AES-1 AESTHETIC FLOW TECHNICAL MEMORANDUM

KERN RIVER NO. 3 HYDROELECTRIC PROJECT
FERC PROJECT NO. 2290

PREPARED FOR:

SOUTHERN CALIFORNIA EDISON®

Energy for What's Ahead®

KERNVILLE, CALIFORNIA

July 2024

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LIST OF ACRONYMS AND ABBREVIATIONS

AES-1	Aesthetic Flow Study
cfs	cubic feet per second
CMP	Comprehensive Management Plan
FERC	Federal Energy Regulatory Commission
GPS	Global Positioning System
KOP	key observation point
KR3	Kern River No. 3
LMP	land management plan
NFKR	North Fork Kern River
PAD	Preliminary Application Document
PLSS	Public Land Survey System
Project	Kern River No. 3 Hydroelectric Project (FERC Project No. 2290)
SCE	Southern California Edison
SIO	Scenic Integrity Objective
SQF	Sequoia National Forest
W&SR	Wild and Scenic River

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1.0 INTRODUCTION

An Aesthetic Flow Study (AES-1) was developed in response to the Federal Energy Regulatory Commission's (FERC) October 12, 2022, Study Plan Determination (FERC, 2022) for Southern California Edison's (SCE) Kern River No. 3 (KR3) Hydroelectric Project (Project; FERC Project No. 2290) relicensing. This Technical Memorandum includes the methodology and findings of the AES-1 Study. Applicable results from the study are also included as part of SCE's Application for New License.

Section 8.0, *Recommendation and Need for Continued Study,* addresses the adequacy of the results of the Level 1 data collection effort and the need for any subsequent data collection (i.e., justification for whether proceeding to a Level 2 or a Level 3 aesthetic flow study is warranted).

2.0 STUDY GOALS AND OBJECTIVES

The AES-1 Study documents the existing character of aesthetic flows and conditions within the Fairview Dam Bypass Reach.[1] This information is needed to support discussions of potential effects of flows on resources and may be used to inform potential minimum flow requirements in the bypass reach resulting from the licensing process.

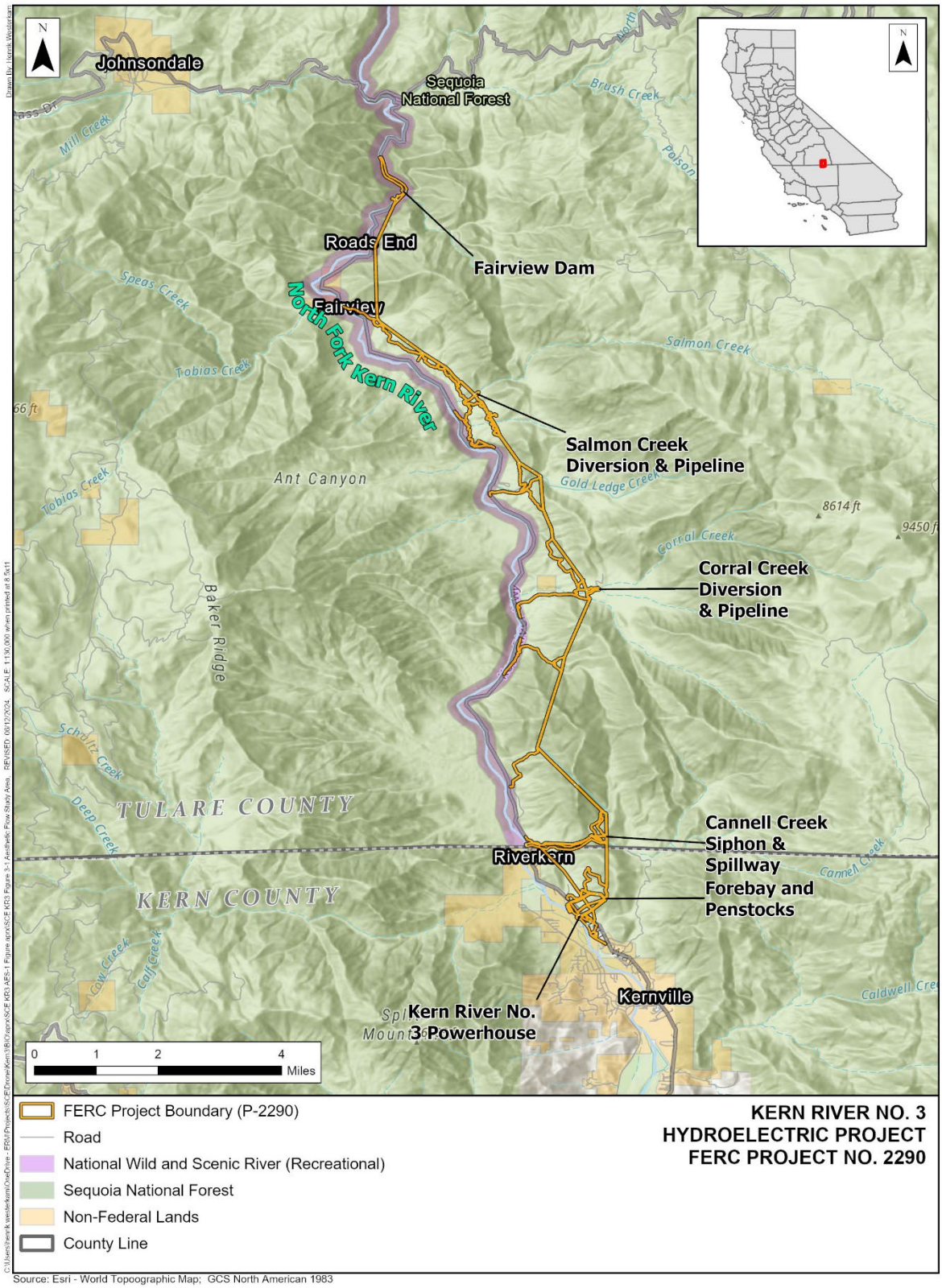
Visual/aesthetic resource studies at licensed hydroelectric projects typically follow a tiered or staged approach to information and data collection (Whittaker and Shelby, 2017). This approach starts with a Level 1 or desktop analysis and—based on potential data gaps—progresses to a Level 2 (limited reconnaissance) or Level 3 (intensive studies) assessment. The AES-1 Study followed the general framework of a Level 1 aesthetic analysis. The study goals and objectives associated with a Level 1 assessment and desktop analysis of existing aesthetic flow characteristics along the Fairview Dam Bypass Reach included:

- Summarizing the applicable land use management plans relevant to aesthetic features and adjacent landscape of the Fairview Dam Bypass Reach.
- Documenting the aesthetic features and flow characteristics of the Fairview Dam Bypass Reach under existing conditions.
- Identifying key observation points (KOPs) along the Fairview Dam Bypass Reach and providing general descriptions of the aesthetic characteristics and public access associated with these KOPs.
- Describing visitors' preferences, perceptions, and satisfaction with aesthetics within the Fairview Dam Bypass Reach by analyzing the pertinent results from the REC-2 Visitor Intercept Survey Questionnaire (herein referred to as the "REC-2 visitor questionnaire").

[1] The Fairview Dam Bypass Reach is defined as the approximately 16-mile bypass reach of the North Fork Kern River (NFKR) between Fairview Dam and the KR3 Powerhouse tailrace.

3.0 STUDY AREA

The study area for the AES-1 Study includes the approximately 16-mile Fairview Dam Bypass Reach of the North Fork Kern River between Fairview Dam and the KR3 Powerhouse tailrace (Figure 3-1).



FERC = Federal Energy Regulatory Commission; SCE = Southern California Edison

Figure 3-1. Aesthetic Flow Study Area.

4.0 METHODOLOGY—LEVEL 1 DESKTOP REVIEW OF EXISTING INFORMATION

The AES-1 Study generally follows the methods prescribed in *Flows and Aesthetics: A Guide to Concepts and Methods* (Whittaker and Shelby, 2017), as well as *Flows and Recreation: A Guide to Studies for River Professionals* (Whittaker et al., 2005). The 2017 publication builds on the sequential framework described in the 2005 publication to investigate flows and aesthetics using established tools across three progressive levels of study. These guidelines recommend a progressive approach with phased efforts of increasing resolution. The phased approach considers the information obtained from the preceding levels of the study to determine if there is a need to proceed to the next level of data collection. The progression to the next level in the sequential framework occurs when more intensive study is needed to inform a potential future license condition.

Overall, the intent of the AES-1 Study is to characterize the existing visual setting and resources and to document aesthetic conditions at varying river flows in the study area. The visual setting and its resources include the topography, vegetation, water, and human-built features that characterize the overall aesthetic quality of the area. River flows (i.e., the amount of water in a river) may change the appearance and influence the overall scenic quality of an area (previous aesthetic flow research has shown that visitors have different preferences for different flow levels [Whittaker and Shelby, 2017]). Specific to this AES-1 Study, the Level 1 desktop review and data collection effort focused on documenting four types of existing information in the study area related to the existing visual setting and aesthetic considerations of river flows, including:

- Resource management plans with aesthetic information and guidance for the study area.
- A description of existing aesthetic conditions and resources.
- Documentation of aesthetic conditions and viewsheds from KOPs.
- A summary of pertinent results from the REC-2 visitor questionnaire.

Study implementation followed the approach described in FERC's Study Plan Determination (FERC, 2022) and Determination of Requests for Study Modifications and New Studies (FERC, 2024).

4.1. RESOURCES MANAGEMENT PLANS

As noted in Section 5.9 of the *Preliminary Application Document* (PAD) (SCE, 2021), there are several applicable management plans that include visual resource information and management direction for the study area. These include the Sequoia National Forest (SQF) *Land and Resource Management Plan* (Forest Service, 1988), U.S. Forest Service (Forest Service) *Comprehensive Management Plan: North and South Forks of the Kern Wild and Scenic River* (Forest Service, 1994a), Tulare County *General Plan 2030 Update* (Tulare, 2012), and Kern County *General Plan* (Kern County, 2009). Additional information about these plans is provided in the PAD and summarized in Section 5.1,

Aesthetic/Scenic Components of Resource Management Plans, of this Technical Memorandum.

Following the submission of the PAD in 2021 (SCE, 2021), SQF finalized its Land Management Plan (LMP; Forest Service, 2023), leading to a review and consolidation of updated information pertinent to the Project's viewshed, aesthetics, and aesthetic flows. The updated applicable visual resource management information related to the *Land Management Plan for the Sequoia National Forest* (Forest Service, 2023) is also summarized in Section 5.1.

4.2. AESTHETIC CHARACTERISTICS OF THE STUDY AREA

A review of existing relevant information sources was performed to provide a general characterization of the NFKR watershed and the Fairview Dam Bypass Reach key aesthetic features. This assessment covered published viewshed descriptions and analyses from the PAD (SCE, 2021) along with visitor brochures, magazines, online publications, event calendars, maps, guidebooks, and other available sources of existing information about the scenic qualities in the vicinity of the Project.

Flows are an important factor in the scenic integrity of a river. A robust discussion of the hydrologic and related river characteristics is included in the *WR-2 Hydrology Study* (Appendix E.2 of the License Application). Information related to the Fairview Dam Bypass Reach physical characteristics is available in the *BIO-6 Stream Habitat Study* (Appendix E.2 of the License Application). Additionally, recreational considerations within the bypass reach are discussed in the suite of recreation studies, including the *REC-1 Whitewater Boating*, *REC-2 Recreation Facilities Use Assessment*, and *REC-3 Recreation Facility Condition Assessment* (see Appendix E.2 of the License Application). The aesthetic considerations of both flow levels and the physical characteristics of the river are also referenced and discussed in the AES-1 Study results, as noted below.

