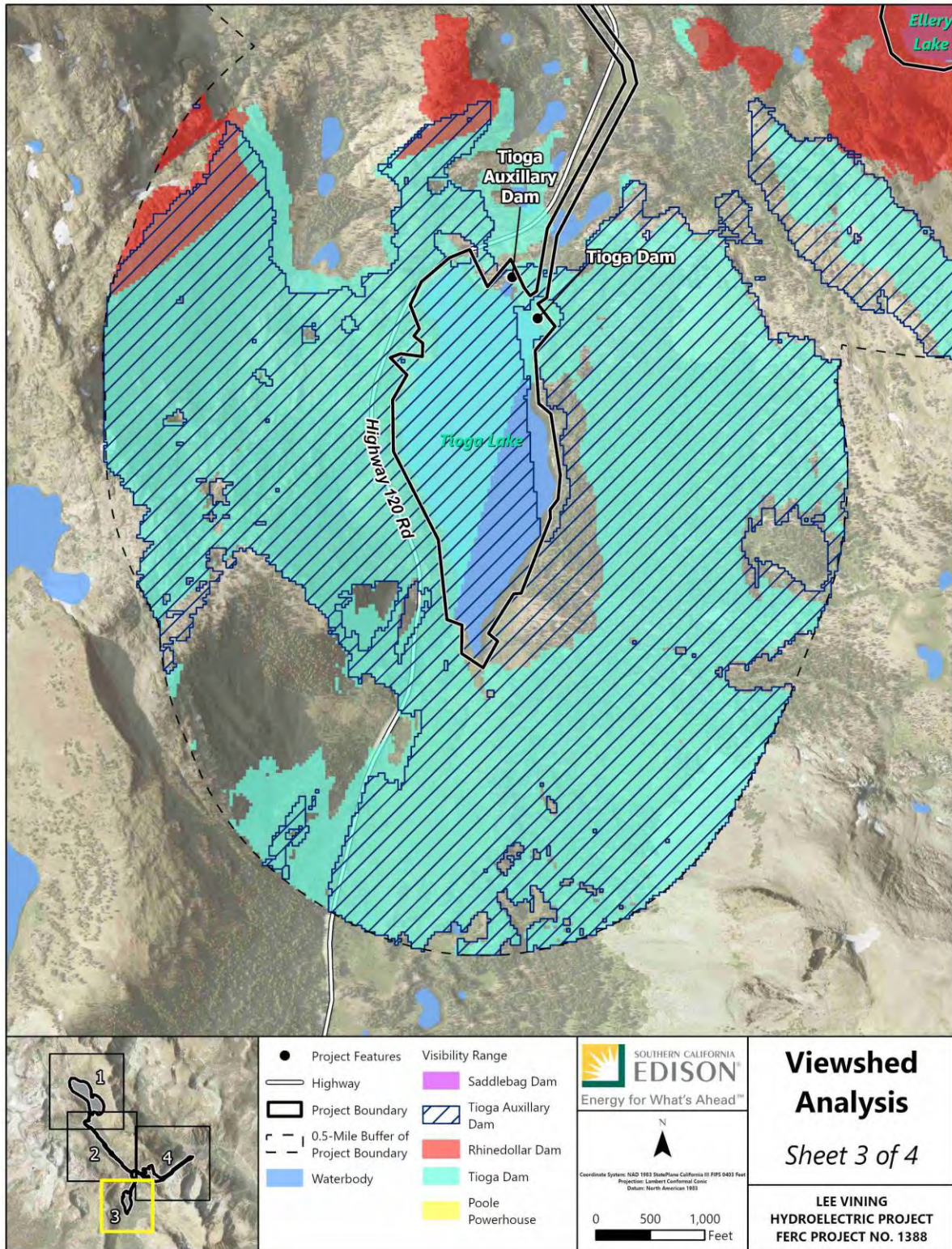


Figure 3.5-3. Extent of Visibility of Project Facilities.

