REC-1 WHITEWATER BOATING
INTERIM TECHNICAL MEMORANDUM

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

PREPARED FOR:

SOUTHERN CALIFORNIA EDISON®
Energy for What's Ahead®

KERNVILLE, CALIFORNIA

October 2023

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LIST OF ACRONYMS AND ABBREVIATIONS

AW	American Whitewater
cfs	cubic feet per second
COVID-19	coronavirus disease 2019
FERC	Federal Energy Regulatory Commission
KR3	Kern River No. 3
KRB	Kern River Boaters
NFKR	North Fork Kern River
Project	Kern River No. 3 Hydroelectric Project (FERC Project No. 2290)
PSA	participant survey analysis
QR code	quick-response code
SCE	Southern California Edison
SPD	Study Plan Determination
SQF	Sequoia National Forest
SUP	Special Use Permit
SWRCB	State Water Resources Control Board
URL	Uniform Resource Locator
USFS	U.S. Forest Service
USR	Updated Study Report
WY	water year

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1.0 INTRODUCTION

This interim Technical Memorandum provides the methods and findings of the Level 1 Desktop Review of Existing Information and Level 2 Limited Reconnaissance associated with the *REC-1 Whitewater Boating Study Plan* in support of Southern California Edison's (SCE) Kern River No. 3 (KR3) Hydroelectric Project (Project) relicensing, Federal Energy Regulatory Commission (FERC) Project No. 2290. The REC-1 Study was included in SCE's Revised Study Plan submitted on July 1, 2022 (SCE, 2022). In the October 12, 2022, Study Plan Determination (SPD) (FERC, 2022), FERC approved the REC-1 Study with modifications. Specifically, FERC recommended SCE expand the number of structured interviews by developing a structured interview questionnaire available online to the whitewater community, allow up to 12 participants plus interested agency representatives to participate in the Level 2 Limited Reconnaissance, and include the potential for a Level 3 controlled flow study unless the results of the Level 1 and Level 2 studies show that a controlled flow study is unnecessary. The modifications recommended by FERC in the SPD have been incorporated into the study methods and are included in this report for the work completed to date.

This interim Technical Memorandum includes data collected from November 2022 through September 2023 and is being filed with FERC as part of SCE's Initial Study Report. SCE will complete additional work for this study in fall 2023 and into 2024, with study results included as part of the Draft License Application and/or Updated Study Report (USR).

2.0 STUDY GOALS AND OBJECTIVES

The goals of this study are to (1) document the whitewater boating opportunities and the range of whitewater boating flows in the approximately 16-mile bypass reach of the North Fork Kern River (NFKR) from Fairview Dam to the KR3 Powerhouse tailrace (i.e., the Fairview Dam Bypassed Reach) and from the KR3 Powerhouse to the Kern River Park in Kernville under current license conditions; (2) identify potential operational constraints on whitewater boating; and (3) evaluate public safety concerns associated with boating flows.

The study has the following objectives:

- Describe the whitewater boating segments in the NFKR from Fairview Dam to Kernville including the length, whitewater difficulty, name of key rapids, and typical access locations for put-in and take-out.

- Identify the range of flows (minimum acceptable and optimum) that would provide whitewater boating opportunities in each whitewater segment for a variety of watercraft including, kayaks, rafts, packrafts, stand-up paddleboards, and body boards.

- Quantify the annual frequency that minimum acceptable and optimum whitewater flows occur in each whitewater segment with Project operations and unimpaired flows for each watercraft type.

- Document potential conflicts of boating flows with other recreation users and identify strategies to mitigate those conflicts.

3.0 STUDY AREA AND STUDY SITES

The study area includes the approximately 16-mile Fairview Dam Bypass Reach from Fairview Dam to the KR3 Powerhouse tailrace and the NFKR from the KR3 Powerhouse to the Riverside Park in Kernville. The Fairview Dam Bypass Reach contains eight whitewater segments ranging in whitewater difficulty from Class II to Class VI (Figure 3-1). The river can be accessed from multiple locations including designated and informal access locations.

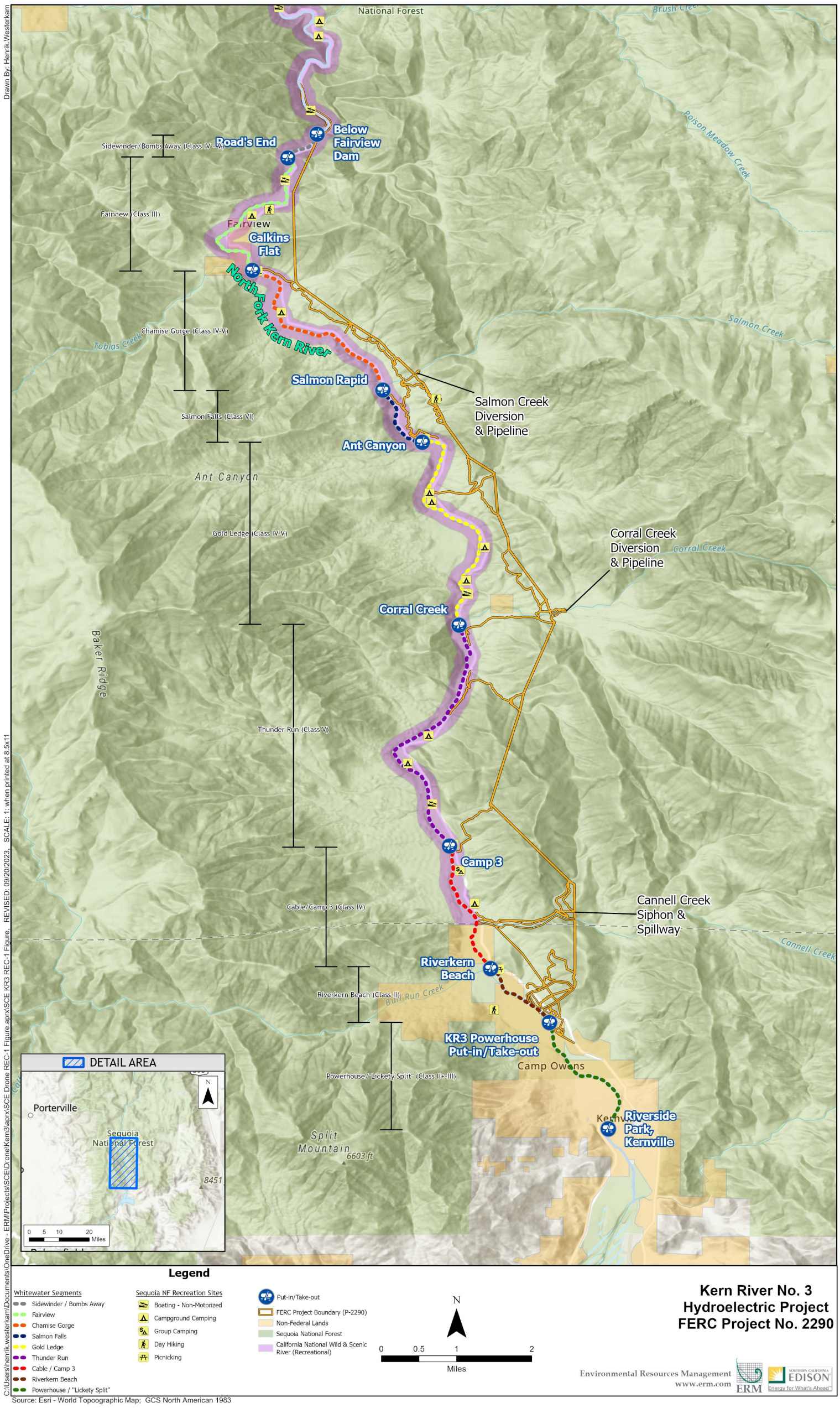

Figure 3-1. Whitewater Boating River Segments in the Study Area.

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4.0 METHODS

The REC-1 Study follows the methods in *Flows and Recreation: A Guide to Studies for River Professionals* (Whittaker et al., 2005). The 2005 publication outlines a sequential framework to investigate flow dependent recreation opportunities using various investigative tools across three progressive levels of study. Progression through the framework affords a better understanding of the whitewater recreation opportunities and flow needs in each segment of the bypass reach. The three levels of study increase data resolution as investigations progress from one level to the next and share interim results earlier in the relicensing process across resource disciplines.

Study Plan Variances

There are no variances for the REC-1 Study approved in the FERC SPD (FERC, 2022) issued in October 2022.

4.1. LEVEL 1: DESKTOP REVIEW OF EXISTING INFORMATION

The Level 1 Desktop Review of Existing Information included the following elements:

- Literature review
  - Literature review included the 1994 Whitewater Flow Study (SCE, 1994), whitewater guidebooks, magazine publications with a focus on whitewater recreation, and online river information pages.
  - A table summarizing whitewater opportunities in the Kern River basin was compiled with the name of the whitewater run, river name, put-in and take-out location, length, gradient (feet per mile), and whitewater difficulty in the Pre-Application Document (SCE, 2021).
  - Detailed information on the whitewater segments from Fairview Dam to Riverside Park in Kernville are provided in this technical memorandum. Information includes length, gradient, whitewater difficulty, as well as formal and informal access points.
  - Summary of commercial and private whitewater boating use where available, using records from the Sequoia National Forest (SQF) and/or provided by local commercial outfitters.
  - Summary of regulatory agency resource management goals and Tribal interests where applicable, from Fairview Dam to Kern River Park.
- Hydrology summary
  - Utilize the hourly gage data compiled as part of *WR-2 Hydrology Study Plan* (SCE, 2022), include a summary of the hydrology in the Fairview Dam Bypass Reach

under impaired and unimpaired conditions, as well as the river segment from KR3 Powerhouse to Riverside Park in Kernville.

  - The hydrology summary includes discharge frequency, timing, duration, and magnitude. Data will be reported using mean, median, interquartile and range.

- Project facility evaluation

  - Description of Fairview Dam impoundment storage and gate operation.

- Structured interview questionnaire

  - Develop and distribute a structured interview questionnaire for the whitewater boating community, including commercial and non-commercial boaters.

  - The structured interview questionnaire focused on individual knowledge of the whitewater segments from Fairview Dam to Riverside Park in Kernville. Respondents were asked to estimate the range of preferred flows for each segment for respective watercraft; document knowledge gaps for estimating the range of preferred flows; evaluate flow information; and indicate whitewater use patterns for commercial and non-commercial boaters.

  - Distribute the structured interview questionnaire to the boating community through electronic communication and flyers distributed to local outfitters, the U.S. Forest Service (USFS) office in Kernville, and posted at various whitewater put-in/take-out locations along the Fairview Dam Bypass Reach.

Information obtained in the Level 1 investigation was used to support and guide the Level 2 Limited Reconnaissance.

4.2. LEVEL 2: LIMITED RECONNAISSANCE

The Level 2 investigation included a limited reconnaissance site visit on August 25, 2023, with study participants consisting of agency staff and boaters as described in the study guidance in Whittaker et al. (2005). The elements of the Level 2 Limited Reconnaissance are described below.

Limited Reconnaissance

- Conduct a site visit for direct observation of the whitewater boating segments from Fairview Dam to Riverside Park in Kernville with a group of study participants consisting of agency staff and boaters.

  - SCE distributed a Level 2 participant self-nomination form (Appendix A) to the KR3 Stakeholder List requesting individuals in the boating community nominate themselves to participate in the Level 2 Limited Reconnaissance Site Visit. The form requested information from individuals on the type of watercraft boated, skill

level, and knowledge of the whitewater boating segments in the approximately 16-mile bypass as well as commercial and non-commercial backgrounds.

- Resource agency staff were invited to participate in the Level 2 Limited Reconnaissance site visit and asked to respond for logistical planning purposes.

- Information collected during the Level 2 Limited Reconnaissance included the following:
  - Review of information collected in Level 1 to confirm accuracy and revise where necessary based on input from Level 2 study participants and field observations;
  - Preliminary estimates of flow preferences for respective watercraft types for each whitewater segment and potential knowledge gaps in flow preferences based on input from study participants;
  - Information on factors influencing flow preferences for respective whitewater segments based on recommendations from study participants;
  - Recreation use patterns in the river segments from Fairview Dam to Riverside Park, e.g., watercraft use by segment, segments typically combined, preferred segments for respective watercraft types and skill levels, and timing of use per respective whitewater segment (weekday, weekend, time of day);
  - Visits to formal and informal access locations used for respective whitewater segments; and
  - Flow information use and needs:
    - How boaters currently utilize flow information?
    - How boaters assess flow conditions on-site for respective whitewater segments, e.g., visual inspection of staff gages, rocks, etc.?
    - What are the whitewater boating community's flow information needs?

The Level 2 Limited Reconnaissance Site Visit coupled with the study participant recommendations increased the precision of estimated boating flow ranges for respective whitewater segments and watercraft types as well as knowledge of recreation use patterns in the river segments from Fairview Dam to Riverside Park. Information obtained in the Level 1 and Level 2 investigations is being used to support and guide planning and implementation for the Level 3 Intensive Study.