4.3. KEY OBSERVATION POINTS

SCE identified 16 publicly accessible and representative KOPs in the Fairview Dam Bypass Reach (note: one of the KOPs is immediately downstream of the bypass reach) to document and characterize key aesthetic features of the aesthetic conditions in the study area (Figure 4.4-1). A KOP is a viewpoint from which the public may view a landscape, project, or other feature of interest. While each KOP is established at a specific site or location, they are intended to be representative of the broader types of views or viewing opportunities available on a landscape. KOPs are a common element of aesthetic assessments and are used to evaluate existing landscape conditions and potential changes to these conditions from a proposed or the continued presence of a project on a landscape. The KOPs for this assessment were selected using criteria designed to help identify characteristics distinct to aesthetic flow investigations (Whittaker and Shelby, 2017).

At each KOP location, SCE collected relevant site location and aesthetic characteristics including site name, Global Positioning System (GPS) coordinates, the date of each

documentation, weather conditions, primary site use, landscape vegetation and features, cultural modifications, general visual characteristics, unique visual characteristics, waters visible from the site, and river flow. SCE also documented the viewing distance zones (foreground, middle ground, and background views) and took representative photographs of the landscape as viewed from each KOP. For purposes of this assessment and per the best practices established for aesthetic flow investigations, existing-conditions photographs were taken at various river flow levels (Whittaker and Shelby, 2017), as documented in Section 5.0, *Level 1 Desktop Review Data Summary*. Attachment A provides the Aesthetic Inventory Form that was used to document this information at each KOP location.

4.4. REC-2 VISITOR QUESTIONNAIRE

Per the FERC Study Plan Determination (FERC, 2022), SCE updated the REC-2 visitor questionnaire to include questions designed to query visitors on their perceptions of aesthetic flows in the Fairview Dam Bypass Reach (see *REC-2 Recreation Facilities Use Assessment Final Technical Memorandum* [Appendix E.2 of the License Application]). These additional questions primarily centered on visitor perceptions of scenic quality and activities with a scenic focus (e.g., photography, scenic driving). The aesthetics-related questions that were added to the REC-2 visitor questionnaire are provided in Attachment B. Participant responses and a summary of the aesthetic-related questions is provided in Section 5.4, *REC-2 Visitor Questionnaire—Aesthetic-Related Questions*.

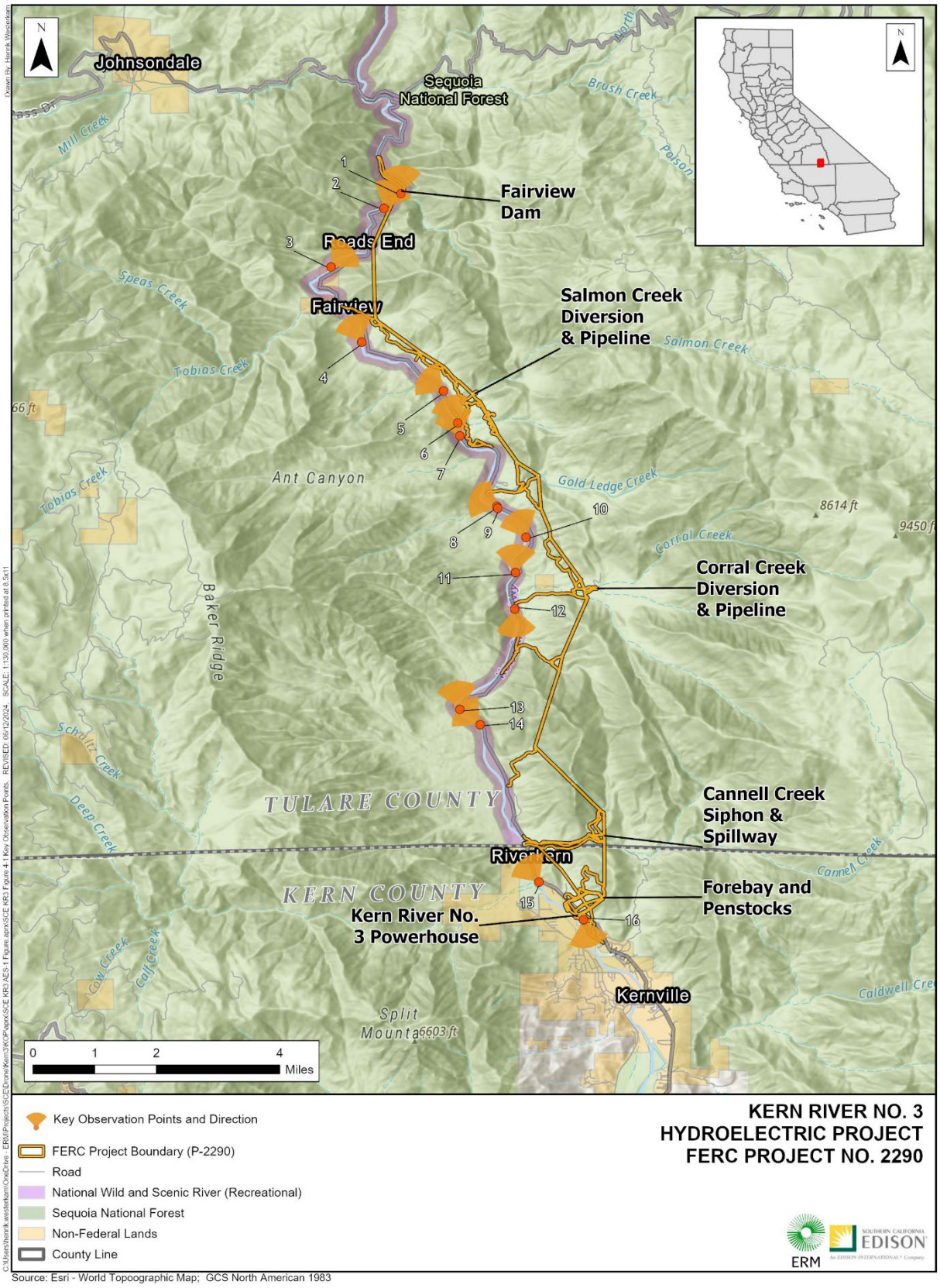


Figure 4-1. Key Observation Points.

5.0 LEVEL 1 DESKTOP REVIEW DATA SUMMARY

This section addresses existing information about visual resources and aesthetic conditions in the vicinity of the Project.

5.1. AESTHETIC/SCENIC COMPONENTS OF RESOURCE MANAGEMENT PLANS

The Project is primarily located within the boundaries of the SQF and falls under the SQF LMP (Forest Service, 2023). The NFKR from its headwater down to the Tulare/Kern County line is also designated a Wild and Scenic River (W&SR) segment and subject to the management prescriptions also detailed in the recently updated SQF LMP, as well as the *North and South Forks of the Kern Wild and Scenic River Plan* (Forest Service, 1994a). In addition, the Project is located in unincorporated areas of Kern and Tulare Counties. Because the Project is a federally licensed facility, county and other local-level planning documents and ordinances do not apply. However, for completeness of the analysis, these documents are considered as part of this Technical Memorandum.

5.1.1. LAND MANAGEMENT PLAN FOR THE SEQUOIA NATIONAL FOREST

The Forest Service updated the LMP for the SQF in May 2023 (Forest Service, 2023). This plan replaces the 1988 Sequoia National Forest Land and Resource Management Plan (Forest Service, 1988) and establishes planning and decision-making guidance to help direct activities on Forest Service-administered lands. Specifically, it identifies overall desired resource conditions and outlines general strategies to achieve these conditions. The LMP addresses the connection between aesthetics or scenic resources and other resource values (e.g., ecology, recreation), and establishes five desired conditions for aesthetic resources:

1. The SQF provides a variety of ecologically sound, resilient, and visually appealing forest landscapes that sustain scenic character, supporting the national forest recreation program niche in ways that contribute to visitors' sense of place and connection with nature.

2. Scenic character is maintained and/or adapted to changing conditions to support ecological, social, and economic sustainability in the SQF and in surrounding communities.

3. The SQF's scenic resources meet or are moving toward desired Scenic Integrity Objectives (SIOs). In places with distinctive scenic attractiveness, and in "special places," scenic integrity is maintained or improved to assure high-quality viewing experiences.

4. The built environment meets or exceeds SIOs and contributes to scenic stability.

5. Scenery stability is enhanced through integrated fuels and forest health projects.

Related to these desired conditions, the SQF LMP describes actions intended to help maintain existing and achieve desired scenic conditions. These actions include:

- Improve long-term scenery resources in all forest restoration projects, especially in areas that do not meet established SIOs.

- Cooperate with other entities such as Bureau of Land Management, public and investor-owned utility companies, California Department of Transportation, local governments, and commercial and private entities, to protect scenic character and meet SIOs on and adjacent to the SQF.

- Improve scenic stability through forest restoration projects.

- Rehabilitate areas that do not meet or exceed their desired scenic integrity objective.

The cooperation action is pertinent to the Project and provides an impetus for coordination with the Forest Service to help ensure that any potential changes in Project conditions and/or operations are consistent with the scenic guidance and objectives established in the LMP.

In addition to establishing desired scenic conditions, the LMP also designates SIOs for lands within the SQF. The Forest Service Scenery Management System process uses five inventory components (Description of the Landscape Character, Scenic Attractiveness, Concern Levels, Distant Zones, and Scenic Integrity) to develop SIOs for a given area. The SIOs describe the desired condition of a region or state of “intactness,” which becomes the target condition that all site-specific projects must adhere to. Figure 5-1 displays the SQF SIOs for lands within and in the vicinity of the FERC Project Boundary.

The majority of the landscape within and around the FERC Project Boundary is mapped with an SIO of High (defined as management activities are unnoticed and the landscape appears unaltered), with smaller areas adjacent to the Project mapped as Moderate (defined as management activities are noticeable but are subordinate to the scenic character, and the landscape appears slightly altered) or are located outside of federal land designation on private SCE land (Forest Service, 2023). Importantly, the Project existed and was part of the scenic landscape when the Forest Service established these SIOs. As such, the existing Project can be considered consistent with the current SIOs.