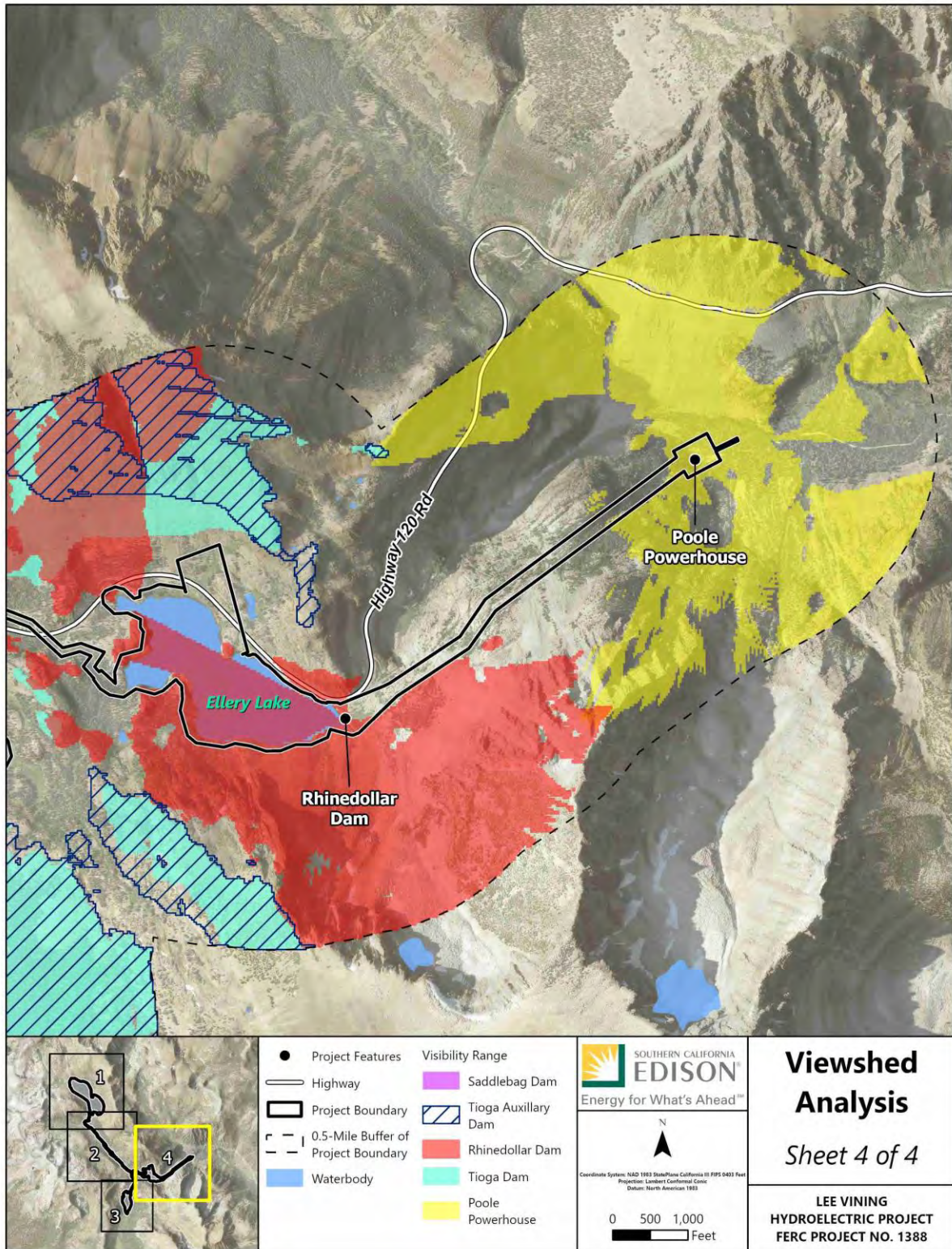


Figure 3.5-4. Extent of Visibility of Project Facilities.

3.6. EXISTING MEASURES TO PRESERVE OR ENHANCE VISUAL QUALITY

Per Section 4(e) Conditions 4 and 6 of the Project License (FERC, 1997), the Project maintains reservoir levels and minimum instream flows to preserve visual quality within the FERC Project Boundary.

PM&E measures for the Project include the existing Visual Resource Protection Plan Section 4(e) Condition 11 (SCE, 1997), which is currently being implemented under the existing license. The following sections summarize existing PM&E measures of the aesthetic environment within the Lee Vining Project Area.

3.6.1. REQUIREMENTS FOR APPROVAL

Prior written approval must first be obtained from USFS before initiating any activity USFS deems as affecting or potentially affecting resources on National Forest System lands. The approval will be contingent upon compliance with federal laws, including, but not limited to, the National Environmental Policy Act, Endangered Species Act, National Historic Preservation Act, Clean Air Act, Clean Water Act, and the National Forest Management Act.

3.6.2. FACILITY DESIGN AND PLACEMENT

The Project facilities are painted in earth tones to blend in with the surrounding areas. The facility areas are landscaped with trees and scrubs to screen and break up the lines of the buildings. Where feasible, new structures will be placed within areas where existing structures are located. These structures will be painted in earth tones relative to Forest Service specifications. Areas will be landscaped to conform with vegetation in the surrounding areas and to screen the buildings and associated facilities. Any vegetation or revegetation plans will be reviewed and approved by the USFS resource specialist prior to implementation. However, note that no new Project infrastructure is currently proposed.