4.3. LEVEL 3: INTENSIVE STUDY

The Level 3 Intensive Study collects flow preference information directly from whitewater boaters for a variety of watercraft for the respective whitewater segments using a single flow survey for individual trips and a flow comparison survey for a range of flows. These

survey tools are one of the approaches recommended by Whittaker et al. (2005) for the Level 3 Intensive Study. The single flow survey and flow comparison survey are similar to other studies conducted by American Whitewater (AW) to collect flow preference information and recreation use patterns on rivers where a controlled flow study is not possible and/or that have unpredictable flow conditions (AW, 2017 and 2021).

The lack of storage in the reservoir at Fairview Dam, coupled with the uncertainty of the snowmelt hydrograph of the NFKR, severely limits the scheduling and flow volume for a controlled flow study. Recommended boating flows in guidebooks and online greatly exceed the capacity of Fairview Dam to provide flows in a controlled flow study format. The online single flow and flow comparison survey resolves the limitations of a controlled flow study at the Project. The single flow survey and flow comparison survey is not limited to the unpredictable snowpack and associated flows during the Integrated Licensing Process study period. Whitewater boaters can provide input immediately after completing individual boating trips using the single flow survey and complete the flow comparison survey based on their collective experience over the study season including past experiences over a wide range of water year (WY) types. Furthermore, the online single flow and flow comparison survey approach greatly expands the pool of study participants regardless of geographic location or schedule. The goal of the survey is to improve the precision for developing flow preference curves for a variety of watercraft types for the respective whitewater segments from Fairview Dam to Kern River Park. In concert with the online survey, and when feasible, SCE will attempt to enhance flows where potential gaps may exist in user experiences of flow conditions. Flow enhancement may include diverting a portion of flow over Fairview Dam to target specific flow ranges where knowledge gaps were identified in Levels 1 and 2 of the study. Enhanced flows will be opportunistic, not scheduled in advance, and subject to available inflows and tunnel flow needs.

SCE will make a good-faith effort to inform the boating community in advance when hydrologic conditions for opportunistic flow enhancements are likely possible. If flows are likely to allow for such enhancement, SCE will reach out to Kern River Boaters (KRB), AW, Los Angeles Kayak Club, Dreamflows, and outfitters holding permits with SQF. This is not a guarantee of a particular flow, just an indication that there may be the possibility of flow enhancement within the diverted reach outside the ordinary whitewater release schedule based on forecasted inflows upstream of Fairview Dam. This good faith effort will attempt to give boaters advance notice to plan trips to the river using forecasting technology available to SCE at the time of study to encourage additional boater use at the targeted flows and participation in the single flow survey. Ideally, boaters will be notified 2 to 3 days in advance to plan a trip. However, inflows to the Project are subject to run-off patterns, which are difficult to forecast in advance.

Results from the *OPS-1 Water Conveyance Assessment* Study (SCE, 2022) may become available prior to or during implementation of the Level 3 study. Additional tunnel operations flexibility identified in the OPS-1 Study beyond the current license condition may be used in the Level 3 Intensive Study to provide flows that satisfy knowledge gaps discovered in Levels 1 and 2.

In the SPD, FERC requested SCE provide justification that the information collected is sufficient to develop flow preference curves without the need for a controlled flow study.

The elements of the Level 3 Intensive Study are described below.

- The whitewater single flow survey was published online April 1, 2023 (Appendix B).
  - Information collected in Levels 1 and 2 was used to help develop an online single flow survey.
  - The single flow survey allowed respondents to evaluate individual flows shortly after experiencing them. Respondents were asked name, zip code, date, time, watercraft type, and river segment(s), and rated the acceptability of the flow using the quantitative 5-point acceptability scale in Whittaker et al. (2005). Single flow survey questions were formatted for viewing on smart phone screens.
  - Posters containing the link to the single flow survey including a quick-response (QR) code were installed at river access locations and distributed to local retailers in Kernville as well as distributed electronically to local, regional, and national whitewater boating groups and accessible on the KR3 relicensing website (Appendix B).
- A whitewater flow comparison survey will be published online in 2024.
  - Information collected in Levels 1 and 2 as well as the Level 3 single flow survey will be used to develop an online whitewater flow comparison survey.
  - The online whitewater flow comparison survey will be designed to obtain information on flow preferences between minimum acceptable and optimum flow for respective whitewater river segments from Fairview Dam to Riverside Park. Survey questions will ask respondents to rate the acceptability of a range of flows for each whitewater segment and watercraft type, timing of use, preferred whitewater segments, river access locations, flow information needs and comparison with other whitewater opportunities in the Kern River basin. The range of flows presented in comparative flow questions will be based on information gathered in Levels 1 and 2 as well as the Level 3 single flow survey.
  - The link to the online whitewater flow comparison survey will be distributed to local, regional and national whitewater boating groups and accessible on the KR3 relicensing website.
- Whitewater focus group
  - The Level 3 Intensive Study will include a focus group designed to gather information from boaters with direct experience on the whitewater river segments from Fairview Dam to Riverside Park. Focus group questions will prompt discussion on suitable range of flows for a variety of watercraft for each whitewater segment; navigability and whitewater difficulty across a range of flows; preferred

whitewater segment(s) from Fairview Dam to Riverside Park; daily, weekly, and seasonal use patterns; flow information needs; river access; safety; other areas of concern; and uniqueness of the whitewater river segments compared to other opportunities in the region.

  - Focus group participants will be identified in advance and nominated collaboratively with the whitewater community. Selection will be based in part on knowledge of whitewater boating opportunities in the Kern River basin and direct experience on the river segments from Fairview Dam to Riverside Park. The focus group will include representation across watercraft types, commercial and non-commercial as well as the local boating community and boaters traveling to paddle on the bypass from outside the North Fork Kern watershed.

- Hydrology analysis

  - Quantify annual number of days of whitewater boating using flow preference curves developed from data collected in the online single flow and flow comparison survey and supplemented with information obtained in focus groups. Analysis will be done for respective watercraft in each whitewater segment under impaired and unimpaired hydrology in the Fairview Dam Bypass Reach.

Public safety concerns associated with whitewater boating flows will be documented using available information such as the Kernville Chamber of Commerce, SQF, California Department of Boating and Waterways, AW accident database and other FERC proceedings where whitewater releases occur. Potential measures to mitigate public safety concerns will also be described.

Potential recreation-use conflicts associated with whitewater boating flows will be identified where possible. Recreation uses occurring in and adjacent to the NFKR documented in the *REC-2 Recreation Facilities Use Assessment* Study (SCE, 2022) will be integrated into the REC-1 USR. Potential flow-related conflicts will be described based on REC-2 survey responses. Mitigation measures to minimize recreation conflicts will be identified where appropriate.

5.0 DATA SUMMARY

The data summary includes results for the Level 1 Desktop Review of Existing Information and the Level 2 Limited Reconnaissance.

5.1. LEVEL 1: DESKTOP REVIEW OF EXISTING INFORMATION

The Level 1 Desktop Review of Existing Information includes literature review, hydrology analysis, and structured interview questionnaire.

5.1.1. LITERATURE REVIEW

The NFKR is a popular whitewater destination offering seasonal whitewater boating opportunities. The whitewater boating opportunities on the Kern River are described in

numerous whitewater guidebooks (Holbek and Stanley, 1988; Cassidy and Calhoun, 1990; Penny, 1991) as well as online sources such as AW River Information pages, the Upper Kern River Rafting Guide (Kern River Outfitters, 2023), and commercial whitewater outfitter websites. Most paper guidebooks and even online sources list the whitewater opportunities in the bypass reach as a single or, at the most, two whitewater segments breaking down the bypass further in the narrative description based on specific rapids and difficulty. These guidebooks provide a broad overview of whitewater boating in the bypass reach but lack the detail describing the variety of whitewater boating opportunities between the different whitewater segments, the river access, difficulty, and flow preferences unique to each segment. The Upper Kern River Rafting Guide divides the upper Kern from Johnsondale Bridge into seven distinct segments with detailed descriptions of rapids and locations in each segment (Kern River Outfitters, 2023).

The REC-1 Study divided the Fairview Dam Bypass Reach into eight whitewater segments and included a ninth segment downstream of the bypass reach from the KR3 Powerhouse to Riverside Park in Kernville (Table 5.1-1). Delineation into these river segments was based in part on whitewater difficulty, river access, whitewater boating community use patterns, and commonly used place names. Dividing the bypass reach based in part on whitewater difficulty and community use patterns allowed for more detailed segment specific analysis of flow preferences.

Table 5.1-1. Whitewater Runs in the Fairview Dam Bypass Reach and Directly Downstream of KR3 Powerhouse

Whitewater Run Segment	Whitewater Difficulty [a]	Put-in	Take-out	RM Start [b]	RM End [b]	Length (miles)
Sidewinder / Bombs Away	IV – V	Below Fairview Dam	Roads End/ Calkins Put-in	18.5	18	0.5
Fairview	III	Roads End / Calkins Put In	Calkins Flat	18	15.7	2.3
Chamise Gorge	IV – V	Calkins Flat	Above Upper Salmon Rapid	15.7	13.2	2.5
Salmon Falls	VI	Below Lower Salmon Rapid	Ant Canyon	13.2	12.3	0.9
Gold Ledge	IV – V	Ant Canyon	Corral Creek	12.3	9.2	3.1
Thunder Run	V	Corral Creek	Thunderbird Access or Camp 3	9.2	5.7	3.5
Cable / Camp 3	IV	Camp 3	Riverkern Beach	5.7	3.9	1.8
Riverkern Beach	II	Riverkern Beach	KR3 Powerhouse Put-in/Take-out	3.9	2.9	1
Powerhouse / “Lickety Split”	II+–III	KR3 Powerhouse Put-in/Take-out	Riverside Park, Kernville	2.9	1.1	1.8

KR3 = Kern River No. 3; NFKR = North Fork Kern River; RM = River Mile
Notes:
[a] International Scale of Whitewater Difficulty
[b] River miles are calculated using National Hydrologic Database flowlines and upstream of the confluence of the NFKR and high watermark of Isabella Lake.

The whitewater difficulty across the nine whitewater segments ranges from Class II to VI, depending on flow. Boaters often combine one or more river segments into a single trip for a longer paddling opportunity and in some cases will paddle the entire length of the bypass reach plus the downstream Lickety Split run to Riverside Park in Kernville. Some boaters do a bridge-to-bridge run, putting in at Johnsondale Bridge and taking out at Riverside Park in Kernville just downstream of the Burlando Road bridge. A bridge-to-bridge involves portaging around Fairview Dam and Salmon Falls.

SQF manages developed river access sites throughout the bypass reach. All eight of the whitewater segments in the bypass reach have developed river access sites with the exception of the segment directly below Fairview Dam (Sidewinder / Bomb's Away) and the Class VI Salmon Falls segment.[1] The close proximity of Mountain Highway 99 provides additional access to the river at undeveloped locations. This allows boaters to split up and/or combine river segments based on their personal preferences. Factors may include available time, whitewater difficulty, group size, flow, etc.

Several additional whitewater boating opportunities exist upstream of the Project on the mainstem of the NFKR and on tributaries (SCE, 2021). The mainstem runs upstream of the bypass include the Class V+ Headwaters of the Kern, which is a remote 40-mile wilderness run requiring a 23-mile hike over mountain passes to reach the put-in (AW, 2023a). The popular Forks of the Kern is another wilderness run directly downstream of the Headwaters. The Forks run offers 14.6 miles of Class III to V whitewater and requires a 3-mile hike to the put-in (AW, 2023b). The Forks run terminates at Johnsondale Bridge on Mountain Highway 99. The 2.4-mile river segment from Johnsondale Bridge to Fairview Dam is known as the Limestone Run. The Limestone Run contains Class III to IV whitewater (AW, 2023c; Holbek and Stanley, 1988). Two NFKR tributaries upstream of Fairview Dam are popular with boaters. The iconic Dry Meadow Creek is a 1.8-mile Class V tributary that enters the NFKR on the Forks run (AW, 2023d). Brush Creek, another iconic California creek popular with whitewater boaters, enters the NFKR upstream of Fairview Dam in the Limestone run. Brush Creek is a 1.4-mile Class V run (AW, 2023e).

Several other whitewater opportunities occur downstream of Lake Isabella Lake on the lower Kern River. These whitewater runs include the Class II-III Jungle Run (AW, 2023f); the Class III-V Miracle to Democrat Hot Springs (AW, 2023g; Holbek and Stanley, 1988); the Class IV-V+ Below Democrat to Kern #1 Powerhouse, which contains three distinct segments known as the Cadillacs (Class V); Richbar (Class III-IV); and the Cataracts (Class V+) (AW, 2023h; Holbek and Stanley, 1988). Two additional whitewater opportunities exist downstream of the Kern River Canyon: the Class IV Rio Bravo run (AW 2023i) and the Class I-II Rancheria Road to Hart Park run (AW, 2023j).