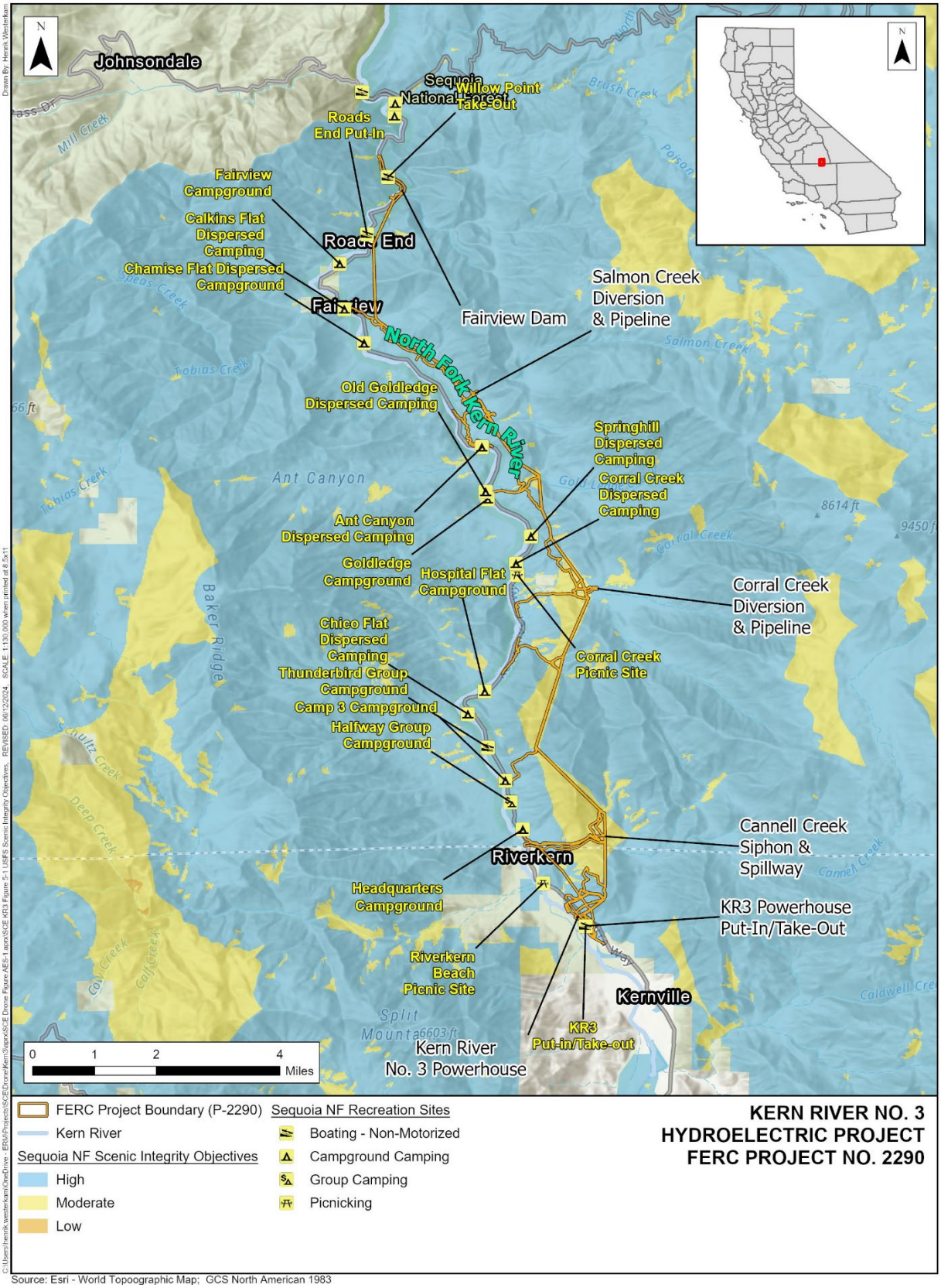


Figure 5-1. Forest Service Scenic Integrity Objectives.

5.1.2. Comprehensive Management Plan North and South Forks of the Kern Wild and Scenic River

Portions of the North and South Forks of the Kern River were designated into the National Wild and Scenic River System in 1987 (Pub. L. No. 100-174, § 247, 101 Stat. 924, 1987), including the 78.5-mile segment of the NFKR from the Tulare County line to its headwaters in Sequoia National Park. The designation applies to the river as well as an approximate 0.25-mile buffer on each riverbank. The Project was developed and operated for decades before both the federal and state W&SR designations and the federal enabling legislation specifically indicates that the designation does not "affect the continued operations and maintenance of the existing diversion project, owned by Southern California Edison on the North Fork of the Kern River" (Pub. L. No. 100-174, § 247, 101 Stat. 924, 1987).

The federal W&SR classification system (wild, scenic, and recreational) is an indicator of the level of development along the river at the time of designation, with "recreational" rivers reflecting the highest level of development. On the other end of the spectrum, "wild" rivers are generally free of development. The NFKR within the Fairview Dam Bypass Reach, from the Kern/Tulare County line to Fairview Dam, is designated as "recreational," meaning that it is accessible by road (Mountain Highway 99), has development along its shorelines (e.g., campgrounds, private residences, resorts, and other commercial development), and has been previously impounded or diverted (the Project outdates the W&SR designation) (Wild and Scenic Rivers Act of 1968, Pub. L. No. 90-542, 82 Stat. 918, 1968). The Fairview Dam, intake, and sandbox are within the W&SR designation, while other Project facilities such as the KR3 Powerhouse, siphon, and penstocks are not.

SQF protects the outstanding remarkable values identified at the time of designation (1987) of this recreational river segment. The only outstanding remarkable value identified at the time of designation on the Fairview Dam Bypass Reach was wildlife because of the presence of a unique species of slender salamander (Forest Service, 1982). The 1994 *Final Impact Statement North and South Forks of the Kern Wild and Scenic River* (Forest Service, 1994b) and the *Record of Decision for the Inyo National Forest Plan Amendment #4 and Sequoia National Forest Plan Amendment* (Forest Service, 1994c) added recreation and scenic resources as outstandingly remarkable values within this W&SR reach, which includes the Fairview Dam Bypass Reach.

Previously, the 1994 Comprehensive Management Plan (CMP) North and South Forks of the Kern Wild and Scenic River identified the outstandingly remarkable values along the designated Project reach and provided management direction for protecting these values (Forest Service, 1994c). This plan specifically identified visual resource management objectives consistent with the 1988 Sequoia National Forest Land and Resource Management Plan (Forest Service, 1988) for the NFKR. These objectives included "retention" and "partial retention" of the scenic integrity of landscapes along the

designated portion of the Fairview Dam Bypass Reach.[2] The plan and its corresponding resource protection objectives did not specifically address scenic or aesthetic conditions associated with river flow levels.

The 2023 LMP for the SQF (Forest Service, 2023) updates the management direction of the 1994 CMP for the W&SR designation within the jurisdictional boundaries of the SQF, including the Fairview Dam Bypass Reach. The LMP acknowledges the desired conditions and standards that will guide the Forest Service management and decision-making processes for the river, and includes the following (applicable to all segments of the W&SR including the Fairview Dam Bypass Reach):

- Desired Conditions
  - The free flow, water quality, and outstandingly remarkable values of designated wild and scenic rivers are protected and enhanced from conditions at the date of designation. Development and management are consistent with each designated river's comprehensive river management plan and classification.
  - Public recreation and resource uses do not adversely impact or degrade the values for which each river was designated.
- Standards
  - Road and motorized trail access to rivers must be consistent with each designated river's classification.
  - Structures and facilities must be consistent with each designated river's comprehensive river management plan, classification, any other applicable congressional designations (e.g., wilderness, national scenic trails), the Wild and Scenic Rivers Act, and LMP direction (e.g., scenic integrity objectives).
  - Any new recreation facilities, if needed, must be consistent with the river's classification and located to protect outstandingly remarkable values.
  - Utility rights-of-way within segments classified as wild must not be authorized. Utility rights-of-way within segments classified as recreational or scenic may be authorized only if there are no alternatives and unavoidable impacts are mitigated.
  - Use of facilities in existence at the date of designation that do not conform to a river's classification is allowed so long as the river's free flow, water quality, and outstandingly remarkable values are protected.
  - Grazing is allowed so long as each designated river's free flow, water quality, and outstandingly remarkable values are protected.

[2] The Forest Service has updated its visual resource terminology since the 1994 CMP was developed; the current terminology supplants the use of visual quality objectives with scenic integrity objectives.

- When evaluating a federally assisted water resources project under the Wild and Scenic Rivers Act section 7(a) and where a comprehensive river management plan has not yet been completed, documented baseline conditions at date of designation for free flow, water quality, and outstandingly remarkable values to evaluate effects of the project must be used. A river's classification is not a factor in the evaluation.

Similar to the 1994 CMP, the 2023 LMP and its W&SR desired conditions and standards do not address aesthetic flows on the river. Standard 5 addresses facilities that were and continue to be located on designated rivers. These facilities are "allowed so long as the river's free flow, water quality, and outstandingly remarkable values are protected" (Forest Service, 2023). The Project falls into this category of existing facilities. Additionally, the LMP also notes that while new hydroelectric projects are not permitted on W&SRs, existing FERC-licensed projects at the time of designation may continue to operate.

The LMP for the SQF also describes actions intended to help maintain existing and achieve desired W&SR-related scenic conditions. These actions include (Forest Service, 2023):

- Complete comprehensive river management plans for W&SRs newly designated by Congress.
- Help maintain and enhance the outstandingly remarkable values of each designated and eligible W&SR through partnerships with other agencies, organizations, and volunteers.
- Provide information to the public that will increase understanding and appreciation of designated and eligible W&SRs and promote citizen stewardship.
- Implement comprehensive river management plans for W&SRs designated by Congress.

As noted previously, the Project was constructed and operated prior to the designation of the NFKR as a W&SR. Section 7 of the W&SR Act (Wild and Scenic Rivers Act of 1968, Pub. L. No. 90-542, 82 Stat. 918, 1968) prohibits the development and licensing of new hydroelectric projects on designated W&SRs. This section of the Act also identifies the need for the administering federal agency to provide an evaluation of continued hydroelectric operations on designated rivers during the FERC licensing process. In the case of the NFKR, the Forest Service is the administering agency with authority to evaluate the continued operation of the Project under established "direct and adverse effect" guidelines for W&SRs (Forest Service, 2004). The Section 7 process, including coordination with the Forest Service and determination, is addressed in SCE's Application for new License.

5.1.3. Tulare County General Plan

A large portion of the Project is located in Tulare County. However, the portion of the Project in Tulare County is located entirely on lands administered by the Forest Service.

As noted in the PAD (SCE, 2021), the Land Use and Environmental elements of the Tulare County General Plan contains several provisions regarding scenic resources that are relevant to lands in the vicinity of the Project (Tulare County, 2012). Most of these provisions are oriented toward maintaining the open space character of the county and appropriately designing and screening facilities to minimize their potential impact on scenic quality. While the Tulare County General Plan does not address aesthetic flows in the Kern River, and as a technical matter does not apply to the Project, it does acknowledge the need to protect and maintain the scenic character of the county's rivers, lakes, and irrigation canals.

5.1.4. KERN COUNTY GENERAL PLAN

The southern portion of the Project is located in Kern County. Similar to Tulare County, the Kern County General Plan includes goals, policies, and implementation measures to help protect scenic resources in the county (Kern County, 2009). As documented in the PAD (SCE, 2021), the Land Use, Open Space, and Conservation Element of the General Plan outlines several provisions that aim to minimize potential impacts to scenic quality from land development and facilities through proper design and screening techniques. It also identifies provisions to protect views of the Kern River but does not specifically address aesthetic flows in the river and as a technical matter does not apply to the Project.

5.2. AESTHETIC CHARACTERISTICS OF THE STUDY AREA

The Project and adjacent areas are within the Sierra Nevada foothills. The topography of the area ranges from rolling hills to mountains with large rocks and granite outcrops that provide localized contrast and interest. The mountains in this region spatially dominate many views through their sheer scale, rocky textures, and colors on the landscape. The area's vegetation shifts from riparian to oak and grass communities to mixed conifer communities depending on elevation. The varied topography and vegetation create an engaging mix of forms, lines, colors, and textures that contribute to the overall scenic quality of the area. Changes in vegetation colors (from vibrant greens to more subdued greens and tans) and kinetic flows in the river further enhance and add seasonal variation to the scenic opportunities in the area.