3.6.3. PIPELINE AND SIMILAR STRUCTURE PLACEMENT AND DESIGN

New pipelines will either be buried or painted in earth tones per Forest Service specifications to blend with the surrounding areas. Ground disturbances revegetate naturally and blend in with the surrounding areas. Where feasible, valve structures will be screened by vegetation. However, note that no new Project pipelines are currently proposed.

3.6.4. TRANSMISSION LINES

There are no plans for construction of new transmission lines for the Lee Vining Project. Existing facilities are small wooden pole structures that blend with the surrounding area.

3.6.5. ROADS AND CLEARED AREAS

New roads or other cleared areas will be located, where feasible, to minimize visual impact. Road cuts, fill areas, and facility areas not occupied with structures, will be revegetated with locally derived native species, wherever practicable, to blend with the surrounding areas and maintain the integrity of the local gene pools. However, note that no new Project roads or cleared areas are currently proposed.

4.0 CONSULTATION SUMMARY

Prior to filing the PAD and Notice of Intent, SCE hosted Recreation and Land Use Resources TWG meetings on January 28, February 25, April 1, and May 27, 2021, which resulted in study requests from Stakeholders to address questions regarding visual resources. Notes and materials from these meetings are available at www.sce.com/leevining. SCE filed draft study plans with the PAD and Notice of Intent on August 12, 2021. SCE reviewed all comments received and drafted revised technical study plans which were distributed to the TWGs on February 18, 2022, for another 30-day review period. All comments received related to this Study Plan are included in Table 4-1 below and were incorporated into the Study Plan where appropriate, which was filed with FERC on April 25, 2022 (SCE, 2022).

On January 23, 2023, SCE distributed a draft 2022 progress report and technical memos to Stakeholders for a 30-day review period. The memos included preliminary data from 2022 study implementation; a meeting to discuss those memos was held on February 1, 2023. No field studies occurred in 2022 for LAND-2 and no comments were received. A response to comments matrix, along with the original progress report and technical memos were filed with FERC on March 31, 2023.

Recreation and Land Use TWG meetings were held on March 1, 2023, and March 15, 2023, to address implementation of these studies. The eight KOPs were selected through consultation with the TWG at these March 2023 meetings, prior to the 2023 field season. KOPs were identified at representative locations such as Project-related travel corridors and recreation sites within the identified viewshed areas for additional analysis.

Table 4-1. Consultation Summary—Response to Comments

Comment Number	Entity	Date/Forum	Comment	SCE Response
1	USFS	4/22/2021 Formal Study Request (Emailed Document)	<i>[Formal request for visual resource assessment]</i>	In response to USFS request, SCE proposed and conducted a Visual Resource Assessment study as described in the LAND-2 Visual Resource Assessment Technical Study Plan and this Technical Report.
2	Adam Barnett USFS	5/27/2021 TWG Meeting	<i>Paraphrase of comment in meeting:</i> The visual resources study request was targeted at SCE facilities, but visual quality observations would likely also capture some USFS facilities, to some extent. It would be good to be clear about who is responsible for what.	While USFS facilities would have no nexus to the Project in this scenario, SCE understands that there may be efficiencies during the process of conducting the visual resources assessment on SCE facilities to also include certain USFS facilities in the area. SCE consulted with the USFS on detailed methods and delineation of responsibilities. KOPs selected for study in the Visual Resource Assessment included several USFS facilities (i.e., Saddlebag Lake Campground, Ellery Lake Campground, Tioga Lake Campground and Overlook, Junction Campground, and Bennettville Trailhead).
3	Monique Sanchez USFS	5/27/2021 TWG Meeting	<i>Paraphrase of comment in meeting:</i> Usually landscape architects work with the visual study team to figure out how the visual quality impacts visitors' experience. We have done this in other projects.	SCE understands that there is usually a cross-over between recreation use and visual assessment and an opportunity to efficiently combine efforts. Opportunities to obtain visual quality assessment data were considered in the selection of REC-1 survey and data collection methods and locations for the 2024 field season.
4	Adam Barnett USFS	3/1/2023 TWG Meeting	<i>Paraphrase of comment in meeting:</i> There is an SCE area north of Ellery Lake that is "industrial looking" not USFS property and is in the Project Area. It is a bare area north of the lake with some old structures and pull-offs. We would like you to include that in the Aesthetics survey.	SCE has added the "industrial" area on the north side of Ellery Lake as a KOP to the Aesthetics survey (KOP8).