A range of watercraft are used in the bypass reach for whitewater boating. These watercraft include rafts, catarafts, open canoes, closed-deck canoes, hardshell kayaks, inflatable kayaks, pack rafts, river boards, and stand-up paddleboards. Other types of watercraft may be used intermittently but are less common. Self-bailing rafts, catarafts,

[1] SQF does not manage the ninth segment, which is outside of the bypass reach.

and hardshell kayaks are the most common types of whitewater watercraft used in the bypass reach. Raft and cataraft lengths vary with water level and river segment. Hardshell kayaks include low-volume play boats, medium volume half-slice river runners, and larger volume creek boats. Kayak choice is typically driven by individual whitewater skill, water level, river segment, and desired experience. Tubing is also popular on the Riverkern Beach and Powerhouse / Lickety Split segments particularly in the summer months when flows are lower and water temperatures warmer. Several Kernville retail shops rent tubes to the public and even provide shuttles to the river. Tubing is not recommended at higher flows. In 2023, tubing was not advised due to the high water conditions.

5.1.1.1. Non-Commercial Whitewater Use

The SQF requires non-commercial whitewater boaters on the NFKR to obtain a Kern River Use Permit. Permits are required for each watercraft, are free of charge, and valid from May 1 through the following April 30 (SQF, 2023). The Kern River Use Permit was suspended during the COVID-19 pandemic (personal communication, Bob Frenes, Assistant Recreation Officer on the Kernville Ranger District, SQF, August 17, 2023). In addition, non-commercial whitewater boaters are required to complete a daily river use manifest (USFS #13-2360-6) for each trip on the NFKR. Drop boxes referred to as “Iron Rangers” are located at developed river access sites. Daily manifest forms were not available in the Iron Rangers at river access sites during the May and August site visits or the Kernville District Ranger office. The SQF does not record the daily manifests or tabulate the number of non-commercial boaters using the NFKR. As a result, annual non-commercial whitewater use numbers are not available for the NFKR.

5.1.1.2. Commercial Whitewater Use

Commercial outfitters offer whitewater rafting trips to the public on the NFKR ranging in duration from approximately 1 hour on the Class II-III Powerhouse / Lickety Split Run to multiday overnight trips with Class IV-V rapids on the Forks of the Kern. Commercial rafting trips occur on all whitewater segments in the bypass reach with the exception of Sidewinder / Bomb’s Away due to access restrictions and Salmon Falls due to the Class VI difficulty. Trips offered in the bypass reach are advertised as intermediate to advanced in difficulty while the Powerhouse / Lickety Split segment is considered suitable for beginners. Trips can range from 1 to 2 hours, half-day, and full-day. The half-day and full-day trips typically combine multiple whitewater segments. These trips advertise Class III-IV rapids.

Commercial outfitters select segments for raft trips based in part on water levels, watercraft, customer skill level, and length of trip purchased by customers. Buses and trailers are used on Mountain Highway 99 to transport commercial customers to river access locations. In some cases, commercial outfitters may utilize their buses and trailers to transport raft customers around a river segment due in part to insufficient skills for the whitewater difficulty in a given segment or inadequate flow for the watercraft being used. Commercial outfitters may also transport raft customers back upstream in the same trip to repeat a whitewater segment to improve customer skills before tackling a more difficult segment or simply repeat because of the quality of the whitewater in the segment. During

low water conditions, commercial outfitters may utilize smaller watercraft or substitute advertised trips for other river opportunities where available.

Several commercial outfitters also offer kayak instruction on the Kern River ranging from beginner classes to advanced instruction. Scheduled group classes are offered as well as private instruction. Class lengths range from 1 to 5 days.

The SQF manages commercial activities on the NFKR through Special Use Permits (SUPs). The SQF issues SUPs for commercial whitewater boating in 5-year increments. The SQF renewed three SUPs for a 5-year period starting in 2023 for the NFKR (personal communication, [Marie] Angie Attencio, Special Uses Permit Administrator, Kern River Ranger District, SQF, August 10, 2023). The number of whitewater SUPs on the NFKR has declined from five to three in the past decade.

Commercial whitewater outfitters report their annual number of passengers on the NFKR to the SQF. In the 18-year period from 2004 to 2022, commercial passenger numbers on the NFKR ranged from a low of 120 in 2015 to a high of 7,510 in 2017 (Figure 5.1-1). The number of commercial passengers in a given year is reflective of the WY type. WY 2015 was a drought year with a limited season for commercial rafting flows. On the other hand, WY 2017 was a wet year with a prolonged run-off allowing the commercial outfitters to offer trips well into the late summer season and early fall.

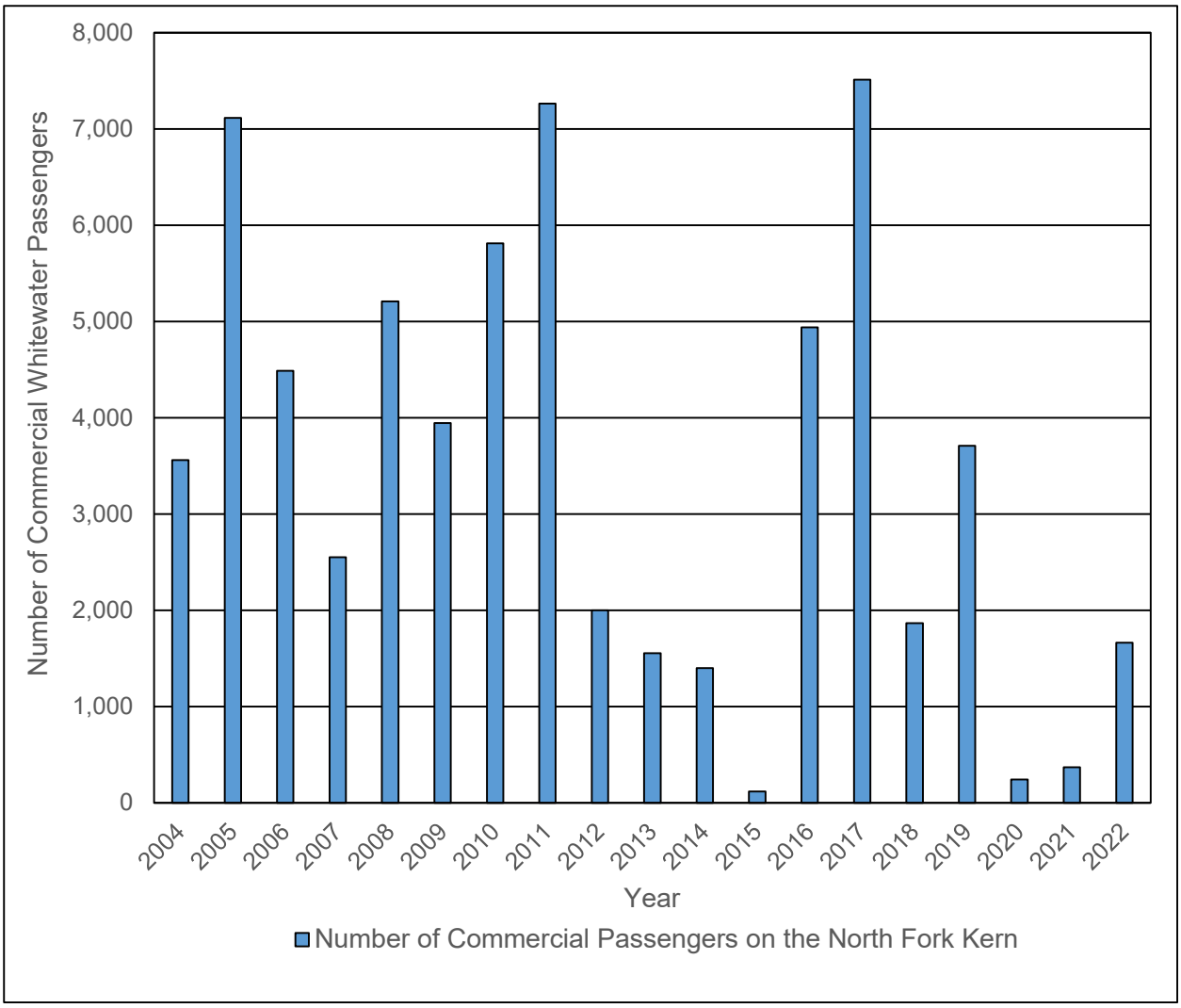

Figure 5.1-1. Annual Commercial Whitewater Passengers Reported to SQF for the North Fork Kern River, 2004–2022.

5.1.1.3. SCE Commercial Use Numbers

SCE issues permits for commercial whitewater outfitters to use the KR3 Powerhouse river access site. The KR3 Powerhouse river access site is the start of the Powerhouse / Lickety Split river segment downstream of the KR3 Powerhouse. This river section is suitable for individuals with no previous rafting experience. This is also the cheapest commercial trip offered by outfitters on the NFKR and is the shortest commercial trip. The commercial whitewater outfitters schedule up to three trips per day for this river segment.

Commercial whitewater outfitters report their annual number of passengers launching at the KR3 Powerhouse river access site to SCE. In the 5-year period from 2017 to 2021, commercial passenger numbers at the KR3 Powerhouse river access site ranged from a low of 1,780 in 2021 to a high of 38,569 in 2017 (Figure 5.1-2). The greatest number of commercial whitewater passenger trips typically occur in May, June, July, and August on the Powerhouse / Lickety Split river segment (Figure 5.1-3). In years with higher

snowpack, the commercial whitewater season is extended. Discharge in WY 2017 was one of the highest in the 25-year period from 1997 to 2022, allowing commercial outfitters to offer trips into October.

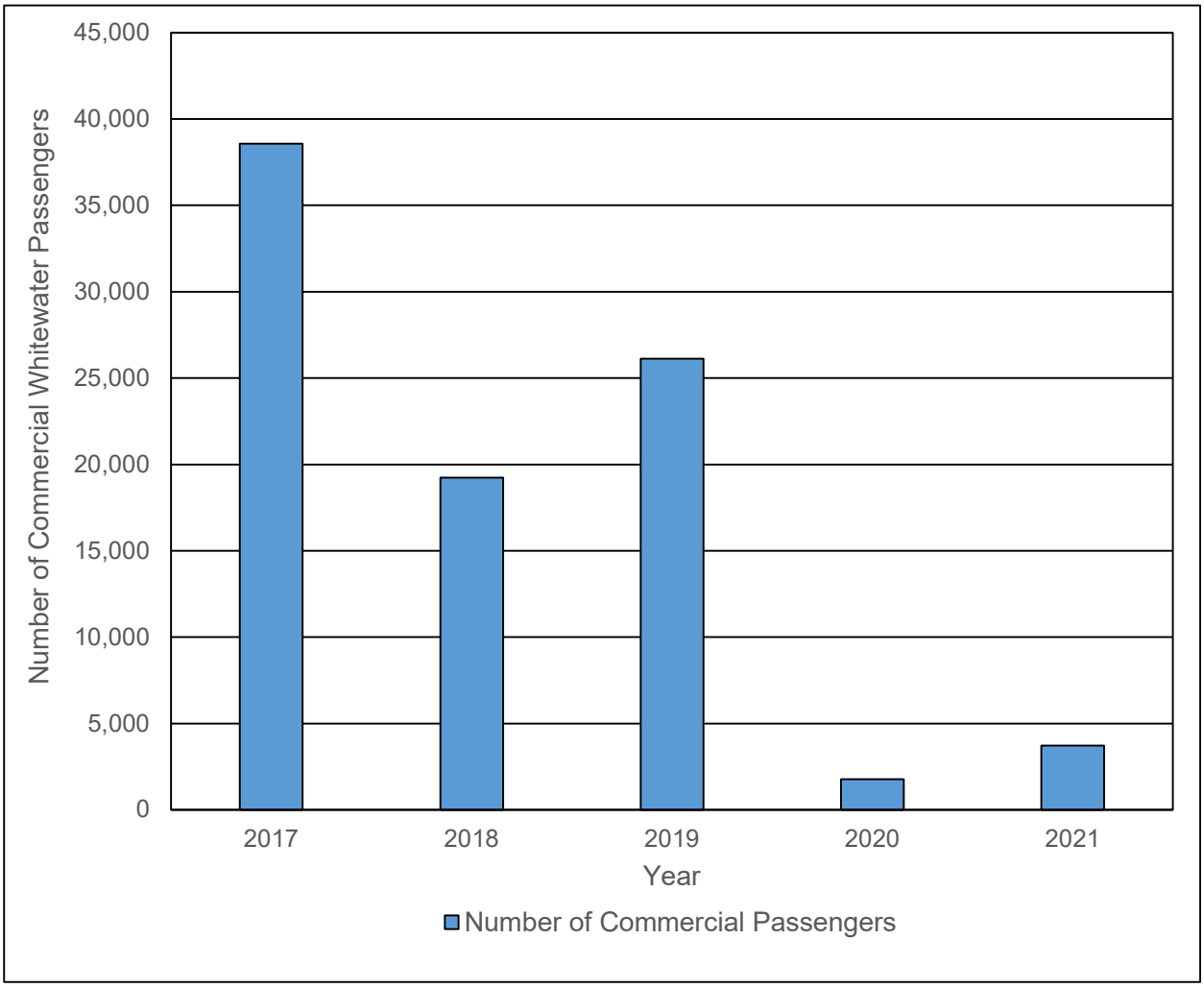

Figure 5.1-2. Annual Commercial Whitewater Passengers Launching at KR3 Powerhouse River Access Site, 2017–2022.