Within the Fairview Dam Bypass Reach, the river itself adds another dominant feature to the landscape. The river is accentuated by and provides contrast with the surrounding topography. The sides of the canyon act as walls that enclose the landscape and focus viewers' attention on those landscape features within the enclosed area, including the river, riparian vegetation, rock outcrops, and general topography. The river's dark blue hues, dynamic, sinuous, directional form and shifting textures (generally from smooth to coarse) create visual interest and contrast with the surrounding landscape forms, textures, and colors. The result is a highly scenic river corridor that has intrinsic aesthetic value that is also integral to the recreational experiences found along the Fairview Dam Bypass Reach.

Rivers are dynamic systems and their flow levels directly influence the scenic interest and quality of the landscape. Flow levels, along with the underlying river channel material

create rapids, riffles, runs, cascades, and pools that add movement, color, and texture to the landscape. In both natural and controlled river systems, these landscape characteristics (e.g., forms, colors, line, textures) change throughout the year based on water availability and corresponding flow levels. During periods of heavy snowmelt or precipitation, flow rates tend to increase while flow levels decrease during dry periods. This seasonal variation creates visual differences in a river's scenic qualities that are akin to the color changes of deciduous vegetation over the course of a year. That is, similar to the seasonal changes in colors and textures of deciduous vegetation that transform a landscape's scenic characteristics throughout the year, seasonal flow changes also result in different landscape characteristics on a river. The Fairview Dam Bypass Reach follows this similar pattern of changing scenic conditions related to flow levels over the course of the year based on water availability and natural flow levels, as well as Project operational needs and minimum instream flow requirements. The changing visual conditions under different flow levels are described in Section 5.3, *Key Observation Points*.

The Project includes several existing facilities and structures that are visible on the landscape. The visibility of these facilities and structures to the public is variable and based on viewing location, vegetation, and topography. The public primarily has views of the Project's facilities and structures at specific points along Mountain Highway 99/Sierra Way. These include Fairview Dam, sandbox, forebay, penstocks, powerhouse, and other associated infrastructure (e.g., fencing, access roads, etc). The Project's flowline (below-ground tunnels, above ground flumes and siphon) is primarily hidden from public view since it is mostly underground or screened by existing vegetation and topography. Overall, the Project's facilities and structures are generally consistent with the area's level of development and are not visually dominant or overly obtrusive on the landscape. Per the 1997 *Visual Resource Protection Plan* (a condition of the existing license), Project facilities and structures are painted with appropriate earth tones to help them better blend into the surrounding landscape (SCE, 1997).

In addition to the Project, there are multiple other cultural modifications (i.e., human-built structures and/or human-altered areas). These modifications include primarily Forest Service owned and maintained recreational sites and facilities (e.g., campgrounds-both developed and dispersed, river put-in/take-outs, day use / picnic areas), private residences, commercial buildings and support facilities (e.g., restaurants, resorts, distribution lines, signs), and travel corridors (e.g., paved and striped roads, signs), among others. In general, these cultural modifications do not substantially detract from the overall scenic quality and are generally consistent with the level of development found throughout the area.

Mountain Highway 99 (Sierra Way through the town of Kernville), the primary travel route within the area, is a two-lane winding road adjacent to the eastern side of the NFKR. Several unincorporated residential areas (including Fairview, Riverkern, and Camp Owens) are located at the northern and southern end of the Project. Additionally, there are over 20 Forest Service-owned and managed, formally developed, and dispersed-use recreational areas situated between the river and Mountain Highway 99, including numerous informal road shoulder pull-offs. The western riverbank and hillside are composed primarily of SQF lands with minimal development. Just 2 miles south of the

FERC Project Boundary, the town of Kernville serves as the largest residential community in the vicinity with residential and commercial developments along both sides of the river.

The *Kern River Valley, 2023 Visitor's Guide* (Kern Valley Sun, 2023) promotes activities, destinations, and events available in the region. The guide provides a list of more than 40 types of outdoor recreation opportunities, many of which (e.g., whitewater rafting and other forms of boating, fishing, and gold panning) are directly influenced by or dependent on the NFKR. The visual quality and aesthetic characteristics of the region are a clear driving force in the draw to the area and the value of the outdoor recreation available to visitors. Recreational opportunities, visitation patterns, and visitor preferences are addressed in detail in the REC-2 Final Technical Memorandum (Appendix E.2 of the Application for a New License).

5.3. KEY OBSERVATION POINTS

To better understand the changing aesthetic conditions associated with different flow levels, SCE established a series of 15 KOPs in the Fairview Dam Bypass Reach and one KOP immediately downstream of the KR3 Powerhouse (not in the bypass reach) from which to document aesthetic flows for a total of 16 KOPs. These KOPs are displayed on Figure 4-1. The KOPs were selected from public access and use areas that reflect typical views of the river. They are primarily located at sites along Mountain Highway 99 since it generally parallels the eastern side of the river throughout the Fairview Dam Bypass Reach and offers multiple opportunities to view the river. The views from these KOPs are intended to capture publicly accessible sites from which viewers would be able to see and experience the changes in flow levels that are caused by operational and seasonal water variations or flow rates throughout the year.

Table 5.3-1 lists the KOPs, their locations, and general descriptions of viewshed conditions. In general, most of the KOP views are oriented upriver and are focused on landscape elements in the foreground because of vegetation and the surrounding topography that enclose most of the views. Enclosed views are defined by landscape elements that form a "floor" and "walls" that frame the visible landscape. In the case of the NFKR, the river channel and broader floodplain serve as the floor, while the surrounding hills, rock outcrops, and mountains form the walls that enclose the landscape. Within this enclosed landscape, the river is one element or feature that contributes to the overall scenic quality of the area. It is the combination of the river along with vegetation, rock outcrops, and the surrounding topography that create a varied (e.g., forms, lines, colors, and textures) and visually engaging landscape.

Table 5.3-1. Key Observation Points

KOP	Location	Project Infrastructure	Viewshed Description
1	Fairview Dam	Dam with fish passage structure, flume, fencing	View is oriented upriver and enclosed by surrounding topography; the river is the dominant natural feature; the dam (and associated Project structures) is highly visible and co-dominant on the landscape; the dam creates a horizontal break across the river and enhances the visible movement of water (turbulence) as water cascades over the dam at higher flows
2	Bombs Away Rapid	None visible	View is oriented upriver and enclosed by surrounding topography; river is dominant with riparian vegetation and rocks/boulders providing visual contrast and texture to the river corridor; interaction of water with rocks emphasizes visibility of movement; roadway, signs, and distribution lines visible above the eastern bank of the river
3	McNally's Suspension Bridge	None visible	View is oriented upriver and enclosed by surrounding topography; river, riparian vegetation, rocks, and steep western bank are prominent features; distribution line is visible as a horizontal line above the river channel
4	Chamise Flat Campground	None visible	View is oriented upriver; river channel is broader but still enclosed by surrounding topography; water acts as focal point of views; movement of water highly perceptible around and downstream of rocks in and along the river channel; riparian and other vegetation, as well as rock outcrops add visual contrast and texture
5	Black Bottom Falls	None visible	View is oriented upriver within a concave, broader canyon with hills and mountains enclosing the landscape; the river is prominent through the valley bottom with visible movement/turbulence, but the extent of the river is limited to the foreground due to its contours and the area's topography; boulders, large rock outcrops, and vegetation provide contrast and texture
6	Upper Salmon Falls	None visible	View is oriented upriver and enclosed by the surrounding topography; boulders in and along the river channel and moving water dominate the foreground with riparian and other vegetation providing vertical interest and scale along the river

KOP	Location	Project Infrastructure	Viewshed Description
7	Lower Salmon Falls	None visible	View is oriented upriver; steep, rocky cliff along western bank encloses the view and provides vertical contrast to the horizontally aligned river; boulders and large rock outcroppings are dominant in and along the river; water is dynamic and movement is readily apparent as it flows around the boulders; clumped vegetation within the rock outcroppings on the riverbanks adds contrast to the view
8	Screaming Right Turn 1	None visible	View is oriented upriver and enclosed by the surrounding topography; the river is centered in the foreground; the interaction of water and rocks/boulders is bordered by riparian vegetation and prominent in the view; surrounding topography and vegetation add contrast and texture to the landscape
9	Screaming Right Turn 2	None visible	View is oriented upriver; sloped hillside on western bank with more distant view into middle ground; the river channel includes a balanced combination of water, a large boulder field and rapids, and riparian vegetation; the vibrant greens of the riparian vegetation are contrasted with the muted greens, grays, and tans of the surrounding area
10	Springhill North	None visible	View is oriented upriver within a broader section of the river canyon; the view is enclosed by gently sloped hills along the riverbank with steeper, more pronounced rock outcroppings and mountains framing the background/skyline; the river serves as a focal point within the channel with boulders and riparian vegetation adding color and texture
11	Corral Creek Put-In	None visible	View is oriented upriver and while within a broader section of the canyon is still enclosed by the surrounding hills; wide river channel features prominently in the foreground; the river transitions from an area of large rocks and rapids where water movement is pronounced to a calmer, flatter area; clumped riparian vegetation adds vertical elements and texture to the view
12	Corral Creek Road 15-18	None visible	View is oriented downriver and enclosed by the surrounding topography; Mountain Highway 99 parallels the edge of the eastern bank of the river while a broad boulder field and clumped riparian vegetation forms the western bank; movement of water is pronounced with visible churn and color differentiation compared to calmer, flat section visible downriver
13	Chico Flat Flume Road	None visible	View is oriented upriver and enclosed by surrounding topography; broad river channel with boulder field spanning the channel and creating visible areas of water turbulence; riparian vegetation and clumped vegetation on surrounding hillsides add color and interest to the view

KOP	Location	Project Infrastructure	Viewshed Description
14	Fender Bender Rapid	None visible	View is oriented upriver and enclosed by surrounding topography; concave river channel includes a mix of water, boulders, and pockets of dense riparian vegetation; water movement is pronounced and facilitated by rocks and boulders; brighter riparian vegetation creates contrast with the lighter tan/gray of the rocks and boulders in and along the river, as well as the muted tans of the hillsides
15	Kern River Beach	None visible	View is oriented upriver, enclosed by the surrounding topography, and limited primarily to the foreground by vegetation and topography; the river features prominently along the canyon bottom; water is slightly textured (indicating movement); a dense wall of riparian vegetation frames the western bank and contrasts with the colors and textures of the hillsides
16	KR3 Powerhouse	Access road to the powerhouse, ancillary buildings and parking areas, and a distribution line (this KOP is downstream of the Fairview Dam Bypass Reach)	View is oriented downriver; broader section of the canyon is semi-enclosed with more distant views into the middle and background; wide section of the river includes mix of calmer, flatter water and areas with visible movement in the surface water; the river is surrounded by dense vegetation that adds color and texture to the landscape; human development is prominent along both river banks with Project-related facilities along the eastern side and residential homes along the western side and onto the surrounding hillside

KOP = key observation point; KR3 = Kern River No. 3

At each KOP, the presence and dominance of the river in the viewshed changes depending on flow level. In the Fairview Dam Bypass Reach, the amount of water in the river or flow level changes based on Project operations, as well as seasonal variations in water availability. Project operational flows are prescribed in the existing FERC license to meet for power generation and resource goals. The *WR-2 Hydrology* Study provides typical monthly flows in the Fairview Dam Bypass Reach based on river gage data from the U.S. Geological Survey from 1997 to 2022 (see the *WR-2 Hydrology Interim Technical Memorandum* [Appendix E.2 of the License Application]). These flows generally follow a seasonal pattern, with the highest average monthly flow levels in spring (April and May) and early summer (June and July) when snow melt is highest, and lower flows throughout the rest of the year.