KOP = Key Observation Point; SCE = Southern California Edison; TWG = Technical Working Group; USFS = U.S. Forest Service

5.0 REFERENCES

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- _____. 2022. *Final Technical Study Plans*. Lee Vining Hydroelectric Project, FERC Project No. 1388. April 25, 2022.
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- USGS (U.S. Geological Survey). 2021. 20211116, USGS 1/3 Arc Second n38w120 20210701: U.S. Geological Survey. Accessed: February 28, 2024. Available at: <https://www.sciencebase.gov/catalog/item/60e5e51cd34e2a7685cf4da6>.

**APPENDIX A
AESTHETIC INVENTORY DATA FORMS**

DRAFT

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining Saddlebag Lake (Reservoir)

Site Name/Location of Key Observation Point (KOP):
Saddlebag Lake Day Use

GPS Coordinates N 37° 57.991° W 119° 16.317°

Date & Time: Aug 9, 2023 10:30am Weather: Sunny | Clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) Recreation, day-use, boat launch

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: Mountains, Lake, Dam

Topography and notable landforms visible from the site: _____

Steep mountainous terrain

Unique geographic or rock features visible from the site: _____

Mountain faces

Type and extent of vegetation and vegetation patterns visible from this site: _____

Trees in foreground, shrubs and trees in background

Type and extent of Project waters visible from this site: (reservoir, creek segment): _____

Reservoir (Saddlebag Lake)

Unique/focal point water features (waterfalls, wetlands, creek segment): _____

None

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Saddlebag dam, old Forest Service building,
metal storage container

Identify the level of development

3

- 1. No noticeable development
- 2. Very limited primitive development
- 3. Five or fewer buildings/structures in view
- 4. 5-10 (or more) buildings/structures in view
- 5. Highly developed

Describe adjacent landscape and land use features:

Recreation day use and overnight
Mountains, Lake

Identify any unique visual/ aesthetic features noted at this site:

Saddlebag dam, Forest Service buildings

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site:

~~2~~ 3

- 1. Foreground (up to 1/2 mile from viewer),
- 2. Middle ground (approx. 1/2 to four miles from viewer)
- 3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views Trees, bushes, lake, mountains,
individual trees

Middleground views Trees, bushes, mountains
individual trees

Background views N/A

Description of context of view (i.e., recreation, roadway) recreation

Description of duration of view (i.e., short, medium, long) medium

Photographs

(Take photos looking in each direction)

Enter photo names and the number of photos taken looking in each direction.

Lower N NE E SE S SW W NW

Middle N NE E SE S SW W NW

Upper N NE E SE S SW W NW

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining Ellery Lake

Site Name/Location of Key Observation Point (KOP):
Ellery Lake Campground

GPS Coordinates N 37° 56' 12" W 119° 14' 34"

Date & Time: Aug. 10, 2023 11:00am Weather: Sunny / Clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) recreation

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: Ellery Lake, Hwy 120,
Mountains, Canyon

Topography and notable landforms visible from the site: Steep mountain slopes
Lee Vining Creek Inlet

Unique geographic or rock features visible from the site: Island in lake,
rock outcrop on shoreline

Type and extent of vegetation and vegetation patterns visible from this site: sparse grasses
trees and shrubs

Type and extent of Project waters visible from this site: (reservoir, creek segment): _____
Lee Vining Creek inlet, Ellery Lake

Unique/focal point water features (waterfalls, wetlands, creek segment): Island wet area
Lee Vining inlet

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Campground (Ellery Lake)

Identify the level of development 3 (road, restroom)

- 1. No noticeable development
- 2. Very limited primitive development
- 3. Five or fewer buildings/structures in view
- 4. 5-10 (or more) buildings/structures in view
- 5. Highly developed

Describe adjacent landscape and land use features: Hwy 120, Campground
back country trails

Identify any unique visual/ aesthetic features noted at this site: Island, canyon,
creek inlet

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site: 2

- 1. Foreground (up to 1/2 mile from viewer)
- 2. Middle ground (approx. 1/2 to four miles from viewer)
- 3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views Trees, shrubs, rock outcrop, lake,
individual trees, individual shrubs

Middleground views rock faces, snow patches,
tree and shrub clusters

Background views N/A

Description of context of view (i.e., recreation, roadway) recreation

Description of duration of view (i.e., short, medium, long) medium

Photographs

(Take photos looking in each direction)

Enter photo names and the number of photos taken looking in each direction.