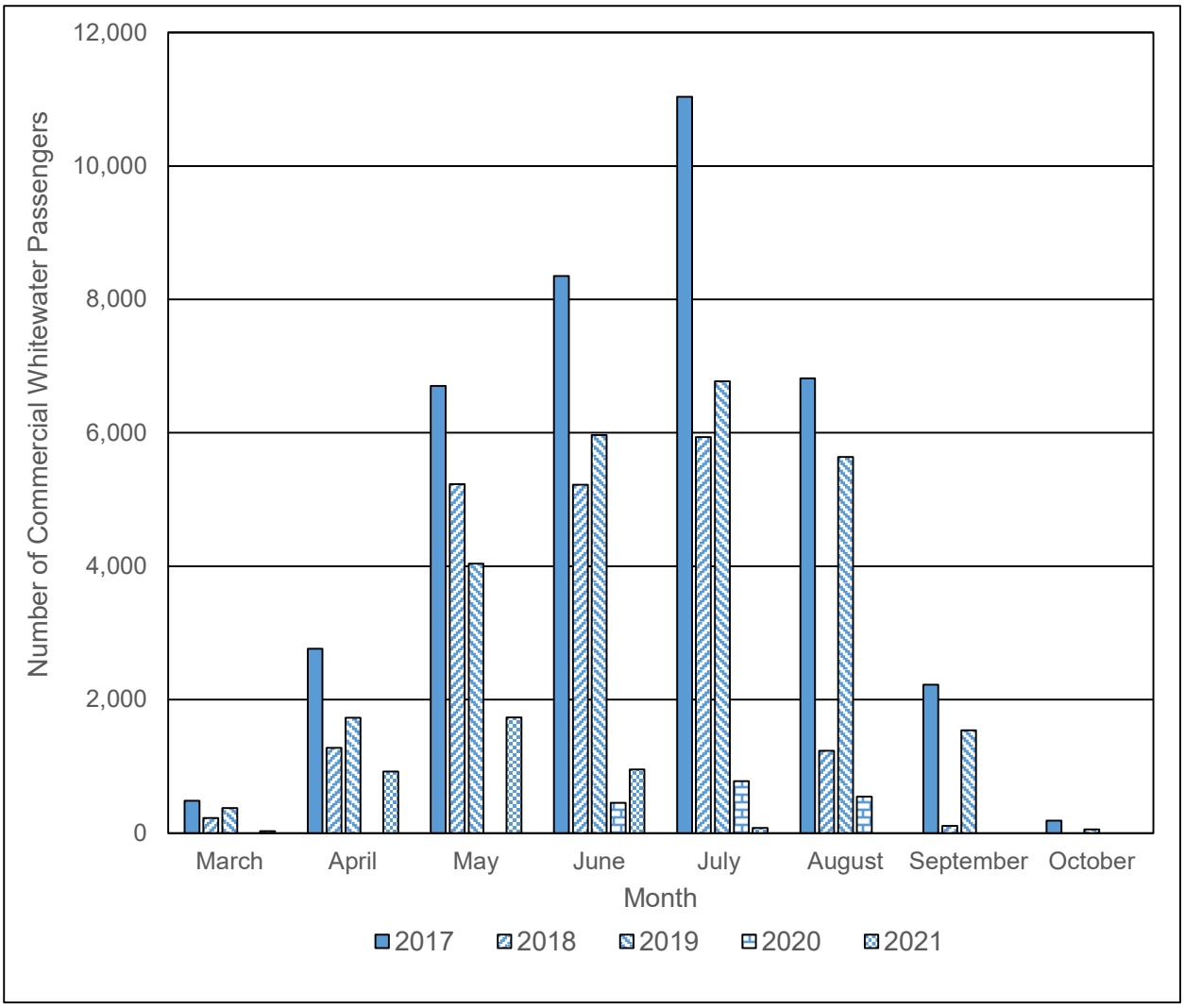

Figure 5.1-3. Monthly Commercial Whitewater Passengers Launching at KR3 Powerhouse River Access Site, 2017–2021.

5.1.1.4. 1994 Study Results

During the previous Project relicensing, a whitewater flow suitability study was conducted to determine the relationship between flows and the quality of whitewater boating in the Fairview Dam Bypass Reach (SCE, 1994). The 1994 study included participant surveys (participant survey analysis [PSA] method) and video survey, field observation, and hydraulic analysis (vector field histogram) methods. The flow suitability study identified the minimal, minimum enjoyable, and lower end of optimal flow for each segment. A summary of the flow preferences from the 1994 whitewater flow suitability study is presented in Table 5.1-2.

Table 5.1-2. 1994 Study Whitewater Flow Suitability Summary (PSA Method)

Whitewater Run	Minimal (Marginal)[a] cfs	Minimum Enjoyable[a] cfs	Lower End Optimal[a] cfs
Sidewinder / Bombs Away	300[b] / --	700 / 900	1,000 / 1,000
Fairview Run	250 / 500	500 / 800	1,000 / 1,200
Chamise Gorge	250 / 500	550 / 900	1,000 / 1,200
Gold Ledge	300 / 700	700 / 1000	1,100 / 1,300
Thunder Run	350 / 800	700 / 1000	1,100 / 1,200
Cable/Camp 3	800 / 700	700 / 900	1,000 / 1,200

Source: SCE, 1994 (Table II-10)

-- = No data; cfs = cubic feet per second; PSA = participant survey analysis
Notes:
[a] Flow ranges were broken down into two boat categories: (1) kayak, canoe, splashyaks; (2) raft, cataraft, oar rigs.
[b] The Bombs Away rapid was not boated at the 300 cfs and 675 cfs, portaged kayaks, and rafts.

The outcome of the whitewater flow suitability study was used to help inform the development of the whitewater flow schedule established as part of the current license and included as part of FERCs Rehearing Order issued on November 4, 1997. In 2002, AW, Friends of the River, Natural Heritage Institute, and SCE signed a Settlement Agreement to resolve outstanding issues associated with USFS Section 4(e) Terms and Conditions, further increasing the number of annual whitewater releases at the Project. Most recently, FERC amended the Project license on January 30, 2019, to include additional clarification regarding the timing of whitewater releases as described in FERC License Article 422, and USFS revised Section 4(e) condition 6(f).

5.1.1.5. FERC License Article 422: Whitewater Release Schedule

During peak run-off in the spring and summer, a flow schedule was developed to enhance whitewater recreation opportunities in the Fairview Dam Bypass Reach (Table 5.1-3). License Article 422 (amended January 30, 2019) states:

> "Beginning no later than 10 a.m. and ending no earlier than 5 p.m. of each day that whitewater flows are scheduled, the Licensee must release the minimum whitewater flows described below into the Project bypass reach. The use of water under the regime below must be based on the previous day's average inflow to the project, from April 1 through July 31, measured by adding the preliminary canal gauge 11185500 data below the diversion to the preliminary river gauge 11186000 data below Fairview Dam. In the event that actual inflows to the Project on a whitewater release day are insufficient to both allow the continuous 300-cfs diversion to the Project powerhouse and meet the minimum whitewater release, then the

whitewater release may be reduced in order to allow the continuous 300-cfs diversion to the Project powerhouse."

The flow release schedule was developed to provide whitewater boating opportunities for the runs in the Fairview Dam Bypass Reach. The flow schedule requires releases of 700 and 1,400 cubic feet per second (cfs). The schedule requires SCE to pass flows over Fairview Dam on certain days from April 1 to July 31. Releases are scheduled based on the previous day's average inflow to Fairview Dam, measured by adding the KR3 Conduit at Adit 6/7 gage (SCE Gage No. 403) to the flow gage located downstream of Fairview Dam (SCE Gage No. 403).

Table 5.1 3. Whitewater Flow Release Schedule for the Project

Dates	Boating Days	River flow at Fairview Dam (cfs)	Minimum Whitewater Release (cfs)
April 1 up to the weekend prior to Memorial Day Weekend	Fridays and Weekends	1,000 to 1,300	700
		More than 1,700	1,400
Weekend prior to Memorial Day weekend until July 4	Daily	1,000 to 1,300	700
		More than 1,700	1,400
July 5 up to July 31	Weekends	1,000 to 1,300	700
		More than 1,700	1,400

Source: License Amendment Order January 30, 2019

cfs = cubic feet per second

SCE publishes preliminary real-time hourly flow information for the Kern River below Fairview Dam (SCE Gage No. 401), KR3 Canal Flow (SCE Gage No. 402), and a calculated inflow at Fairview Dam (sum of gages 401 and 402); a running day average is provided at http://www.sutronwin.com/scedison/tw/jsp/. The Kern River flow phoneline at (877) 537-6356 is also available to obtain current flow information. The USACE operates a gage downstream of the Project in Kernville and provides hourly streamflow data (USACE, 2023).

5.1.1.6. Minimum Instream Flows

License Article 406 requires SCE to maintain continuous minimum flows or natural flows, whichever is less, as measured by SCE gage 401 below Fairview Dam. Minimum instream flow requirements are specified by month(s) (Table 5.1-4).

Table 5.1-4. Monthly Minimum Instream Flow Requirements

Months	Minimum Instream Flow (cfs)
October	80
November through February	40
March	70
April through June	100
July through August	130
September	100

cfs = cubic feet per second

5.1.1.7. Fairview Dam Intake Operation

The Project is operated in compliance with existing regulatory requirements, agreements, and water rights to generate power (SCE, 2021). Water for power is diverted primarily from the NFKR, and the Project is operated as a run-of-river facility. The reservoir upstream of Fairview Dam has no water storage. Therefore, the amount and timing of flow diverted for power at Fairview Dam is a function of inflow from the NFKR upstream of the Project, FERC License requirements for minimum instream flow, seasonal whitewater flow releases, flowline capacities, and other operational agreements. The powerhouse operates when sufficient water is available at the primary intake at Fairview Dam and the two small diversions that supply additional water to the water conveyance system (i.e., Salmon Creek and Corral Creek Diversions). Normal operating flow capacity of the water conveyance is 585 to 605 cfs.

Water is diverted from the NFKR on the east abutment of Fairview Dam and directed into the conveyance system, bypassing 15.7 miles of the NFKR between Fairview Dam and KR3 Powerhouse (SEC 2021). There are two flowline intake gates located at the east end of the dam that divert water into a concrete-lined sediment trap (sandbox). The intakes are equipped with trash racks that contain a 2-inch clearance. Each gate can move 300 cfs, for a total capacity of 600 cfs. Depending on the availability of water in the conveyance system, SCE may elect to utilize none, one, or both of the generating units. For example, during low-flow periods (e.g., November through April), SCE may elect to operate only one unit and take the other off-line to conduct routine maintenance or may elect to remove both generating units from service during periods of low flow.

The intake gates are operated remotely. Whitewater releases require active monitoring by the operator and cannot be automated. During a whitewater release, the flume gates are slowly closed to reduce inflow into the canal. The operator monitors river flows below Fairview Dam and canal flows to obtain the required flow below Fairview Dam.

5.1.2. HYDROLOGY

Project operations alter flows in the Fairview Dam Bypass Reach between Fairview Dam and the KR3 Powerhouse tailrace, and the timing of flows in the river segment between the KR3 Powerhouse and Riverside Park in Kernville. Flow diversions have the potential to alter the frequency, timing, and quality of whitewater boating opportunities. A summary of the hydrology data in the bypass reach was completed for impaired conditions from 1997 to 2022 and from 1997 to 2021 for unimpaired conditions. SCE maintains two gaging stations that monitor and record water flow for Project compliance (Table 5.1-5).

Table 5.1-5. SCE Gaging Stations

Gage Name/Location	SCE Gage No.	USGS Gage No.	Flow Records
Kern River near Kernville / Downstream of Fairview Dam	401	11186000	2/1922 to present
KR3 Conduit near Kernville / within Flow Conveyance at Adit 6/7	402	11185500	9/1960 to present

KR3 = Kern River No. 3; SCE = Southern California Edison; USGS = U.S. Geological Survey

5.1.2.1. Discharge above Fairview Dam (Unimpaired)

The annual discharge in the NFKR upstream of Fairview Dam varies considerably between years (Figure 5.1-4). The median annual discharge between the WYs 1997 and 2021 ranged from 144 cfs in 2015 to 1,251 cfs in 2017 (Table 5.1-6). In 10 of the 24 WYs between 1997 and 2021, the annual median discharge was less than 300 cfs. The maximum discharge between 1997 and 2021 was 25,219 cfs in 1997, which occurred during a January storm event. In WY 2015, the annual maximum discharge was only 447 cfs. The minimum discharge of 67 cfs occurred in WY 2015 as well. Minimum discharges above Fairview Dam were less than 200 cfs in 21 of the 24 years between 1997 and 2021. Minimum discharge typically occurs in the late summer and fall months. The quartile range illustrates the annual discharge present between 25 and 75 percent for respective WYs. In 14 of the 24 WYs between 1997 and 2021, discharge above Fairview Dam was less than 700 cfs 75 percent of the time.