Photographs were taken during a range of flow levels to document the variation and changes in aesthetic conditions associated with these flows (KOP photographs are provide in Attachment C). For purposes of this assessment, the photographs were taken at lower flows (approximately 130-160 and 300-400 cfs), moderate flows (between 700 cfs up to 1,000 cfs), and high flows (over 1,000 cfs). In addition, drone footage, other available Project photos, and field observations were also used to help document and describe aesthetic conditions under low flow rates (under 160 cfs) in the Fairview Dam Bypass Reach. Examples of the drone footage that was taken at lower flows (approximately 40 cfs) and reviewed for assessment purposes are provided in Figures 5-2 through 5-4. Refer to *BIO-6 Stream Habitat Typing Technical Memorandum* (Appendix E.2 of the License Application) for additional photographs depicting stream habitat conditions at low flows (approximately 80 cfs).

Figure 5-2. Example Image from Drone Footage of the Fairview Dam Bypass Reach at Lower Flow Rate (November 2020, approximately 40 cfs) – Example 1

Figure 5-3. Example Image from Drone Footage of the Fairview Dam Bypass Reach at Lower Flow Rate (November 2020, approximately 40 cfs) – Example 2

Figure 5-4. Example Image from Drone Footage of the Fairview Dam Bypass Reach at Lower Flow Rate (November 2020, approximately 40 cfs) – Example 3

In total, photographs were taken on five different dates each with different flow levels at each KOP, as listed in Table 5.3-2. Figures 5-5 through 5-9 display an example

photograph at each captured flow level/range on the date ranges listed in Table 5.3-2. A full set of photographs from each KOP at each flow range is provided in Attachment C. The flow rates capture the amount of water released below the Fairview Dam as measured by USGS gage 111860000, SCE gage 401 and do not factor in flows from tributaries along the bypass reach. More detailed information about the hydrology and stream characteristics in the Fairview Day Bypass Reach is available in the *WR-2 Hydrology Interim Technical Memorandum* (Appendix E.2 of the License Application).

Table 5.3-2. Dates and Approximate Flow Rates at Key Observation Points

Date	Flow Rate [a] of KOP Photography (cfs)		
	Above Fairview Dam [b]	Fairview Dam Bypass Reach [c]	Below KR3 Powerhouse [d]
5/8/2023 to 5/9/2023	3,748	3,676–3,874	3,678
8/9/2023 to 8/10/2023	1,495	897–1,000	1,469
8/27/2023 to 8/28/2023	1,279	719–829	1,276
9/6/2023 to 9/7/2023	895	331–381	900
9/18/2023 to 9/19/2023	726	134–160	701

cfs = cubic feet per second; KOP = key observation point

[a] The flow rates on the same date fluctuate slightly throughout the day. All flow rates were recorded at the specific time the KOP photograph was taken and estimated to the nearest hour.

[b] Flows were estimated by adding USGS gage 111860000, SCE gage 401, USGS gage 111855000, and SCE gage 402.

[c] Flows recorded at USGS gage 111860000, SCE gage 401, USGS gage 111855000, and SCE gage 402.

[d] Due to high flows in early 2023, the stream gage in Kernville did not provide accurate flows; therefore, flows below the KR3 Powerhouse were estimated by adding USGS gage 111860000, SCE gage 401, USGS gage 111855000, and SCE gage 402. Flow estimates do not account for any tributary accretion flows that may occur throughout the reach.

Figure 5-5. 134–160 cfs Flow Range at KOP 2.

Figure 5-6. 331–381 cfs Flow Range at KOP 4.

Figure 5-7. 719–829 cfs Flow Range at KOP 7.

Figure 5-8. 897–1,000 cfs Flow Range at KOP 9.

Figure 5-9. 3,676–3,874 cfs Flow Range at KOP 14.

Table 5.3-3 lists the water resource characteristics captured on the aesthetics field inventory form at different flow rates. These water resource characteristics are based on guidance from the Forest Service Scenery Management System (Forest Service, 1995). They provide an indicator of the visual changes to the river and landscape at each KOP at different flow levels. Table 5.3-3 also provides a description of the differences in visual characteristics of the river, including the interaction of the water, river channel, riverbanks, and surrounding landscape at different flow levels at each KOP.

Table 5.3-3. Visual Characteristics at Different Flow Levels

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 1					
Stream Habitat	Cascade	Cascade	Cascade	Cascade	Cascade
Water Movement	Rapid, falls	Rapid, falls	Rapid, falls	Rapid, falls	Rapid, falls
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Dominant	Dominant	Dominant	Dominant	Dominant
Description	• At lower flow rates, the concrete dam and a large rock outcrop below the dam (on the eastern side) are clearly visible and create a hard break in the river delineating an upper and lower area that is not connected by flowing water • At higher flow rates, the dam disappears under a cascading flow of water; the rock outcrop below the dam remains partially visible at moderate flows but is completely submerged at high flows • Water movement becomes apparent when the river flow is high enough to flow over the dam—at lower flows, the water appears still while the magnitude of turbulence generally increases as the flow level increases (i.e., as the volume of water cascading over the dam increases so does the amount of visible turbulence) • While the Project structures (e.g., dam, penstock, fish passage, etc.) are visible or noticeable at all flow levels, they become more pronounced as flow levels decrease (i.e., the visual focus shifts from the kinetic flow of water above, over, and below the dam to the concrete Project structures)				
KOP 2					
Stream Habitat	Boulder run	Boulder run	Boulder run	Boulder run	Boulder run
Water Movement	Medium	Medium	Rapid	Rapid	Rapid
Scale Contrast	Medium	Medium	Medium	Medium	Medium
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• At lower flow rates, the water becomes less dominant, though still provides an additional element that complements the broader landscape • Rocks and boulders in the stream channel are highly visible at lower flow rates and create pockets of turbulence • At moderate flows (over 300 cfs), larger rapids and riffles appear that add more color and texture to the river channel • As flows increase (over 1,000 cfs), many of the rocks and boulders in the stream channel disappear below the surface of the water and the movement of water becomes powerful with a higher degree of churn, waves, and a corresponding change in color (whites and gray-green colors dominate)				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 3					
Stream Habitat	Riffle	Riffle	Riffle	Riffle	Riffle
Water Movement	Slow	Slow	Medium	Medium	Medium
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• At lower flows, the river appears shallow with multiple exposed rocks and boulders peppering the channel, and the water surface is generally calm but there are several small areas of turbulence • As flows increase at this location, the visual changes to the river are subtler with fewer exposed rocks, the water filling more of the channel's width, and additional areas of turbulence • At higher flows, the water expands across the full width of the channel, rocks and boulders are fully submerged, riparian vegetation is partially submerged, and there is large amount of visible churn in the water (characterized by a change in color and texture of the water surface)				
KOP 4					
Stream Habitat	Deep pool, run, riffle	Deep pool, run, riffle	Deep pool, run, riffle	Deep pool, run, riffle	Boulder run, run
Water Movement	Slow	Medium	Rapid	Rapid	Rapid
Scale Contrast	Medium	Medium	Medium	Medium	Medium
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• At low flows, the river cuts through a visible boulder field (along both banks of the river) with several large rocks and boulders in the river channel that break up the surface of the water and create small areas of turbulence • As flows increase, the width of the water widens slightly, but maintains a serpentine form through the adjacent boulder field; the rocks and boulders in the channel are fully or partially submerged creating a longer run of turbulence • At higher flows (over 1,000 cfs), more of the rocks and boulders in the channel are fully submerged, the riparian vegetation is partially submerged, and several large rapids form (increased turbulence and churn)				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 5					
Stream Habitat	Shallow pool, run	Boulder run, run	Boulder run, run	Boulder run, run	Boulder run, run
Water Movement	Medium	Medium	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• While the river is visible and an integral component of the landscape, its prominence is minimized at low flows (i.e., it complements the overall scenic conditions but is not the dominant feature on the landscape) • At lower flows, a series of rocks and boulders is visible across the channel bottom and continues the pattern of clusters of rock scattered throughout the rest of the adjacent landscape; the water flows around these rocks and boulders creating small pockets of turbulence and interest • At moderate flows (between 700–1,000+ cfs), the general form and presence of the river is relatively unchanged, but the quantity of water submerges some of the rocks and boulders and creates larger areas of turbulence (rapids) • At very high flows, the greater quantity of water acts to widen and better define the river (e.g., continuous lines along the edges) and submerges most of the rocks and boulders in the river channel which results in a higher degree of turbulence				
KOP 6					
Stream Habitat	Boulder run, deep pool	Boulder run, cascade, deep pool	Boulder run, cascade, deep pool	Boulder run, cascade, deep pool	Boulder run, cascade, deep pool
Water Movement	Medium	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Dominant	Dominant	Dominant	Dominant	Dominant
Description	• Except at very high flows, a large boulder field dominates the view at this KOP • At low flows, water is visible cutting through the boulder field in the river channel with multiple small areas of turbulence • As flows increase, the boulders remain prominent, but the flow of water around the rocks increases and creates a longer run of rapids • At very high flows, the width of the water in the channel widens and the volume of water submerges many of the boulders in the river channel creating a continuous run of rapids with heavy turbulence				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 7					
Stream Habitat	Boulder run, Shallow pool	Boulder run, cascade	Boulder run, cascade	Boulder run, cascade	Boulder run, cascade
Water Movement	Medium	Medium	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Dominant
Description	• At lower flows, there is a prominent cluster of boulders across the river channel in this location • The presence of water at this KOP generally follows a similar pattern as KOP 7; that is, as flows increase, the amount of water passing through the boulder field increases and creates larger areas of turbulence • At moderate flows, there is a balance of water and rock landscape elements with both co-dominating views • At very high flows, the volume of water fully or partially submerges many of the boulders and creates a large rapid that dominates views				
KOP 8					
Stream Habitat	Boulder run, riffle	Boulder run	Boulder run	Boulder run	Boulder run
Water Movement	Medium	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Medium	Medium	Medium	Medium	Medium
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• At low flows, the river is present on the landscape, but adjacent features (e.g., a larger boulder field, riparian vegetation) equally defined the river channel's landscape elements (e.g., form, line, color, and textures) • As flows increase, more of the boulder-filled river channel fills with water creating a more textured combination of exposed rock, water, and small pockets of turbulence • At very high flows, the volume of water in the river channel submerges many of the rocks and boulders, and extends into a wider area thereby partially submerging portions of the river's banks and riparian vegetation; water movement is very apparent with a longer stretch of turbulent water and rapids				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 9					
Stream Habitat	Boulder run, deep pool	Boulder run, deep pool	Boulder run, deep pool	Boulder run, deep pool	Boulder run, deep pool
Water Movement	Medium	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Co-dominant	Co-dominant	Dominant	Dominant	Dominant
Description	• The view of the river at KOP 10 is similar to KOP 9 in that a large boulder field dominates and extends fully across the river channel and is particularly visible at lower flows • As flows increase, the natural channels and voids in the boulder field fill with water and create small rapids and areas of turbulence that are distinguished by their color (white) and texture (rough); this contrasts with the calmer, flatter, and glossier pool downriver of the boulder field • At very high flows, the boulders in the river channel are partially or fully submerged, as are portions of the riverbanks and riparian vegetation; the magnitude of turbulence is very high with a consistent run of rapids and churn that changes the color (white caps intermixed with gray water) and texture (matte, rough) of the river				
KOP 10					
Stream Habitat	Boulder run, run	Boulder run, run	Boulder run, run	Boulder run, run	Boulder run, run
Water Movement	Rapid	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Medium	Medium	Medium	Medium	Medium
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• At lower flows, the water is one of several landscape features (along with boulders, riparian vegetation, and the surrounding topography) that contributes to the overall scenic setting; the water is present and visible in the foreground with a large boulder field and riparian vegetation framing the river's banks; the presence of rocks in the river creates a small riffle and turbulence • As flows increase from lower to more moderate levels the river's width expands primarily into the boulder field along the eastern bank and the amount of turbulence increases changing the surface texture • At very high flows, the river expands into the boulder field along the eastern bank, partially or fully submerges the rocks in the river channel, and partially submerges riparian vegetation; there is also a substantial increase in turbulence with an extended run of small waves and whitecaps				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 11					
Stream Habitat	Boulder run, deep pool	Boulder run, deep pool	Boulder run, deep pool	Boulder run, deep pool	Boulder run, deep pool
Water Movement	Slow	Slow	Medium	Medium	Medium
Scale Contrast	Medium	Medium	Medium	Medium	Medium
Spatial Dominance	Co-dominate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• At lower flows, a section of boulders and small rapids is visible upriver from this site; the rapids transition to a broader, calmer section of river with a sandbar on the eastern bank and a steep hillside on the western bank; turbulence is visible on the calmer section of river through the slightly textured surface of the pool • As flows increase, the river spreads across more of the boulder field creating additional areas of turbulence; while the width slightly increases, the pool below the rapids remains largely unchanged with similar visual characteristics across a range of lower to moderate flows • At very high flows, the water dominates the river channel and overruns the riparian vegetation and sandbar on the eastern bank; the upriver rapids increase in size and visible turbulence also increases across the pool				
KOP 12					
Stream Habitat	Boulder run, deep pool	Boulder run	Boulder run	Boulder run	Boulder run
Water Movement	Medium	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Dominant	Dominant	Dominant	Dominant	Dominant
Description	• At low flows, the water cuts through a channel along the eastern side of a large boulder field that extends from the hillside to the west, across a flat portion of the canyon bottom, and then across the deeper river channel; the interaction of the boulders and the water creates a run of small rapids that are distinguished by their visible turbulence (different color [white] and texture [rough] from other areas of water); the river is a focal point within the canyon but is co-dominant with the surrounding topography • As flows increase, the magnitude of the rapids visible at this KOP also increases; the rising water submerges many of the boulders in the stream channel and there is a longer run of whitewater; as the size and length of the rapids increases, they becomes a more prominent focal point in the river canyon and on the landscape • At very high flows, the width of the river increases by expanding into the adjacent, flat boulder field and riparian vegetation; the high degree of visual turbulence from increased rapids help make the river the dominant landscape feature at these very high flows				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 13					
Stream Habitat	Boulder run, shallow pool	Cascade	Cascade	Cascade	Cascade
Water Movement	Rapid	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Large	Large	Large
Spatial Dominance	Dominant	Dominant	Dominant	Dominant	Dominant
Description	• Similar to other areas of the river, there is a boulder field that extends from the western to the eastern bank of the river channel and dominates the view at lower flows at this KOP; at low flows, the water is visible moving between the boulders with several small rapids distinguished by their color (white) and texture (rough) • As flows increase, the water fills in and partially or fully submerges the boulders in the river channel; more rapids form and the river takes a more prominent focus on the landscape • At very high flows, the water extends farther into the adjacent boulder-covered banks and the boulder field in the river channel transforms into a series of large rapids that dominate the view				
KOP 14					
Stream Habitat	Boulder run, riffle	Boulder run, riffle	Boulder run, riffle	Boulder run, riffle	Boulder run, riffle
Water Movement	Medium	Rapid	Rapid	Rapid	Rapid
Scale Contrast	Large	Large	Medium	Medium	Medium
Spatial Dominance	Subordinate	Co-dominate	Co-dominate	Co-dominate	Co-dominate
Description	• A extensive boulder field with a dense patch of riparian vegetation extends across the river channel in this location; at low flows the water splits around a patch of boulders and vegetation forming two separate branches; each branch is dominated by large boulders with dark blue water flowing around them and several small rapids; while the water is evident, the landscape is characterized by a high degree of contrast and variety across the different landscape features (e.g., the river, boulders and rock outcrops, vegetation, and topography) • As flows increase, the length and magnitude of the rapids in each branch of the river increase and become more apparent (larger sections of white water and turbulence) and more pronounced on the landscape • At higher flows (~1,000 cfs), the rapids take on more prominence with their visible turbulence serving to elevate the dominance of the river in the view; this is particularly evident at very high flows, where not only are the rapids larger and longer but the water extends through the patch of boulders and riparian vegetation that splits the river at lower flows				