Lower N NE E SE S SW W NW

Middle N NE E SE S SW W NW

Upper N NE E SE S SW W NW

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining Tioga Lake

Site Name/Location of Key Observation Point (KOP): Tioga Lake Campground

GPS Coordinates N 37° 55.635' W 119° 15.268'

Date & Time: Aug. 9, 2023 3:50 pm Weather: Sunny, Clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) recreation, camping

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: level open grassy areas, lake, mountains, dam in distance

Topography and notable landforms visible from the site: rock outcrop in lake, rock outcrops surrounded by forest canyon beyond dam

Unique geographic or rock features visible from the site: rock in lake, rock outcrops on both sides of dam

Type and extent of vegetation and vegetation patterns visible from this site: grass/meadow south side of lake, trees visible to mountain tops. sparse @ top

Type and extent of Project waters visible from this site: (reservoir, creek segment): _____

Tioga Lake Reservoir

Unique/focal point water features (waterfalls, wetlands, creek segment): _____

inlet to the south

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

campground, dam, Tioga Pass road

Identify the level of development

3

- 1. No noticeable development
- 2. Very limited primitive development
- 3. Five or fewer buildings/structures in view
- 4. 5-10 (or more) buildings/structures in view
- 5. Highly developed

Describe adjacent landscape and land use features:

Highway pull off, forest, open grassy meadow, shrubs

Identify any unique visual/ aesthetic features noted at this site:

rock outcrop in lake, rock outcrops both sides of dam, solar panels on left of dam

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site:

2 3

- 1. Foreground (up to 1/2 mile from viewer)
- 2. Middle ground (approx. 1/2 to four miles from viewer)
- 3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views shrubs, trees, dam, rock outcrops, individual trees, individual shrubs

Middleground views mountain faces, trees, shrubs, clusters of trees, clusters of shrubs

Background views N/A

Description of context of view (i.e., recreation, roadway)

recreation

Description of duration of view (i.e., short, medium, long)

medium

Photographs

(Take photos looking in each direction)

Enter photo names and the number of photos taken looking in each direction.

Lower N NE E SE S SW ~~W~~ NW

Middle N NE E SE S SW ~~W~~ NW

Upper N NE E SE S SW ~~W~~ NW

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining Tioga Lake

Site Name/Location of Key Observation Point (KOP): Tioga Lake Overlook

GPS Coordinates N 37° 55.301" W 119° 15.279"

Date & Time: Aug 9, 2023 3:15 pm Weather: Sunny, Clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) Overlook, recreation

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: lake, mountain, forest

Topography and notable landforms visible from the site: low meadows to east
mountains and forest

Unique geographic or rock features visible from the site: roadside sheer faces

Type and extent of vegetation and vegetation patterns visible from this site: dense forest
low meadow to sparse trees high; meadows along lake edge

Type and extent of Project waters visible from this site: (reservoir, creek segment): Tioga Lake (reservoir) Tioga dam

Unique/focal point water features (waterfalls, wetlands, creek segment): Wet areas to east; potential wetlands

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Information / Visitor site info, Campground, dam

Identify the level of development

3

1. No noticeable development
2. Very limited primitive development
3. Five or fewer buildings/structures in view
4. 5-10 (or more) buildings/structures in view
5. Highly developed

Describe adjacent landscape and land use features:

Tioga Pass road, Campground

Identify any unique visual/ aesthetic features noted at this site:

Canyon view to north

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site:

2 3

1. Foreground (up to 1/2 mile from viewer),
2. Middle ground (approx. 1/2 to four miles from viewer)
3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views Dense trees, dense shrubs individual tree identification

Middleground views Dense forest, open grassland, sparse mountain tops.

Background views

N/A

Description of context of view (i.e., recreation, roadway)

recreation, roadway

Description of duration of view (i.e., short, medium, long)

medium

Lee Vining Hydroelectric Project
LAND-2

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining

Site Name/Location of Key Observation Point (KOP):
Hwy 120 Pullout West of Warren Fork Trailhead

GPS Coordinates N 37° 56' 44" W 119° 13' 34"

Date & Time: Aug 10, 2023 9:30am Weather: Sunny clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) highway pullout

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: Canyon, highway, Creek

Topography and notable landforms visible from the site: steep canyon walls

high mountain peaks

Unique geographic or rock features visible from the site: Ellery spillway,

shear cliffs along highway

Type and extent of vegetation and vegetation patterns visible from this site: sparse shrubs

trees along canyon drainage

Type and extent of Project waters visible from this site: (reservoir, creek segment): _____

Lee Vining Creek @ Ellery spillway

Unique/focal point water features (waterfalls, wetlands, creek segment): Waterfalls @