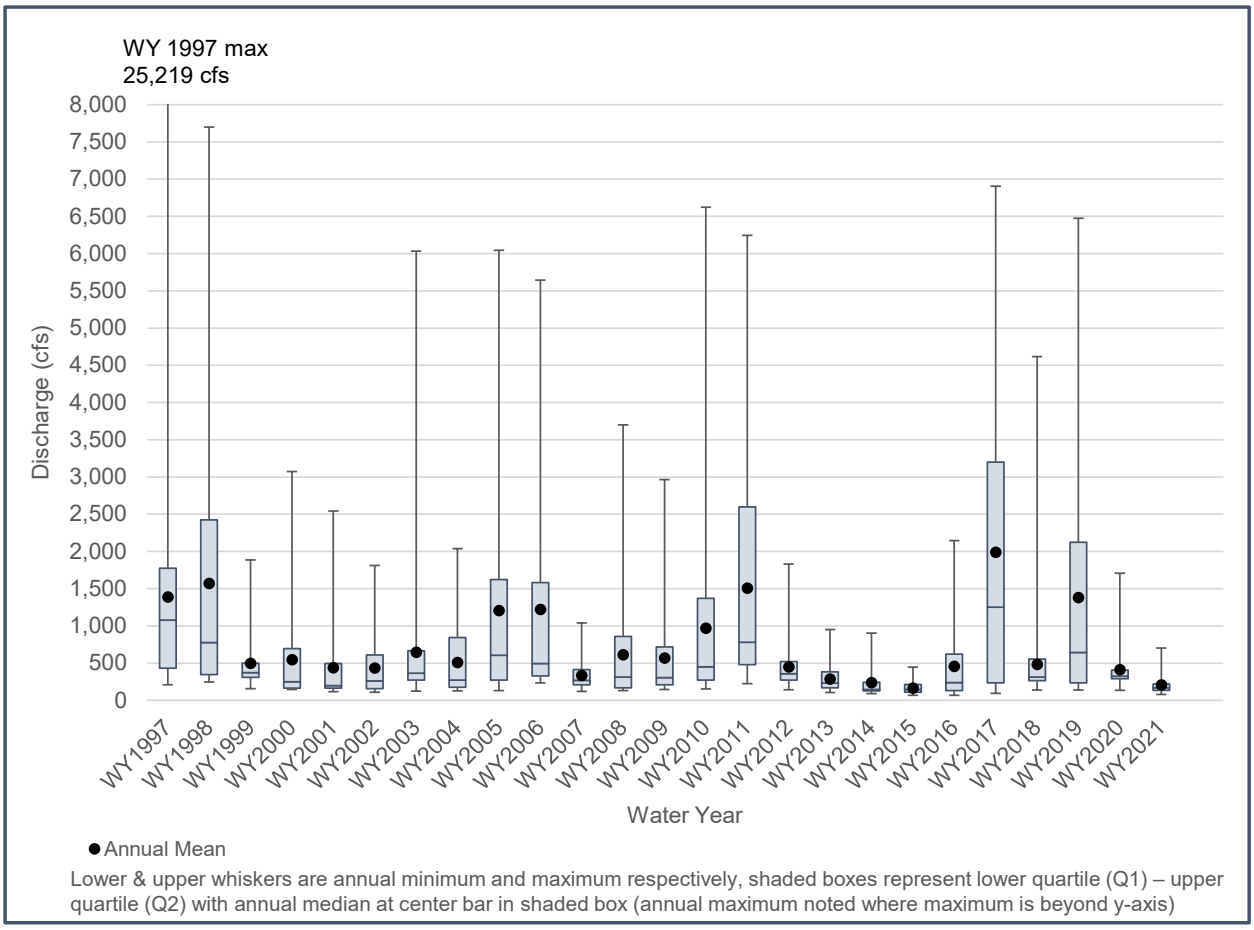

Figure 5.1-4. Annual Discharge (cfs) Statistics for Inflow above Fairview Dam on the North Fork Kern River, WYs 1997–2021.

Table 5.1-6. Annual Discharge (cfs) Statistics for Inflow above Fairview Dam on the North Fork Kern River, WYs 1997–2021

Water Year	Mean	Median	Min	First Quartile	Third Quartile	Max
WY1997	1,388	1,078	208	432	1,776	25,219
WY1998	1,571	778	246	346	2,425	7,700
WY1999	500	374	156	309	497	1,886
WY2000	545	251	145	165	694	3,072
WY2001	438	196	116	165	495	2,543
WY2002	434	262	110	158	610	1,810
WY2003	646	365	124	273	666	6,033
WY2004	510	272	126	175	844	2,039
WY2005	1,206	604	131	270	1,623	6,044
WY2006	1,221	493	234	329	1,583	5,644

Water Year	Mean	Median	Min	First Quartile	Third Quartile	Max
WY2007	334	269	121	209	414	1,040
WY2008	614	313	133	168	860	3,699
WY2009	571	305	145	210	717	2,965
WY2010	968	450	152	271	1,369	6,624
WY2011	1,507	779	223	480	2,598	6,245
WY2012	449	357	142	273	519	1,832
WY2013	287	232	106	168	382	950
WY2014	239	147	89	127	242	903
WY2015	166	144	67	110	212	447
WY2016	456	239	69	132	620	2,144
WY2017	1,988	1,251	93	234	3,201	6,905
WY2018	483	311	137	266	556	4,616
WY2019	1,383	644	137	235	2,124	6,474
WY2020	414	324	133	289	406	1,708
WY2021	209	168	80	137	221	704

WY = water year

Monthly median discharge above Fairview Dam is highest April through June, corresponding to snowmelt run-off patterns in the southern Sierras (Figure 5.1-5) with the highest median flows occurring in May (Table 5.1-7). In the months from September through November, inflows to Fairview Dam are less than 300 cfs 75 percent of the time. In December and January, inflows are less than 400 cfs 75 percent of the time. A rain on snow winter storm event in January 1997 resulted in the peak flow event of 25,219 for the period between 1997 and 2021.

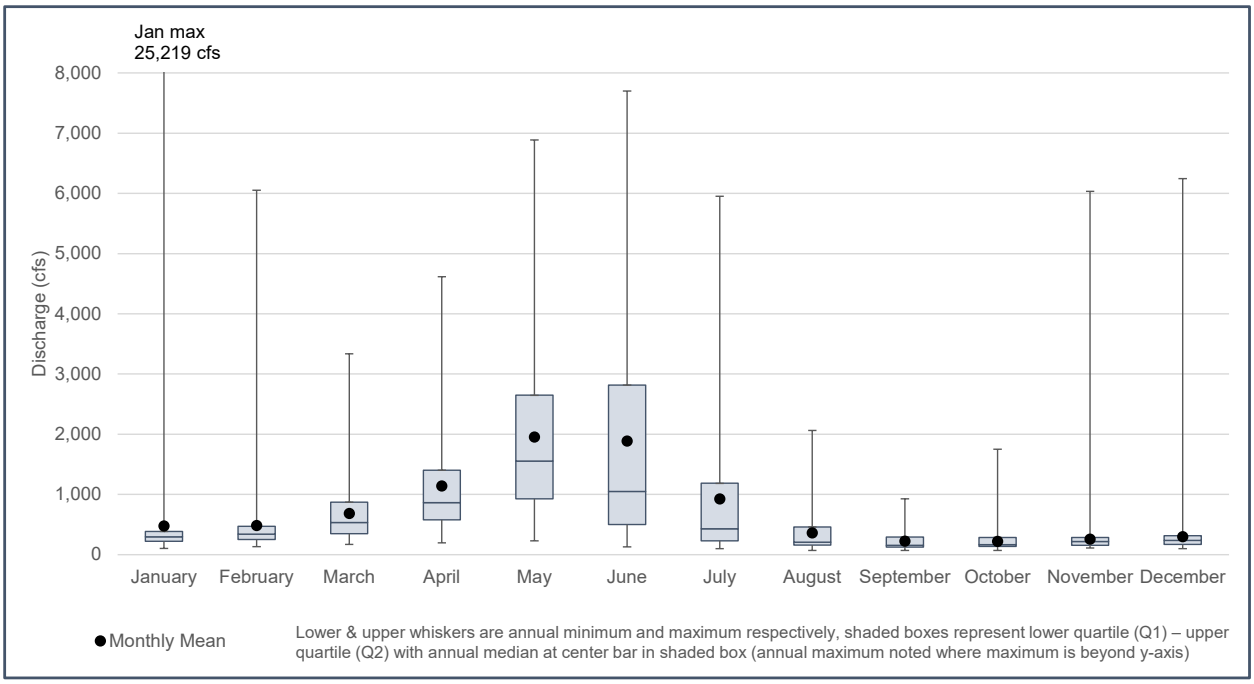

Figure 5.1-5. Monthly Discharge (cfs) Statistics for Inflow above Fairview Dam on the North Fork Kern River, WYs 1997–2021.

Table 5.1-7. Monthly Discharge (cfs) Statistics for Inflow above Fairview Dam on the North Fork Kern River, WYs 1997–2021

Month	Mean	Median	Min	First Quartile	Third Quartile	Max
January	474	294	103	222	385	25,219
February	481	339	133	253	469	6,052
March	680	534	171	349	872	3,335
April	1,138	864	194	576	1,404	4,616
May	1,951	1,555	228	926	2,648	6,887
June	1,886	1,048	128	500	2,817	7,700
July	923	429	98	230	1,185	5,952
August	360	206	70	157	458	2,064
September	223	155	67	125	293	928
October	217	167	69	137	286	1,752
November	255	218	109	156	284	6,033
December	296	236	100	169	314	6,245

5.1.2.2. Fairview Dam Bypass Discharge (Impaired)

The annual discharge in the bypass reach downstream of Fairview Dam varies considerably between years (Figure 5.1-6). The median annual discharge between WYs 1997 and 2022 ranged from 86 cfs in 2016 to 706 cfs in 2017 (Table 5.1-8). In 19 of the 25 WYs between 1997 and 2022, the annual median discharge was less than 200 cfs. The annual median discharge in five of those WYs was less than 100 cfs. The maximum discharge between 1997 and 2022 was 25,100 cfs in 1997, which occurred during a January storm event. The minimum discharge of 26 cfs occurred in the WY 2015. Minimum discharge in the bypass reach was less than 100 cfs in 24 of the 25 years between 1997 and 2022. Minimum discharge typically occurs in the late summer and fall months. The quartile range illustrates the annual discharge present between 25 and 75 percent for respective WYs. In 16 of the 25 WYs between 1997 and 2022, the 75 percent quartile was less than 300 cfs. In other words, discharge in the bypass reach in 16 years between 1997 and 2022 was less than 300 cfs 75 percent of the time.

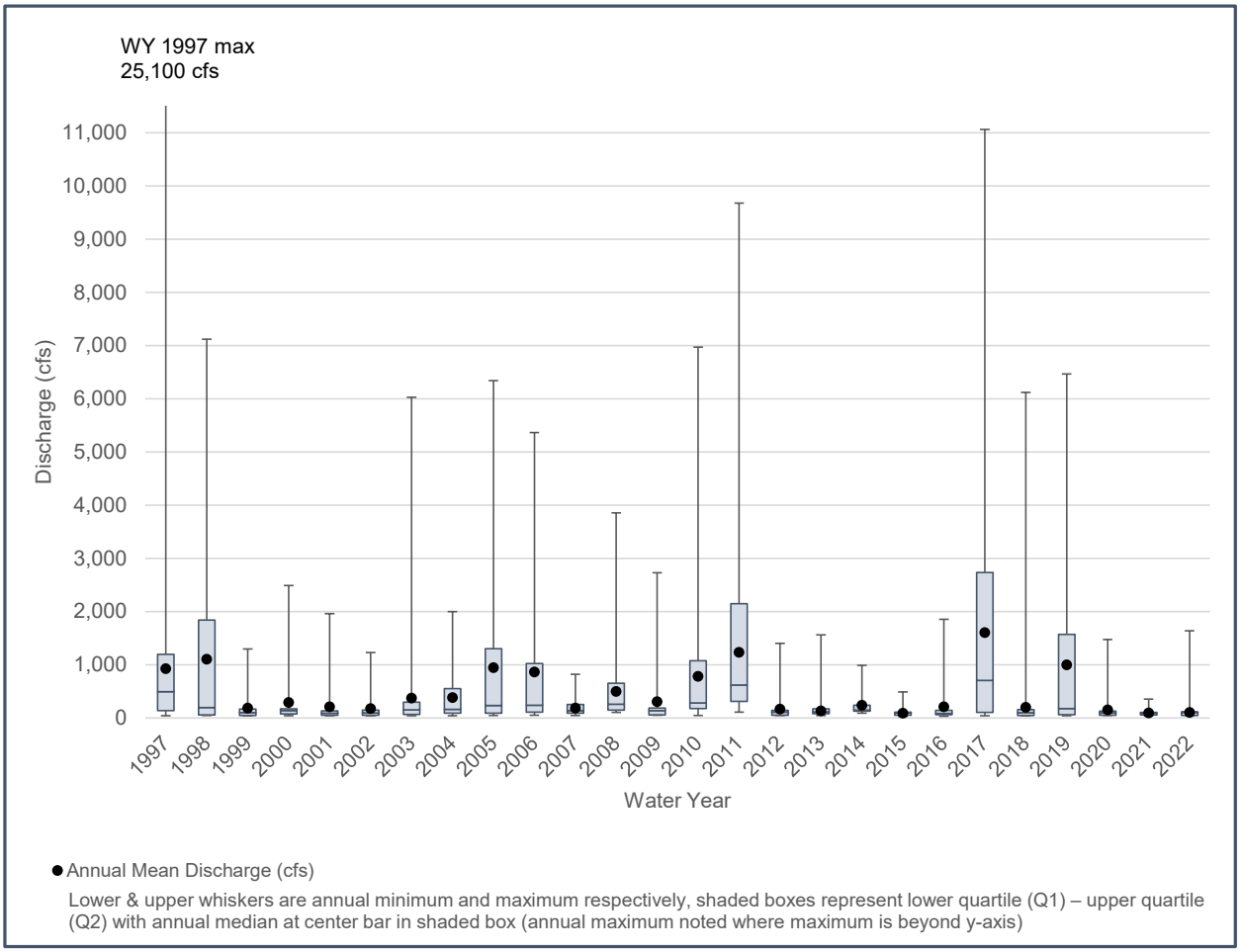

Figure 5.1-6. Annual Discharge (cfs) Statistics in the Fairview Dam Bypass Reach on the North Fork Kern River, WYs 1997–2022.