Water Resource Characteristics	Flow Ranges [a]				
	134–160 cfs	**331–381 cfs**	**719–826 cfs**	**879–1,000 cfs**	**3,600–3,800 cfs**
KOP 15					
Stream Habitat	Boulder run, riffle	Run, riffle	Run, riffle	Run, riffle	Run, riffle
Water Movement	Slow	Medium	Medium to rapid	Medium to rapid	Medium to rapid
Scale Contrast	Small	Small	Small to medium	Small to medium	Small to medium
Spatial Dominance	Co-dominant	Co-dominant	Dominant	Dominant	Dominant
Description	• At low to moderate flows, the visual characteristics of the river stay relatively consistent at this location; the general form, lines, and degree of visual turbulence change slightly as flows increase; the most noticeable change as flows increase is the degree to which rocks in the river channel are exposed (lower flows) or submerged (higher flows) • At high to very high flows, the water extends onto the low riverbanks partially submerging riparian vegetation and increasing the width of the river; there is also a noticeable increase in the level of turbulence at these higher flows				
KOP 16 (below the Fairview Dam Bypass Reach)					
Stream Habitat	Run, riffle	Run, riffle	Run, riffle	Run, riffle	Run, riffle
Water Movement	Medium	Medium	Medium	Medium	Medium
Scale Contrast	Small	Small	Small	Medium	Medium
Spatial Dominance	Co-dominant	Co-dominant	Co-dominant	Co-dominate	Co-dominate
Description	• The river maintains similar visual characteristics across a range of flows at this KOP; as flows increase, the primary differences in visual characteristics are a slight widening of the river into lower areas along its banks and additional areas of turbulence • At all flow levels, the river is co-dominate with other elements of the surrounding landscape				

cfs = cubic feet per second; KOP = key observation point

[a] Similar flows from Table 5.3-3 are grouped here for reporting purposes. The ranges are based on the flows (cfs) between the Fairview Dam (KOP 2) and the KR3 Powerhouse (KOP 16) that occurred on the scheduled KOP photography dates and times per U.S. Geologic Survey gage 401.

In general, at lower flows (under 160 cfs) the river level (amount of water) tends to be less prominent compared to other landscape features (e.g., vegetation, topography, rock outcrops) but still contributes positively to the overall scenic character of the Fairview Dam Bypass Reach. However, at very low flows (under 40 cfs), the lack of water creates an emphasis on other landscape features, in particular large boulder fields and riparian vegetation along the river channel, which reduces the visual complexity of the landscape (see Figures 5-2 through 5-4). At very high flows (over 3,000 cfs), the river takes on flood characteristics including water overflowing the banks, fully submerged rock outcrops, partially submerged riparian vegetation, and a much higher degree of turbulence (and associated color and texture changes). While impressive from a water volume standpoint, the visual characteristics under these very high flows tend to detract from the overall scenic integrity of the landscape (that is, the river becomes such a dominant feature to the detriment of other landscape elements).

Outside of these extremes, there is a high degree of visual variability across a range of moderate flows (generally between 160 and 1,000 cfs). This variability includes changes to the visibility of boulders in the river channel (exposed, partially submerged, fully submerged), the presence and magnitude of rapids, the width of the water in the river channel, and other visual changes in landscape elements. The degree of visual change depends in part on the viewing location, specifically the location of the KOP and the structure of the river channel that is visible from the KOP. At some KOPs, the visual changes associated with different moderate flow levels are minimal, while at others, the degree of visual changes is high (Attachment C). For example, at KOPs 3, 4, 8, and 16 there are small changes in the visual characteristics of the river across various moderate flow levels, while at KOPs 2, 9, 12, and 14, the changes in water volumes and corresponding changes in the visual characteristics across moderate flows are more pronounced.

Flows are an important component of the scenic integrity and aesthetic quality of the Fairview Dam Bypass Reach. Flows are also important for other resources including recreation, fish, vegetation, and others. The effects and flow-dependent needs of other resource areas are described separately in each resource area's Technical Memorandum (Appendix E.2 of the License Application).

5.4. REC-2 VISITOR QUESTIONNAIRE—AESTHETIC-RELATED QUESTIONS

Several aesthetics-related questions were added to the REC-2 visitor questionnaire to augment the public input process. These aesthetics-related questions are provided in Attachment B. Summarized responses from the entire year of data collection are provided below (the full results of the recreation survey, including a summary by season are available in the REC-2 Final Technical Memorandum [Appendix E.2 of the License Application]). These results are specific to visitors who were contacted within the Fairview Dam Bypass Reach unless noted otherwise.

Not only are some types of recreation dependent on flow levels, but others are enhanced by their scenic contribution to the overall recreational experience (Whittaker and Shelby, 2017). Specific to flows in the river, survey participants were asked if flow levels in the

Fairview Dam Bypass Reach affected their ability to participate in water-related activities. Overall, about 86 percent of visitors indicated that flows had no effect on their ability to participate in water-related activities. Approximately 9 percent of visitors indicated flows were too high, while slightly less than 4 percent of visitors responded that flows were too low for them to participate in a water-based activity. These responses are not specifically indicative of aesthetic preferences, although they do point to the influence of flow levels on recreation activity preferences and visitor satisfaction with the overall recreational experience.

For comparison purposes, visitors above the Fairview Dam responded similarly to those in the bypass reach in terms of the effect of flow levels on water-related activities. Slightly more than 86 percent of respondents above the dam also indicated that flows had no effect on their ability to participate in water-related activities. Additionally, about 11 percent and 3 percent of respondents above the dam reported that flow levels were too high or too low, respectively. A portion of the survey period coincided with abnormally high flow levels in the Kern River. This may have influenced the responses to this question (both above and below Fairview Dam); that is, high seasonal flows may have contributed to more visitors indicating that flows were too high compared to periods with more average flows.

According to the survey results, visitors highly rated the scenic quality of the Fairview Dam Bypass Reach. In total, slightly more than 96 percent of visitors rated scenic quality as “very good” (66.6 percent) or “good” (29.6 percent). This high rating is comparable to ratings of the scenic quality of the Kern River above the Fairview Dam Bypass Reach. About 98 percent of visitors above the Fairview Dam rated scenic quality as “very good” (71.7 percent) or “good” (26.7 percent) in the river reach above the dam. Only about 0.4 percent of visitors gave the scenic quality of the Fairview Dam Bypass Reach a poor rating (combination of “poor” [0.3 percent] and “very poor” [0.1 percent] responses). The reasons these visitors gave for the poor scenic quality included low river flows (2 responses), lack of great views (1 response), and the effects of fires on the area (1 response).