Ellery spillway. Waterfall Below spillway

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Pooler powerhouse road, ~~regional~~ Hwy 120, transmission/distribution lines

Identify the level of development

3

1. No noticeable development
2. Very limited primitive development
3. Five or fewer buildings/structures in view
4. 5-10 (or more) buildings/structures in view
5. Highly developed

Describe adjacent landscape and land use features:

mountainside, highway

Identify any unique visual/ aesthetic features noted at this site:

canyon drainage, Ellery spillway, waterfalls below Ellery spillway

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site:

3

1. Foreground (up to 1/2 mile from viewer),
2. Middle ground (approx. 1/2 to four miles from viewer)
3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views

Sage brush, Ellery spillway, Hwy 120, individual trees

Middleground views

brush clusters, sparse trees, snow patches

Background views

mountain pass silhouettes, color degradation

Description of context of view (i.e., recreation, roadway)

highway pull out

Description of duration of view (i.e., short, medium, long)

long

Photographs

(Take photos looking in each direction)

Enter photo names and the number of photos taken looking in each direction.

Lower Angle N NE E SE S SW W NW

Middle Angle N NE E SE S SW W NW

Upper Angle N NE E SE S SW W NW

Upper N NE E SE S SW W NW

Middle N NE E SE S SW W NW

Lower N NE E SE S SW W NW

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining

Site Name/Location of Key Observation Point (KOP):
Junction Campground, Bennettville Trailhead

GPS Coordinates N 37° 56.323 W 119° 15.061

Date & Time: Aug 9, 2023 1:06pm Weather: Sunny, Clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) Recreation

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: Entrance road for campground
Lee Vining creek, Tioga Pass road

Topography and notable landforms visible from the site: rolling, sloping to ~~SW~~ SE
mountains to NW

Unique geographic or rock features visible from the site: rock outcrops to NW

Type and extent of vegetation and vegetation patterns visible from this site: open meadow to SE
grass immediate NW scattered trees

Type and extent of Project waters visible from this site: (reservoir, creek segment): _____
Lee Vining creek segment

Unique/focal point water features (waterfalls, wetlands, creek segment): _____
Lee Vining creek segment, bend in creek

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Campground, bridge, Tioga Pass road

Identify the level of development 3

- 1. No noticeable development
- 2. Very limited primitive development
- 3. Five or fewer buildings/structures in view
- 4. 5-10 (or more) buildings/structures in view
- 5. Highly developed

Describe adjacent landscape and land use features: main road to Yosemite
bridge over Lee Vining Creek, trailhead, campground

Identify any unique visual/ aesthetic features noted at this site: Bend in Lee Vining Creek
Tioga Pass Road

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site: 2

- 1. Foreground (up to 1/2 mile from viewer)
- 2. Middle ground (approx. 1/2 to four miles from viewer)
- 3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views bridge, campground, trees, brush, shrubs
individual trees, individual shrubs

Middleground views mountains, trees, shrubs
clusters of trees, clusters of shrubs

Background views N/A

Description of context of view (i.e., recreation, roadway) recreation roadway

Description of duration of view (i.e., short, medium, long) medium

Lee Vining Hydroelectric Project
LAND-2

Photographs

(Take photos looking in each direction)

Enter photo names and the number of photos taken looking in each direction.

Lower N NE E SE S SW W NW

Middle N NE E SE S SW W NW

Upper N NE E SE S SW W NW

Blank lined area for additional entries.

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining

Site Name/Location of Key Observation Point (KOP):
Pooler Powerhouse Gate

GPS Coordinates N 37° 56' 39" W 119° 12' 55"

Date & Time: Aug. 10, 2023 8:30am Weather: Sunny clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) Parking area

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) High

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: Powerhouse, substation, Lee Vining Creek, mist/spray into creek, power lines

Topography and notable landforms visible from the site: mountains, steep rock face behind powerhouse, trees

Unique geographic or rock features visible from the site: sheer rock face behind powerhouse, rock/concrete retaining wall

Type and extent of vegetation and vegetation patterns visible from this site: trees surrounding site

Type and extent of Project waters visible from this site: (reservoir, creek segment): Lee Vining Creek, outlet/Project tailrace

Unique/focal point water features (waterfalls, wetlands, creek segment): Lee Vining Creek, tailrace

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Pooler Powerhouse, maintenance building, transmission/distribution lines, substation

Identify the level of development

- 1. No noticeable development
- 2. Very limited primitive development
- 3. Five or fewer buildings/structures in view
- 4. 5-10 (or more) buildings/structures in view
- 5. Highly developed

Describe adjacent landscape and land use features: Forested, access road
cleared trees