Table 5.1-8. Annual Discharge (cfs) Statistics in the Fairview Dam Bypass Reach on the North Fork Kern River, WYs 1997–2022

Water Year	Mean	Median	Minimum	First Quartile	Third Quartile	Maximum
WY 1997	930	497	45	141	1,195	25,100
WY 1998	1,105	197	47	60	1,840	7,120
WY 1999	188	103	42	50	166	1,300
WY 2000	294	137	45	79	174	2,490
WY 2001	210	91	43	54	134	1,960
WY 2002	179	96	41	51	150	1,230
WY 2003	377	152	41	67	299	6,030
WY 2004	385	165	44	92	552	2,000
WY 2005	945	235	49	92	1,303	6,340
WY 2006	863	242	51	113	1,026	5,368
WY2007	185	142	47	93	256	821
WY 2008	498	259	108	148	653	3,857
WY 2009	305	140	51	59	187	2,729
WY 2010	784	286	46	178	1,075	6,972
WY 2011	1,236	620	110	310	2,151	9,678
WY 2012	168	108	47	55	144	1,402
WY 2013	134	117	49	83	173	1,562
WY 2014	239	147	89	127	242	988
WY 2015	91	101	26	54	108	491
WY 2016	210	86	27	60	146	1,858
WY 2017	1,607	706	44	104	2,736	11,064
WY 2018	202	103	44	49	157	6,122
WY 2019	1,002	176	41	62	1,572	6,467
WY 2020	152	95	46	52	129	1,476
WY 2021	96	92	39	58	107	354
WY 2022	108	107	42	48	117	1,638

WY = Water Year
Notes:
WY 1997–2004 (shaded grey) based on daily data.
WY 2005–2022 based on hourly data.

Monthly discharge in the bypass reach below Fairview Dam is typically highest in May and June, corresponding to snowmelt run-off patterns in the southern Sierras (Figure 5.1-7). Median flows are highest in May (Table 5.1-9), although the 75 percent quartile range is highest in June. The 75 percent quartile range was greater from November through February compared to the quartile range from August through October due to precipitation associated with winter storm events. Some of these winter storms manifest as rain on snow events and can result in the maximum discharge for the year such as the peak in January 1997.

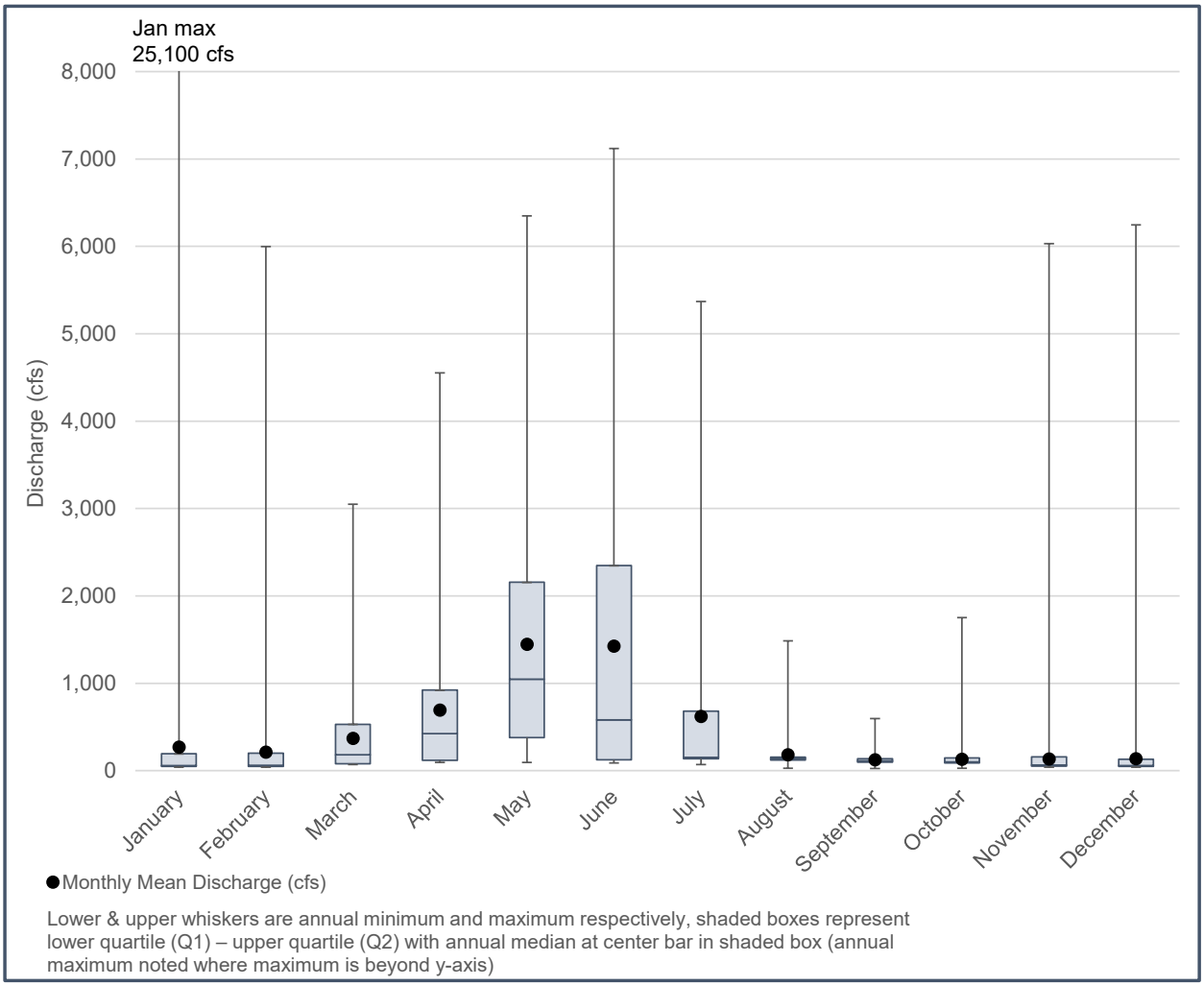

Figure 5.1-7. Monthly Discharge (cfs) Statistics in the Fairview Dam Bypass Reach on the North Fork Kern River, WYs 1997–2022.

Table 5.1-9. Monthly Discharge (cfs) Statistics in the Fairview Dam Bypass Reach on the North Fork Kern River, WYs 1997–2022

Month	Mean	Median	Minimum	First Quartile	Third Quartile	Maximum
January	271	60	41	51	194	25,100
February	214	62	42	48	202	5,997
March	370	182	72	80	530	3,048
April	693	425	96	120	923	4,552
May	1,448	1,049	96	379	2,156	6,350
June	1,427	583	88	127	2,347	7,120
July	620	152	71	137	680	5,370
August	183	140	29	121	156	1,486
September	126	113	26	97	137	596
October	133	100	27	90	145	1,752
November	135	65	40	52	158	6,030
December	137	60	40	50	133	6,245

5.1.2.3. Frequency of Whitewater Boating Opportunities

The annual frequency of whitewater boating opportunities was analyzed for inflows to Fairview Dam and in the bypass reach for flows greater than 700 cfs between 8 a.m. and 8 p.m. (Figure 5.1-8). The frequency analysis selected 700 cfs for the Level 1 hydrology analysis based on the whitewater release requirement established in FERC License Article 422. The discharge volume for the frequency analysis will be revised as additional information becomes available on boater flow preferences in the Level 3 Intensive Study.

There is a high frequency of boating opportunities above Fairview Dam and in the bypass reach in above normal WYs. In low WYs, there are substantially less boating opportunities in the bypass reach, and in some years no boating opportunities at all. The majority of the flows greater than 700 cfs above Fairview Dam and in the bypass reach coincide with discharge events during the snowmelt hydrograph in the months of March, April, May, June, and July (Figure 5.1-9). Stochastic storm events in the winter months also result in flows greater than 700 cfs but are less frequent.

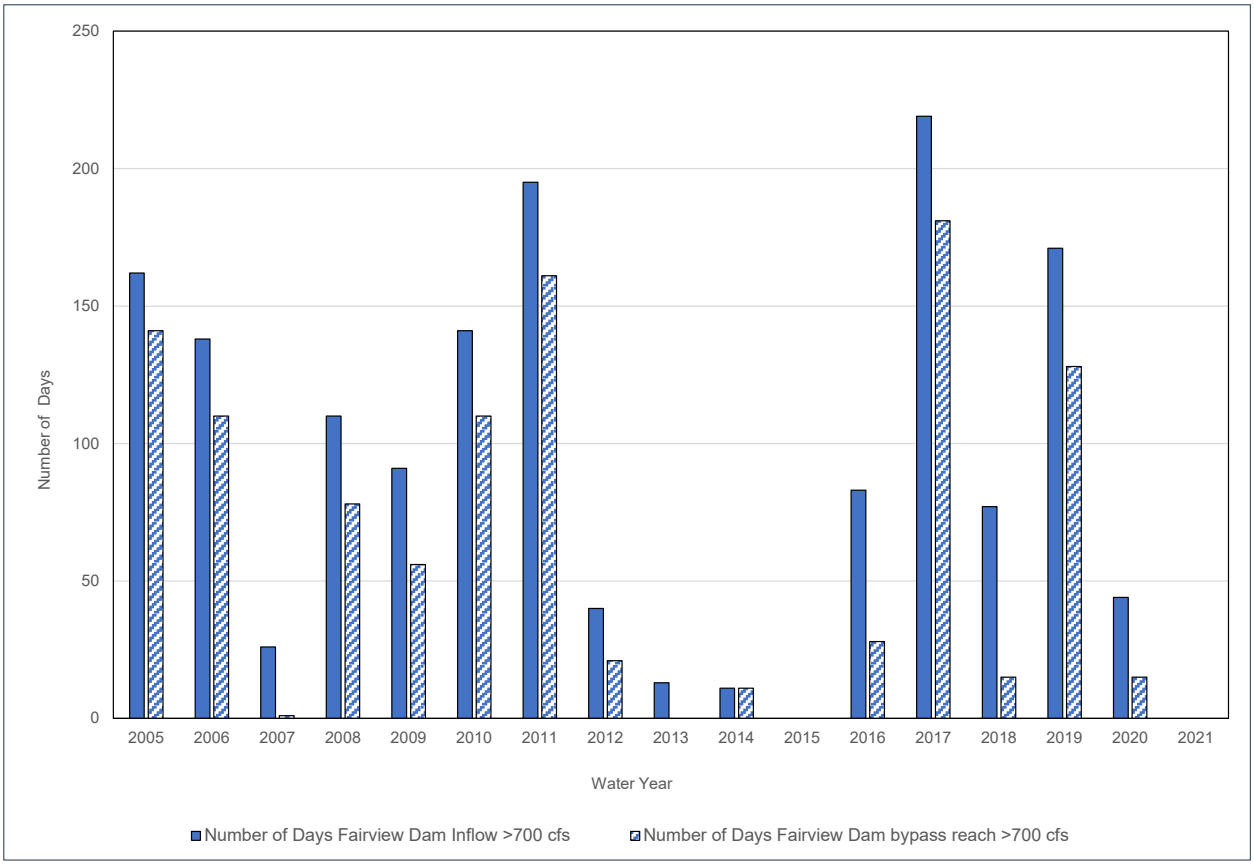

Figure 5.1-8. Comparison of Annual Number of Days Flows are > 700 cfs above Fairview Dam and in the Fairview Dam Bypass Reach, WYs 2005–2021.