In terms of the scenic features that are most attractive in the Fairview Dam Bypass Reach, approximately 95 percent of visitors indicated either river flows (52.8 percent) or the general scenery of the area (42.3 percent). Flows (44 percent) and the general scenery (46.7) were also the most indicated scenic features of visitors who participated in the survey at recreation sites and use areas above the Fairview Dam. Based on the overall scenic ratings and percentage of visitors who value flows as an important scenic feature, visitors appear to be generally satisfied with flow levels in the Fairview Dam Bypass Reach from an aesthetics perspective.

This does not mean that there are not visitors who may be dissatisfied with some flow-related aesthetic characteristics in the Fairview Dam Bypass Reach. During public scoping and other commenting opportunities during the licensing process, some members of the public voiced their concerns about the aesthetic conditions in the bypass reach resulting from Project operations. However, when considered in aggregate with other sources of public perceptions of visual quality, including the visitor survey, the

majority of the visitors are satisfied with the aesthetic conditions and opportunities found throughout the Fairview Dam Bypass Reach.

The general satisfaction with flows is further supported by visitors' specific ratings of the scenic qualities of existing flows in the Fairview Dam Bypass Reach across the variety of flows found throughout the year. A majority of visitors (88.4 percent) rated the scenic conditions of flows in the bypass reach as either "very good" (56.7 percent) or "good" (31.7 percent). Less than 3 percent of visitors gave the scenic condition of flows a low rating (combined "very poor" and "poor" responses). Of those respondents who provided a negative rating of flows ("very poor" and "poor" responses), about 12 percent attributed their rating to low flows in the bypass reach.

Visitors also highly rated the scenic conditions of the general scenery and Project facilities in the bypass reach. More than 97 and about 85 percent of visitors rated the general scenery and Project infrastructure, respectively, as either "very good" or "good." These results further reinforce that visitors are satisfied with the current aesthetic conditions at the NFKR, including the specific aesthetic quality associated with flows, the general scenery, and Project infrastructure in the bypass reach.

Finally, nearly 21 percent of visitors indicated that they visited the Fairview Dam Bypass Reach specifically to participate in an aesthetic-oriented activity. These activities include photography, painting, scenic driving, viewing scenery, and viewing wildlife. These visitors most often visited the bypass reach area in spring and summer and took fewer trips to the area in fall and winter. This visitation pattern is similar to that of other visitors to the Fairview Dam Bypass Reach.

In general, the survey results are representative of a visitor population that highly rates the scenic opportunities or aesthetic conditions available in the Fairview Dam Bypass Reach. However, while aesthetic conditions and opportunities are an important component of the recreation experience, they are only one of many contributing factors to why most visitors choose to recreate in the bypass reach.

6.0 STUDY-SPECIFIC CONSULTATION

No study-specific consultation has occurred during the Level 1 desktop analysis.

7.0 OUTSTANDING STUDY PLAN ELEMENTS

All planned components of the AES-1 Level 1 Study have been completed to date.

8.0 RECOMMENDATION AND NEED FOR CONTINUED STUDY

This report captures all of the planned elements of the Level 1 aesthetics assessment, including a review of area management plans that address visual resources and scenic integrity, a general description of the aesthetic characteristics of the Fairview Dam Bypass Reach, and more detailed aesthetic characteristics under different flow conditions at specific locations (KOPs). It also incorporates input from visitors to the study area who participated in the REC-2 visitor questionnaire. Cumulatively, these sources of

information provide a robust understanding about aesthetic conditions in the Fairview Dam Bypass Reach and frame the types of scenic characteristics and changes to these characteristics under various flow levels.

Whittaker and Shelby (2017) does not provide specific criteria for evaluating the level of information needed to progress from one aesthetics study level to the next. However, Whittaker et al. (2005) provides a series of questions intended to help address the sufficiency of information to guide the progression from one study level to the next. These questions are presented in the context of whitewater boating flows but have been modified here for aesthetic purposes. The questions help determine if Level 1 information is sufficient or if additional study is necessary and include the following:

- Are there flow-dependent aesthetic opportunities on the river?
  - *Yes, the river is one of several landscape features that contributes to the overall scenic context and quality in the area. As noted in Section 5.3,* Key Observation Points, *river flows change throughout the year and influence the level of prominence of the river on the landscape.*
- Are flow-dependent opportunities affected by project operations?
  - *Seasonally yes, Project operations can divert up to approximately 600 cfs for Project generation once the minimum instream flow is met (ranging from 40 cfs up to 130 cfs, depending upon the month). However, as the Project is run-of-river and has no storage, there are numerous periods of time (days, weeks, or months) where the inflows above Fairview Dam far exceed the diversion capacity and flows spill over the dam. This typically occurs during spring run-off and storm events. The* WR-2 Hydrology Interim Technical Memorandum *(Appendix E.2) summarizes historical flows along the Fairview Dam Bypass Reach.*
- Are flow-dependent aesthetic conditions "important" relative to other resources or foregone power generation? If certain aesthetic conditions will not be considered when determining project operation decisions (e.g., if agencies and stakeholders agree that flow releases will be primarily driven by biological needs for an endangered species), more detailed information about flows may be unnecessary, and Level 1 information may be sufficient (assuming it documents stakeholder and agency agreement about this evaluation).
  - *Yes, aesthetic conditions are one of several resources that influence the overall recreational experience in the Fairview Dam Bypass Reach. As noted in Section 5.4, REC-2 Visitor Questionnaire—Aesthetic-Related Questions, many recreational activities are enhanced by their scenic contribution to the overall recreational experience, and the Fairview Dam Bypass Reach is known for its scenic quality and viewing opportunities. In addition, the bypass reach provides popular and easily accessible opportunities to angling, whitewater boating, and other shoreline-based activities (see the* REC-2 Final Technical Memorandum *[Appendix E.2] for additional information about visitor uses and activity preferences*

in the area). As such, aesthetics will be considered during the development of license conditions. A discussion of flows pertaining to aquatic resources is provided in Section 7.9, Aesthetic Resources, of the License Application.

- Does Level 1 information precisely define aesthetic flow ranges and potential project effects on aesthetic conditions?

  - *Yes, as documented in Section 5.3,* Key Observation Points*, aesthetic conditions change under different flows regimes in the Fairview Dam Bypass Reach. While these descriptions do not evaluate specific public flow preferences, they do provide an understanding of how flows influence aesthetic conditions. Per the results from the REC-2 visitor questionnaire, visitors value and highly rate the scenic quality and contribution of river flows to the overall aesthetic context of the bypass reach. Since the surveys were administered over the course of a year and at different flow levels, it appears that visitors' aesthetic preferences are not necessarily sensitive to flow levels. This is supported by the small percentage of visitors (3 percent) who gave the scenic condition of flows a low rating across the entire survey period. Therefore, while the AES-1 Study did not specifically evaluate visitors' preferences for precise flow ranges, there is enough related information to gage general flow preferences and sufficient historical hydrology data available to evaluate potential Project effects on aesthetics within these flow ranges. This evaluation is discussed in Section 7.9, Aesthetic Resources, of the License Application.*

Per Whittaker et al. (2005), if none of these questions are answered affirmatively, Level 1 information is probably not sufficient, and more intensive study (Level 2 or 3) may be necessary. Given the level of existing information about flows, aesthetic conditions, and hydrology in the Fairview Dam Bypass Reach, progressing to a Level 2 or 3 assessment is not warranted.

As noted above, one of the justifications for moving to a Level 2 or 3 assessment is to augment descriptive information with evaluative information about river flows to better establish a preferred range of flows under which scenic conditions are optimal (i.e., perceived as being more scenic). While there is value in evaluative processes, in this case, the descriptive scenic characteristics of the Fairview Dam Bypass Reach point to a wide range of moderate flows (160 to 1,000 cfs) under which the river exhibits characteristics that may be perceived as more or less scenic than other flows. This means that there is a high degree of variability in the scenic conditions created by different flow levels. As noted in Section 5.3, *Key Observation Points*, this variability is also dependent on the specific location (KOP) on the river from which the flow is observed. From a practical standpoint, this means that there is not one flow (or highly discrete range of flows) under which the river reach would exhibit optimal scenic conditions across all sites. Instead, there are multiple opportunities at multiple flow levels for the public to experience the river's aesthetic resources and perceive the scenic quality of these resources based on their specific preferences (e.g., low versus high flows, no to high levels of turbulence, presence of boulders and rock outcrops, variety and color of riparian vegetation).

Additionally, the flows in the river are not only influenced by Project operations, but also by seasonal water availability. The Project is a run-of-river (diversion) development without a large impoundment and so is subject to seasonal (and annual) changes in water availability and flows. As such, there is a normal fluctuation in flows and corresponding change in scenic characteristics that would be present with or without the Project. These variable flow-related characteristics are not unusual and similar to other rivers throughout the region, as noted in the *Final Environmental Impact Statement and Study Report North Form Kern Wild and Scenic River Study* (Forest Service, 1982). Given the range of average daily flows (see the *WR-2 Hydrology Interim Technical Memorandum* [Appendix E.2 of the License Application]) in the Fairview Dam Bypass Reach, there are times of the year across different seasons when flow levels are likely to be perceived as more scenic than others to different visitor groups under current operations. Importantly and as noted in Whittaker and Shelby (2017), optimal aesthetic flows do not need to be available at all times. While research suggests that the public generally perceives lower flows as less acceptable from a scenic quality standpoint, moderate and high flows (more commonly perceived as acceptable flows) are periodically available in the Fairview Dam Bypass Reach under existing conditions.

Finally, as acknowledged in Section 5.1, *Aesthetic/Scenic Components of Resource Management Plans*, the NFKR is a designated W&SR with the Fairview Dam Bypass Reach managed as, and to the standards of, a recreational river and the outstandingly remarkable values at the time of designation. The KR3 Project was constructed and operated for decades prior to the designation. Crucially, the establishing legislation specifically identifies and allows for the continued presence and operation of the Project. Furthermore, the W&SR study that was the basis for the federal designation indicated that the Project “does not create an extensive impoundment, nor does it greatly alter the free-flowing character of the river” (Forest Service, 1982). The current SQF LMP (Forest Service, 2023) provides management direction and guidance for the W&SR portions of the NFKR, including the Fairview Dam Bypass Reach.[3] The LMP does acknowledge that visual resources and aesthetics are an important component of the visitor experience, and as such, maintaining the aesthetic conditions in the river reach is pertinent to meeting the plan’s recreation objectives. However, it does not address desired conditions and standards related to aesthetic flows on the river. While not explicitly stated, the implication is that flows are important to the recreation experience, but specific aesthetic flows are not a critical resource value or standard by which to manage the W&SR designation of the bypass reach. This is supported by the results of the visitor survey that show that a majority of visitors to the Fairview Dam Bypass Reach are satisfied with current aesthetic conditions and do not identify flows as a factor that detracts from the visitor experience.

The License Application further addresses current and future aesthetic flows under the proposed new license conditions.

[3] The plan updates and supersedes earlier environmental documents and management plans for the W&SR.