Identify any unique visual/ aesthetic features noted at this site: cleared trees to west
cabin on top of cliff to NW

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site:

- 1. Foreground (up to 1/2 mile from viewer)
- 2. Middle ground (approx. 1/2 to four miles from viewer)
- 3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views trees, shrubs, retaining wall, gate, powerhouse, substation, maintenance building, transmission/distribution lines

Middleground views N/A

Background views N/A

Description of context of view (i.e., recreation, roadway) parking area

Description of duration of view (i.e., short, medium, long) short

1.0 ATTACHMENT 1. AESTHETIC INVENTORY FORM

Site Location and Characteristics

Project Name and Development Lee Vining Ellery Lake

Site Name/Location of Key Observation Point (KOP): Pull off North of Ellery Lake

GPS Coordinates N 37° 56' 15" W 119° 14' 14"

Date & Time: Aug 10, 2023 11:30am Weather: Sunny, Clear

Lee Vining Creek flow on this date/time: _____

Site primary use (i.e., recreation, highway, parking area) Highway pull off

Scenic Integrity Objective for KOP Location (USFS 2019) (i.e., High, Medium or Low) Medium

Landscape Scenic Character

Provide a brief description of the key characteristics of the following:

General visual/aesthetic description of site: Mountain peaks, old building, transmission/distribution poles & lines, Hwy 120, rock outcrop in lake

Topography and notable landforms visible from the site: steep slopes, rocky terrain, sheer mountain walls

Unique geographic or rock features visible from the site: rock outcrop @ lake, rock bowl w/ snow

Type and extent of vegetation and vegetation patterns visible from this site: minimal trees and shrubs, vegetation lower canyon

Type and extent of Project waters visible from this site: (reservoir, creek segment): Ellery Lake

Unique/focal point water features (waterfalls, wetlands, creek segment): None

Land Use Patterns and Cultural Features

Identify the type of visible development (campgrounds, Project facilities, etc.):

Transmission/distribution lines, old building,
Hwy 120

Identify the level of development

3

1. No noticeable development
2. Very limited primitive development
3. Five or fewer buildings/structures in view
4. 5-10 (or more) buildings/structures in view
5. Highly developed

Describe adjacent landscape and land use features:

highway, scenic pull out
back country trails

Identify any unique visual/ aesthetic features noted at this site:

rock outcrop in lake
rock bowl w/ snow

Landscape Visibility

Distance Zones - Characterize predominate viewing distances from this site:

+ 2

1. Foreground (up to 1/2 mile from viewer)
2. Middle ground (approx. 1/2 to four miles from viewer)
3. Background (greater than four miles from viewer)

Describe prominent vegetation, key features, and degree of discernable detail of each distance zone:

Foreground views Trees, shrubs, rock outcrop, building,
individual trees, individual shrubs, rock faces,
building materials

Middleground views

N/A

Background views

N/A

Description of context of view (i.e., recreation, roadway)

roadway, pull off

Description of duration of view (i.e., short, medium, long)

short

APPENDIX B
360-DEGREE KOP PHOTOGRAPHS

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KOP 1, Upper view, looking North

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KOP 1, Upper view, looking Northwest

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KOP 1, Upper view, looking West

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KOP 1, Upper view, looking Southwest

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KOP 1, Upper view, looking South

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KOP 1, Upper view, looking Southeast

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KOP 1, Upper view, looking East

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KOP 1, Upper view, looking Northeast

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KOP 1, Upper view, looking North

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KOP 1, Middle view, looking Northwest

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KOP 1, Middle view, looking West

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KOP 1, Middle view, looking Southwest

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KOP 1, Middle view, looking South

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KOP 1, Middle view, looking Southeast

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KOP 1, Middle view, looking East

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KOP 1, Middle view, looking Northeast

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KOP 1, Middle view, looking North

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KOP 1, Lower view, looking Northwest

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KOP 1, Lower view, looking West

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KOP 1, Lower view, looking Southwest

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KOP 1, Lower view, looking South

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KOP 1, Lower view, looking Southeast

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KOP 1, Lower view, looking East

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KOP 1, Lower view, looking Northeast

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KOP 1, Lower view, looking North

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KOP 2, Lower view, looking North

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KOP 2, Lower view, looking Northeast

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KOP 2, Lower view, looking East

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KOP 2, Lower view, looking Southeast

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KOP 2, Lower view, looking South

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KOP 2, Lower view, looking Southwest

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KOP 2, Lower view, looking West

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KOP 2, Lower view, looking Northwest

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KOP 2, Middle view, looking North

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KOP 2, Middle view, looking Northeast