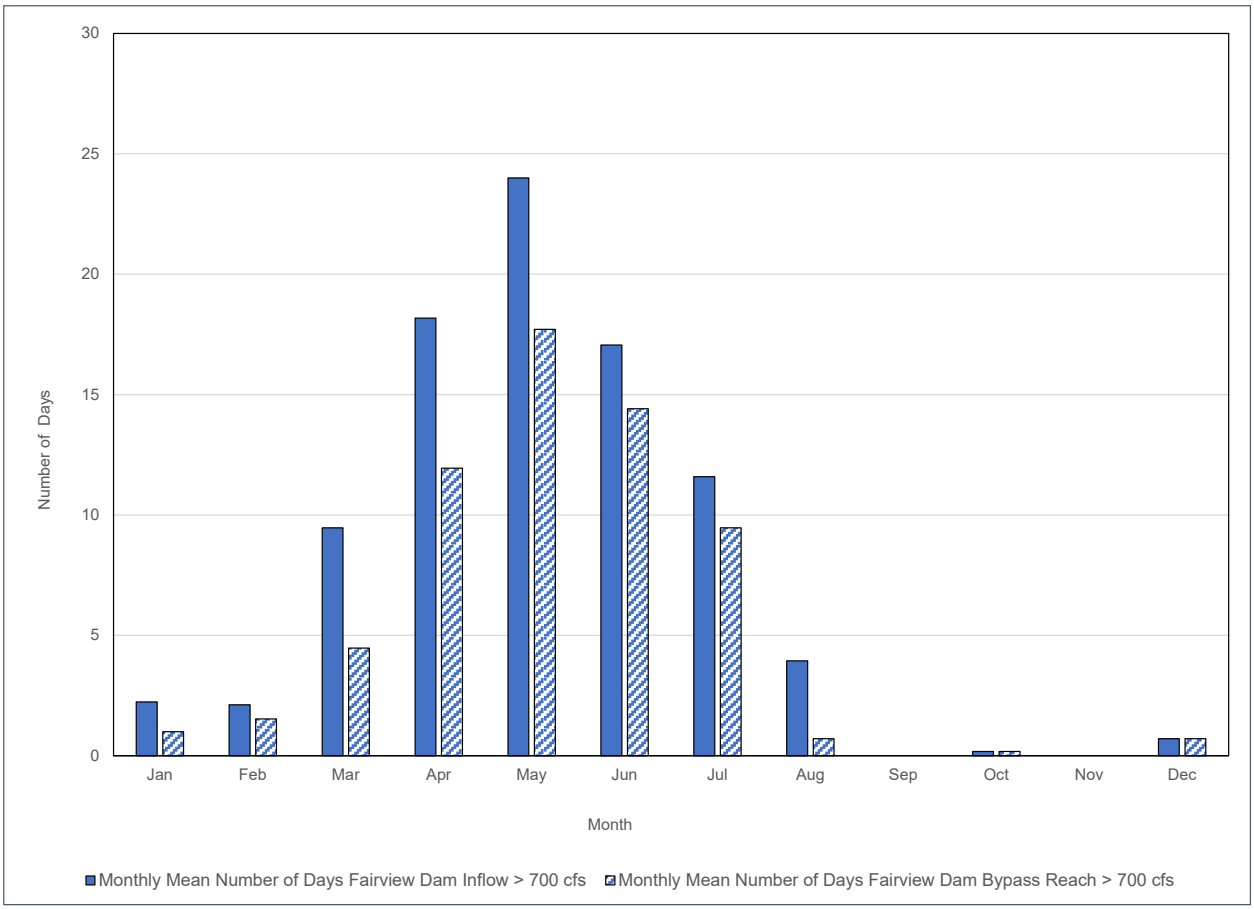

Figure 5.1-9. Comparison of Mean Monthly Number of Days Flows are > 700 cfs above Fairview Dam and in the Fairview Dam Bypass Reach, WYs 2005–2021.

5.1.3. STRUCTURED INTERVIEW QUESTIONNAIRE:

SCE developed a Structured Interview Questionnaire available to all members of the whitewater boating community per the requirements of the FERC SPD. The structured interview questionnaire queried boaters about the individual whitewater segments from Fairview Dam to Riverside Park to document information on recreation use patterns, estimated boating flow ranges for each segment for respective watercraft, potential knowledge gaps about boating flows in the bypass reach, and flow information needs. A copy of the Structured Interview Questionnaire is provided in Appendix C.

The Structured Interview Questionnaire was launched online and sent via electronic notification on May 5, 2023, to all Project Stakeholders announcing the launch of the Structured Interview Questionnaire, including a hyperlink to the survey and a QR code. The electronic notification also explained the purpose of the questionnaire, information being sought, estimated time to complete, and dates the questionnaire would remain open. SCE posted this same information about the Structured Interview Questionnaire on the Project relicensing website including the Uniform Resource Locator (URL) links to the questionnaire. On May 13, 2023, SCE again sent electronic notification to all Project Stakeholders listing availability of the Structured Interview Questionnaire and the Level 2

Limited Reconnaissance participant sign-up form and the Level 3 Intensive Study single flow survey. The electronic notification contained a description of the questionnaire, information being sought, estimated time to complete, and dates the questionnaire would remain open. During the week of May 8, 2023, laminated 8.5- by 11-inch posters were distributed to commercial whitewater outfitters in Kernville, the SQF office, and river access locations announcing availability of the Structured Interview Questionnaire, including the URL and QR code. On May 30, 2023, SCE forwarded the Structured Interview Questionnaire announcement to AW, Gold Country Paddlers, and Los Angeles Kayak Club requesting these organizations make the information available to their membership via their respective websites. The administrators for the KRB Facebook page were included in the distribution to the Project Stakeholders on May 5 and May 13, 2023. On July 7, 2023, SCE contacted KRB requesting the Structured Interview Questionnaire announcement be posted to the KRB Facebook page to inform KRB membership. Outreach efforts to inform the Project Stakeholders, resource agencies, and the broader whitewater community about the Structured Interview Questionnaire are provided in Appendix D.

The Structured Interview Questionnaire closed at midnight on August 15, 2023. Fifty-one individuals responded to the Structured Interview Questionnaire. Analysis of the structured interview responses will occur in early 2024 and will be reported in the USR. Information obtained from the structured interview responses will be used to help develop the comparative flow evaluation survey for the Level 3 Intensive Study.

5.2. LEVEL 2 LIMITED RECONNAISSANCE

The Level 2 limited reconnaissance site visit summarizes the composition of the study participants and information that the participants provided for the individual river segments in the Fairview Dam Bypass Reach as well as the segment downstream of the KR3 Powerhouse.

5.2.1. LEVEL 2 LIMITED RECONNAISSANCE PARTICIPANTS

The Level 2 Limited Reconnaissance site visit occurred on August 25, 2023, with 10 study participants and one agency staff (Figure 5.2-1). In the SPD, FERC limited participation in the Level 2 Limited Reconnaissance site visit to no more than 12 individuals plus interested resource agency staff. KR3 relicensing participants were invited to nominate themselves for participation in the L2 Limited Reconnaissance site visit. On April 12, 2023, SCE distributed an email to the KR3 relicensing participants list requesting individuals complete the Level 2 participant self-nomination form to nominate themselves for the site visit. A copy of the Level 2 participant self-nomination form is provided in Appendix A, as well as SCE outreach and L2 participant communication. The Level-2 participant self-nomination form closed May 15, 2023, at 11:59 p.m.

Figure 5.2-1: Level 2 Limited Reconnaissance Focus Group.

Thirteen individuals nominated themselves to participate in the Level 2 Limited Reconnaissance site visit. SCE sent a confirmation email to all 13 individuals on May 30, 2023, informing them that their self-nomination form was accepted for participation in the site visit. In that communication, SCE requested participants reserve August 25 and September 15 as potential dates for the site visit. SCE sent similar communication to agency representatives inviting their participation in the Level 2 Limited Reconnaissance site visit. Follow-up communication with Level 2 site visit participants on July 14, 2023, established August 25, 2023, for the date of the site visit. On August 11, 2023, SCE emailed a reminder to the Level 2 participants and requested an RSVP for planning purposes. For those individuals that did not RSVP, SCE followed up with additional emails and phone messages to confirm participation. Three individuals that nominated themselves for the Level 2 Limited Reconnaissance site visit indicated they were unable to participate. Another boater nominated a replacement, for a total of 10 boaters participating in the Level 2 Limited Reconnaissance on August 25, 2023.

Two agency staff responded to SCE's invitation to participate in the Level 2 Limited Reconnaissance; the State Water Resources Control Board (SWRCB) and the SQF. The SQF participated in the Level 2 Limited Reconnaissance on August 25, 2023, but the

SWRCB responded to a message on the day of the Level 2 Limited Reconnaissance site visit informing SCE they were not able to attend.

The 10 Level 2 Limited Reconnaissance site visit participants represented a broad cross-section of the whitewater boating community on the NFKR. Seven of the 10 participants identified Kernville as their primary residence and another identified Lake Isabella as their primary residence (Figure 5.2-2). One participant was from Los Angeles and another from Rancho Cordova in Northern California. Most Level 2 participants were greater than 40 years in age (Figure 5.2-3). Two participants were between the age of 20 to 29 (Figure 5.2-4). The group was comprised largely of male participants (Figure 5.2-5). Most of the participants rated themselves as advanced to expert skill level (Figure 5.2-6). More than half of the Level 2 participants boat more than 30 days per year (Figure 5.2-7). Most Level 2 participants have experience boating more than one watercraft on the NFKR with the most common types of watercraft being paddle rafts and hardshell kayaks (Figure 5.2-8). Two participants wrote in packraft and riverboard, respectively. On average, the Level 2 participants have greater than 20 years' boating experience on eight out of the nine river segments (Figure 5.2-9). Two participants indicated they have 37 and 45 years, respectively, of experience boating segments on the NFKR in the Fairview Dam Bypass Reach.

Four of the Level 2 participants were owners and/or managers of commercial whitewater companies operating on the NFKR in the bypass (Figure 5.2-10). Six of the Level 2 participants identified as non-commercial boaters. Nine of the participants indicated they were members of one or more local, regional, and national whitewater river organizations. The river organizations listed by participants included the following: American Canoe Association, America Outdoors, AW, Gold Country Paddlers, KRB, Los Angeles Kayak Club, LA River Expeditions, and Washington Recreational River Runners.

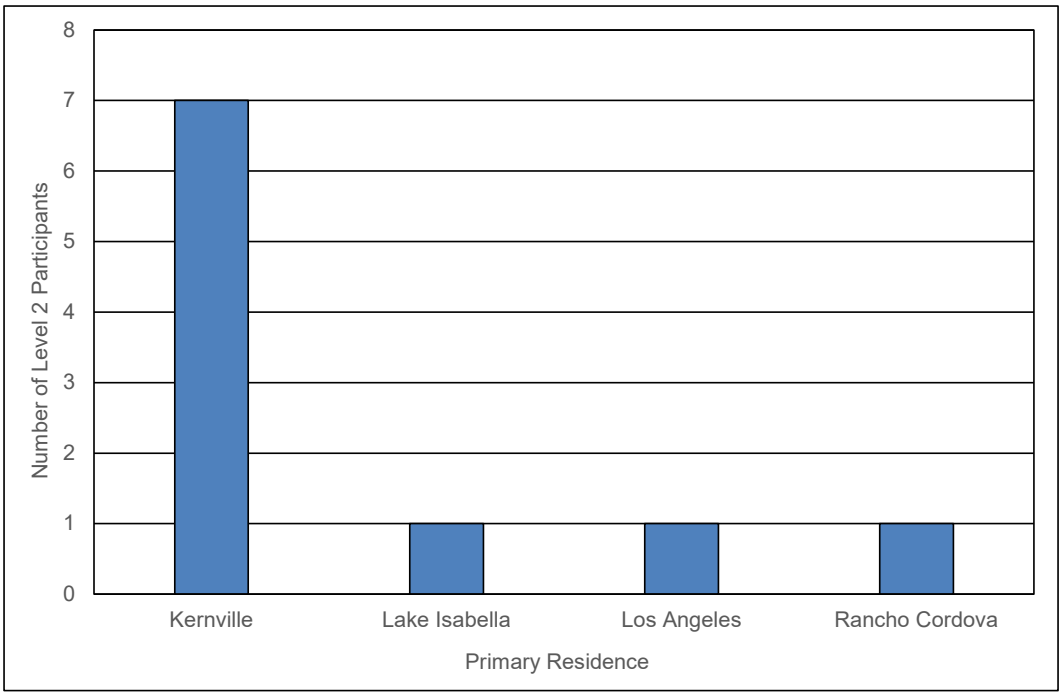

Figure 5.2-2: Level 2 Participant Primary Residence.

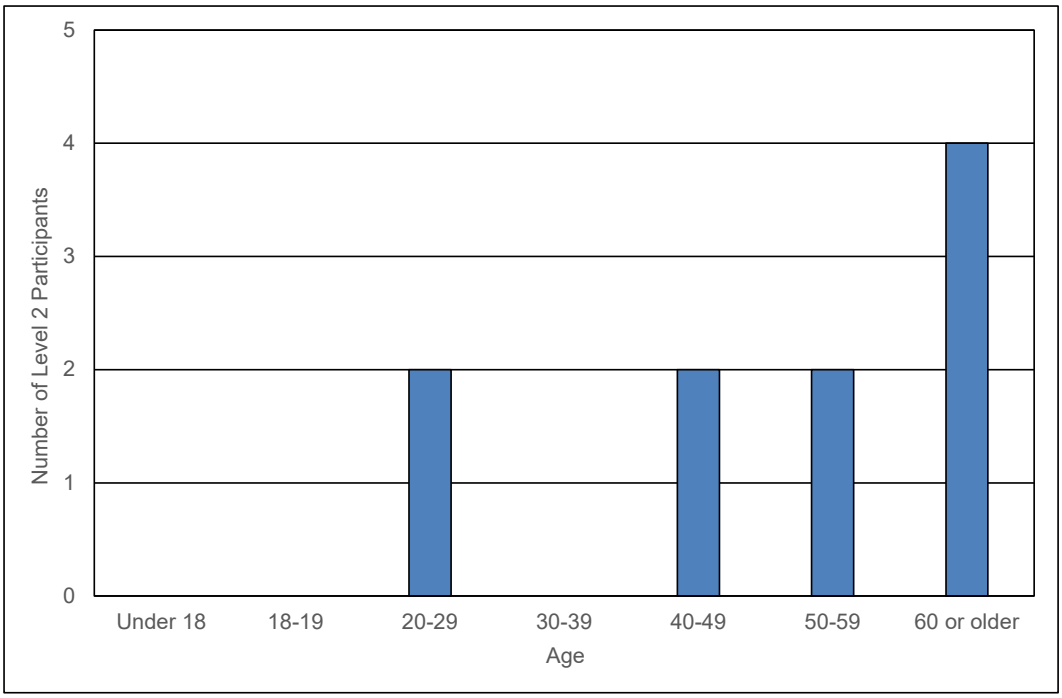

Figure 5.2-3: Age Composition for Level 2 Participants.