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APPENDIX A
AESTHETIC INVENTORY FORM

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KR3 Relicensing Project
Aesthetics Study
Field Inventory Form

Name:_____ **Date:**_____ **Time**:_____ **Weather:**_____ **Bypass cfs:**_____

1. VIEWPOINT INFORMATION
KOP No.: _____ KOP Name/Description: _____
GPS No. : _____ GPS Reading: _____
Distance From River Edge (ft): _____ Elevation Above River (ft): _____
Reference Points: _____
Photo No./Direction: _____

Notes

2. WATER RESOURCES
Stream Habitat (circle visible): boulder pocket water boulder run cascade deep pool shallow pool run riffle
Water Movement (circle visible): none slow medium rapid falls
Scale Contrast (circle one): small/minimal medium/moderate large/severe
Spatial Dominance (circle one): subordinate co-dominate dominant
Characteristic Landscape Description (Select: strong, moderate, weak, or none):
_____form _____line _____color _____texture

Notes

3. LANDFORM
Type (circle visible): river valley hills mountains cliffs/rock outcrops other
Scale Contrast (circle one): small/minimal medium/moderate large/severe
Spatial Dominance (circle one): subordinate co-dominate dominant
Characteristic Landscape Description (Select: strong, moderate, weak, or none):
_____form _____line _____color _____texture

Notes

4. VEGETATION
Shade Cover (circle one): 0-25 percent 26-50 percent 51-75 percent 76-100 percent
Diversity (circle one): none little present substantial extensive
Scale Contrast (circle one): small/minimal medium/moderate large/severe
Spatial Dominance (circle one): subordinate co-dominate dominant
Characteristic Landscape Description (Select: strong, moderate, weak, or none):
_____form _____line _____color _____texture

Notes

5. LAND/WATER USE AND STRUCTURES

Intensity (circle one): undeveloped dispersed developed

Type (circle visible): campground day use area river access city park
dispersed camping trail dirt road highway

Structures (circle one): none/undeveloped few/low development moderately developed
many/highly developed

Scale Contrast (circle one): small/minimal medium/moderate large/severe

Spatial Dominance (circle one): subordinate co-dominate dominant

Characteristic Landscape Description (Select: strong, moderate, weak, or none):

_____form _____line _____color _____texture

Notes

6. USER ACTIVITY

Time of Day: morning noon evening

Frequency: low moderate high

Activity Type: camping WW boating fishing swimming hiking birding/wildlife viewing sightseeing cycling off-roading picnicking highway driving

Viewer Attentiveness (circle one): fleeting competing focused

Notes

7. OTHER CONSIDERATIONS

Smells (circle one in each row): present absent
dominant inconspicuous discordant harmonious

Sound of River? (circle one in each row): present absent
dominant inconspicuous discordant harmonious

Other Sounds (circle one in each row): present absent
dominant inconspicuous discordant harmonious

Raw Visibility (circle one in each pair): unscreened partially screened screened panorama
inferior normal superior

Distance in Relation to River (circle one): 0-30ft 31-100ft 101-300ft

Elevation in Relation to River (circle one): 0-20ft 21-50ft 51-100ft

Notes

8. OVERALL SCENIC INTEGRITY RATING

(Based on discussion in Chapter 2 and examples in Appendix H of the SMS Handbook

Scenic Integrity Rating:

_____very high ____high _____moderate ___low _____very low ____unacceptably low

Notes

APPENDIX B
REC-2 VISITOR QUESTIONNAIRE—AESTHETIC-RELATED QUESTIONS

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The REC-2 Final Visitor Intercept Survey Questionnaire is provided in the *REC-2 Recreation Facilities Use Assessment Final Technical Memorandum* (included in Appendix E.2 of Exhibit E of the License Application). The aesthetics-related questions from the survey are provided below.

17. If you participated in a water-related activity, did the flows in the North Fork Kern River affect your ability participate?

YES (select one): □ flow was too high □ flow was too low

□ other (explain) _____

□ NO: flow did not affect planned activities

□ N/A: did not partake in water-related activity

23. How would you rate the scenic quality of the NFKR area in general on a scale of 1-5, with 1 indicating very poor and 5 indicating very good?

Scenic Features	1 Very Poor	2 Poor	3 Neutral	4 Good	5 Very Good
General Scenic quality of NFKR area					

If you rated Very Poor (1) or Poor (2), please explain:

_____

24. What is the scenic feature that most attracted you to this area of the NFKR? Select top feature:

a. General scenery such as rock outcrops, mountains and valleys

b. Flows in the North Fork Kern River

c. Project infrastructure (flowline, Powerhouse, Dam, other built facilities)

d. Other: please provide: _____

e. Scenery was not a consideration when selecting this location

25. How would you rate the following scenic qualities in the area between Fairview Dam and the Kern River No. 3 Powerhouse on a scale of 1 to 5, with 1 indicating very poor and 5 indicating very good?

Scenic Features	1 Very Poor	2 Poor	3 Neutral	4 Good	5 Very Good
General scenery such as rock outcrops, mountains and valleys					
River flows between Fairview Dam and KR3 Powerhouse					
Project infrastructure (flowline, Powerhouse, Dam, other built facilities)					

If you rated Very Poor (1) or Poor (2) for any above, please explain:

_____

26. Over the past 12 months, how often have you visited the area to partake in photography, painting, scenic driving, viewing scenery, and/or viewing wildlife?

a. Never _____

b. This is my first time _____

c. Spring (March–May) #____

d. Summer (June–August) #_____

e. Fall (September–November) #_____

f. Winter (December–February) #_____

APPENDIX C
KEY OBSERVATION POINT PHOTOGRAPHS

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KOP 1—FAIRVIEW DAM

September 18, 2023: 134–160 cfs flow range

September 6, 2023: 331–381 cfs flow range

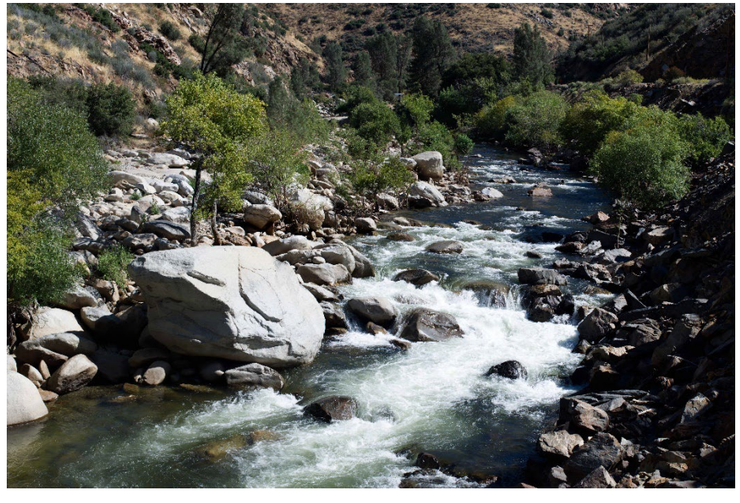
August 27, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 2—BOMBS AWAY

September 18, 2023: 134–160 cfs flow range



September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 3—MCNALLY'S BRIDGE

September 18, 2023: 134–160 cfs flow range

September 6, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 4—CHAMISE FLAT

September 18, 2023: 134–160 cfs flow range

September 6, 2023: 331–381 cfs flow range

August 27, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 5—BLACK BOTTOM FALLS

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 6—UPPER SALMON FALLS

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

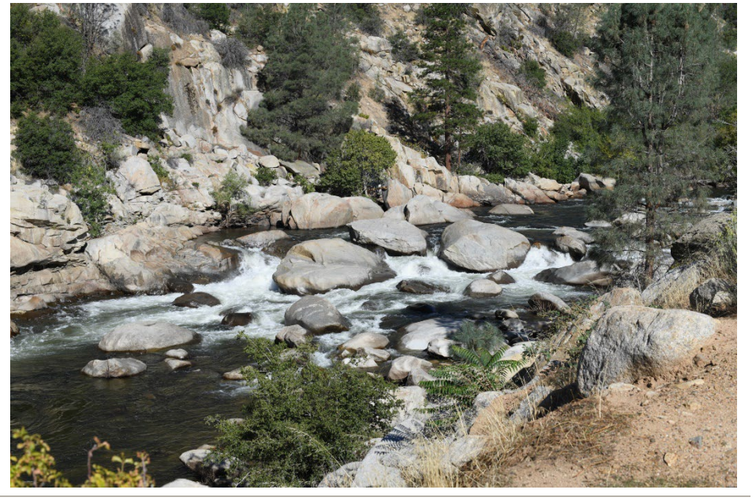
August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 7—LOWER SALMON FALLS

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range



August 28, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 8—SCREAMING RIGHT TURN 1

September 18, 2023: 134–160 cfs flow range

September 6, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

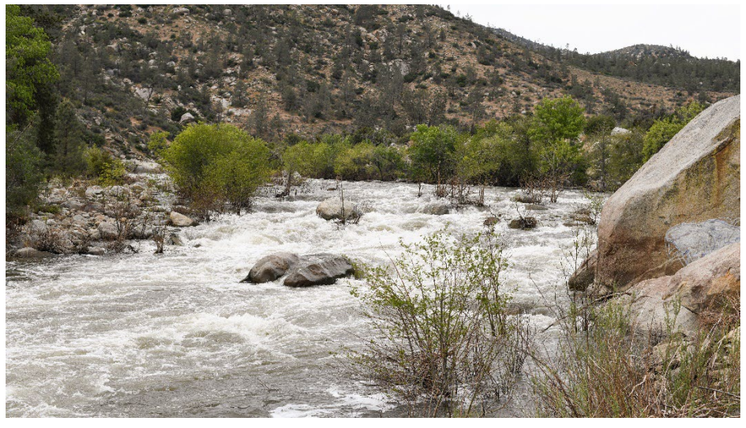
KOP 9—SCREAMING RIGHT TURN 2

September 19, 2023: 134–160 cfs flow range

September 6, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range



May 9, 2023: 3,676–3,874 cfs flow range

KOP 10—SPRINGHILL NORTH

September 18, 2023: 134–160 cfs flow range

September 6, 2023: 331–381 cfs flow range

August 27, 2023: 719–829 cfs flow range

August 9, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 11—CORRAL CREEK PUT-IN

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 12—CORRAL CREEK RD 15-18

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

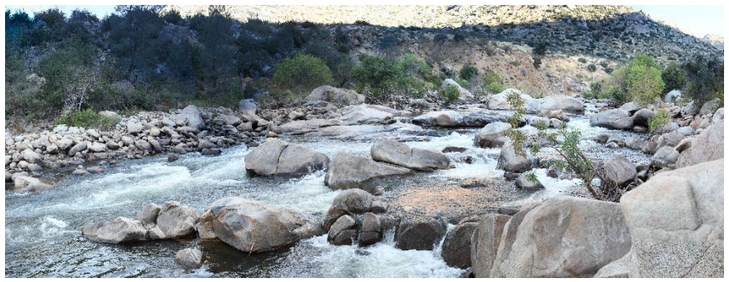
August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 13—CHICO FLAT FLUME RAPID

September 19, 2023: 134–160 cfs flow range



September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 14—FENDER BENDER

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 15—KERN RIVER BEACH

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range

KOP 16—KERN RIVER NO. 3 POWERHOUSE

September 19, 2023: 134–160 cfs flow range

September 7, 2023: 331–381 cfs flow range

August 28, 2023: 719–829 cfs flow range

August 10, 2023: 891–1,000 cfs Flow Range

May 9, 2023: 3,676–3,874 cfs flow range