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KOP 2, Middle view, looking East

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KOP 2, Middle view, looking Southeast

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KOP 2, Middle view, looking South

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KOP 2, Middle view, looking Southwest

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KOP 2, Middle view, looking West

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KOP 2, Middle view, looking Northwest

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KOP 2, Upper view, looking North

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KOP 2, Upper view, looking Northeast

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KOP 2, Upper view, looking East

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KOP 2, Upper view, looking Southeast

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KOP 2, Upper view, looking South

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KOP 2, Upper view, looking Southwest

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KOP 2, Upper view, looking West

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KOP 2, Upper view, looking Northwest

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KOP 3, Upper view, looking North

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KOP 3, Upper view, looking Northeast

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KOP 3, Upper view, looking East

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KOP 3, Upper view, looking Southeast

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KOP 3, Upper view, looking South

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KOP 3, Upper view, looking Southwest

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KOP 3, Upper view, looking North

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KOP 3, Middle view, looking North

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KOP 3, Middle view, looking Northeast

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KOP 3, Middle view, looking Southeast

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KOP 3, Middle view, looking South

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KOP 3, Middle view, looking West

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KOP 3, Middle view, looking Northwest

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KOP 3, Lower view, looking North

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KOP 3, Lower view, looking Northeast

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KOP 3, Lower view, looking East

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KOP 3, Lower view, looking Southeast



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KOP 4, Lower view, looking South

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KOP 4, Lower view, looking Southwest

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KOP 4, Lower view, looking Northwest

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KOP 4, Middle view, looking North

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KOP 4, Middle view, looking Northeast

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KOP 4, Middle view, looking East

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KOP 4, Middle view, looking Southeast

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KOP 4, Middle view, looking South

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KOP 4, Middle view, looking Southwest

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KOP 4, Middle view, looking West

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KOP 4, Middle view, looking Northwest

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KOP 4, Upper view, looking North

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KOP 4, Upper view, looking Northeast

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KOP 4, Upper view, looking East

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KOP 4, Upper view, looking Southeast

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KOP 4, Upper view, looking South

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KOP 4, Upper view, looking Southwest

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KOP 4, Upper view, looking West

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KOP 4, Upper view, looking Northwest

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KOP 5, Lower angle view, looking North

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KOP 5, Lower angle view, looking Northeast

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KOP 5, Lower angle view, looking East

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KOP 5, Lower angle view, looking Southeast

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KOP 5, Lower angle view, looking South

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KOP 5, Lower angle view, looking Southwest

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KOP 5, Lower angle view, looking West

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KOP 5, Lower angle view, looking Northwest

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KOP 5, Middle angle view, looking North

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KOP 5, Middle angle view, looking Northeast

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KOP 5, Middle angle view, looking East

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KOP 5, Middle angle view, looking Southeast

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KOP 5, Middle angle view, looking South

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KOP 5, Middle angle view, looking Southwest

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KOP 5, Middle angle view, looking West

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KOP 5, Middle angle view, looking Northwest

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KOP 5, Middle angle view, looking Northwest

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KOP 5, Upper angle view, looking North

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KOP 5, Upper angle view, looking Northeast

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KOP 5, Upper angle view, looking East

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KOP 5, Upper angle view, looking Southeast

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KOP 5, Upper angle view, looking South

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KOP 5, Upper angle view, looking Southwest

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KOP 5, Upper angle view, looking West

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KOP 5, Upper angle view, looking Northwest

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KOP 5, Upper view, looking North



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KOP 5, Upper view, looking East

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KOP 5, Upper view, looking Southeast

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KOP 5, Upper view, looking South

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KOP 5, Upper view, looking Southwest

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KOP 5, Upper view, looking West

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KOP 5, Upper view, looking Northwest



KOP 5, Middle view, looking North



KOP 5, Middle view, looking Northeast

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KOP 5, Middle view, looking East

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KOP 5, Middle view, looking Southeast

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KOP 5, Middle view, looking South

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KOP 5, Middle view, looking Southwest

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KOP 5, Middle view, looking West

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KOP 5, Middle view, looking Northwest

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KOP 5, Lower view, looking North

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KOP 6, Lower view, looking Northwest

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KOP 6, Middle view, looking North

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KOP 6, Middle view, looking East

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KOP 6, Middle view, looking Northwest

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KOP 6, Upper view, looking North

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KOP 6, Upper view, looking East

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KOP 7, Lower view, looking North

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KOP 7, Lower view, looking Northeast

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KOP 7, Upper view, looking South

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KOP 7, Upper view, looking Southwest

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KOP 7, Upper view, looking South

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