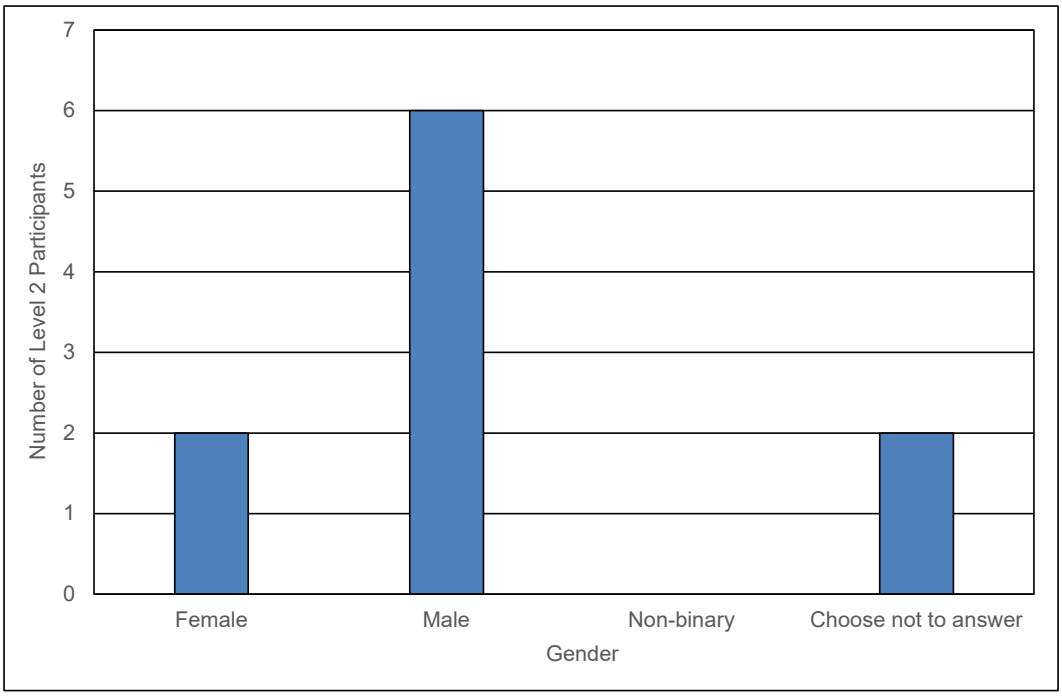

Figure 5.2-4: Gender Composition for Level 2 Participants.

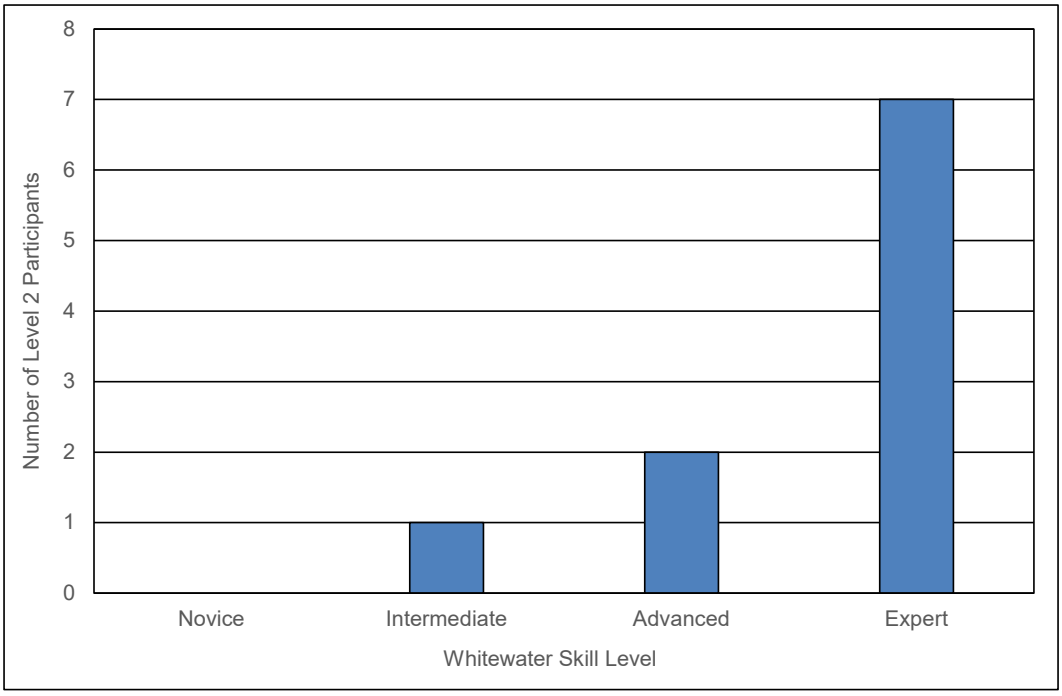

Figure 5.2-5: Whitewater Skill Level for Level 2 Participants.

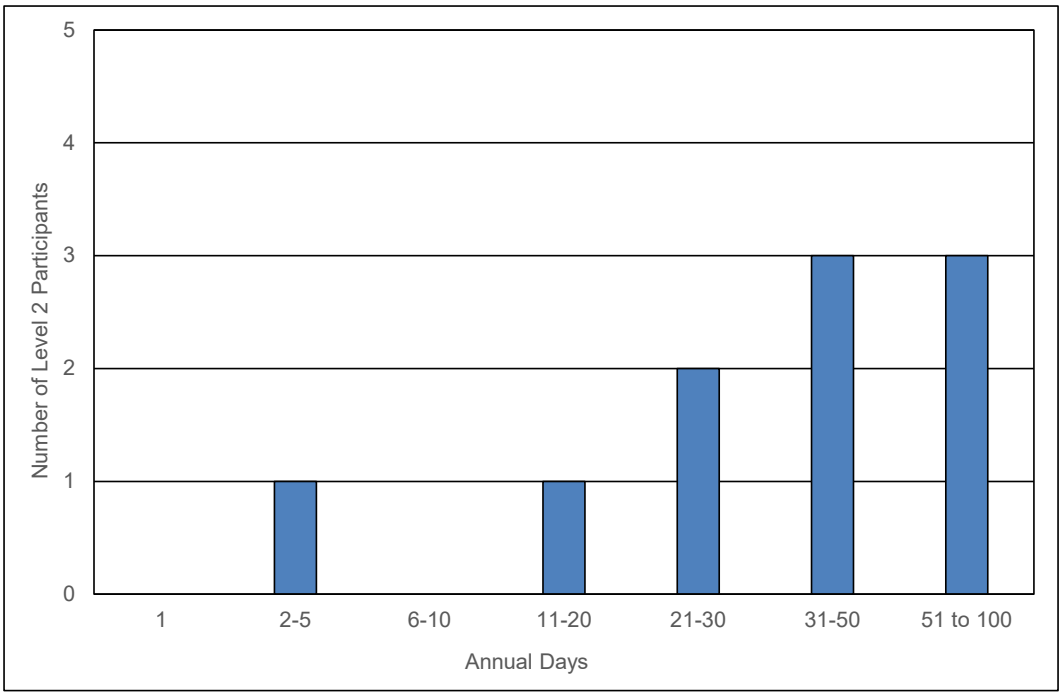

Figure 5.2-6: Annual Number of Days Level 2 Participants Whitewater Boat.

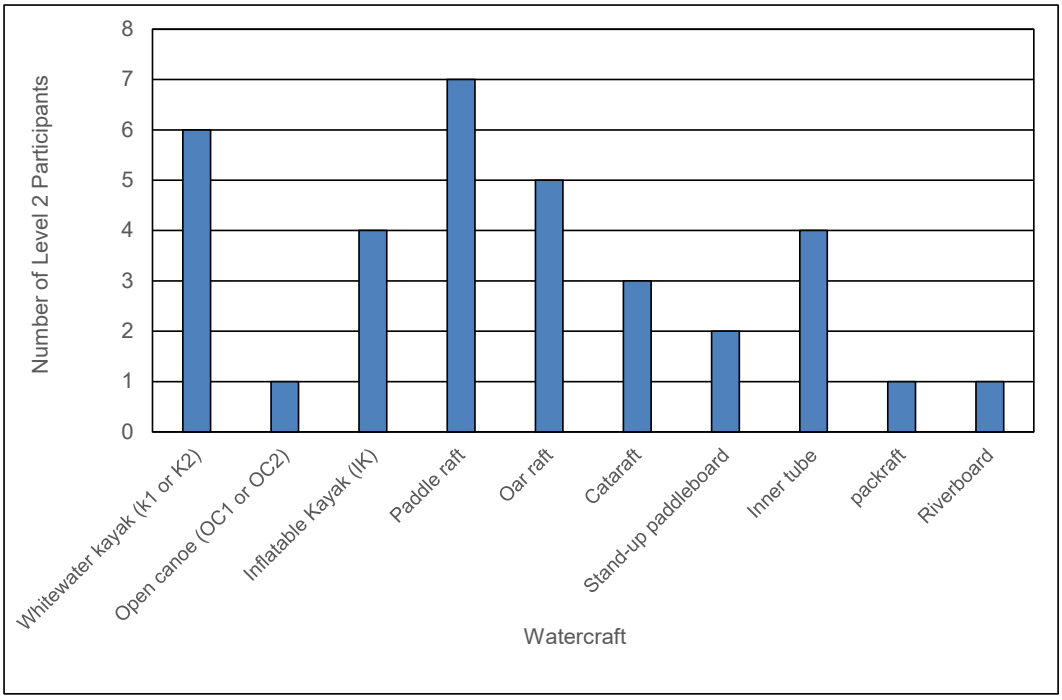

Figure 5.2-7: Watercraft Used by Level 2 Participants.

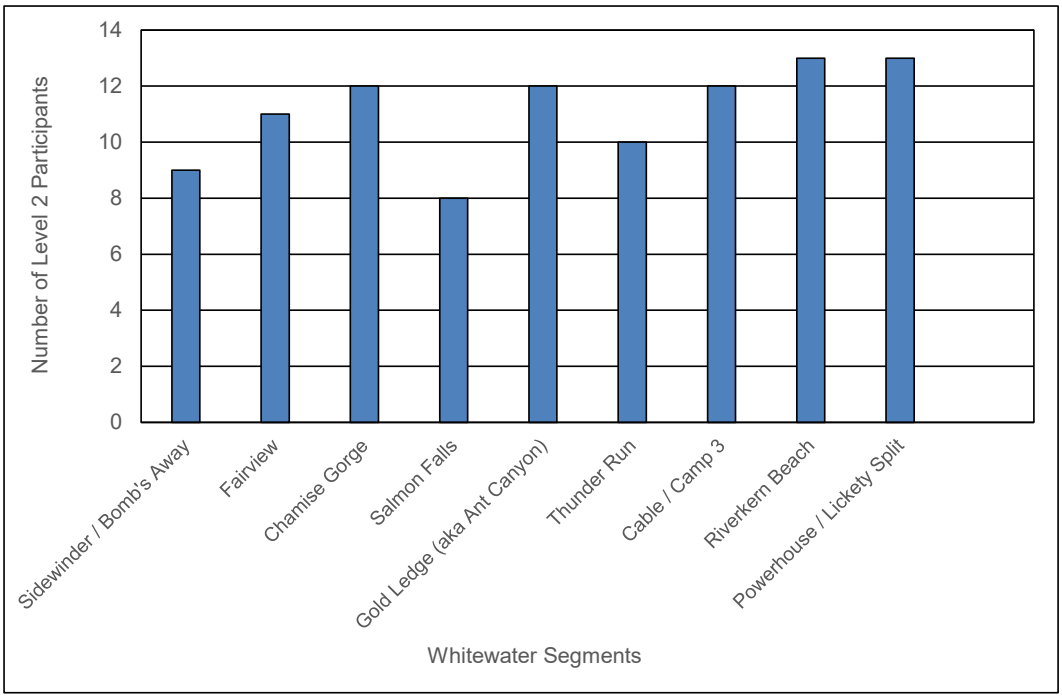

Figure 5.2-8: Whitewater Segments Boated by Level 2 Participants.

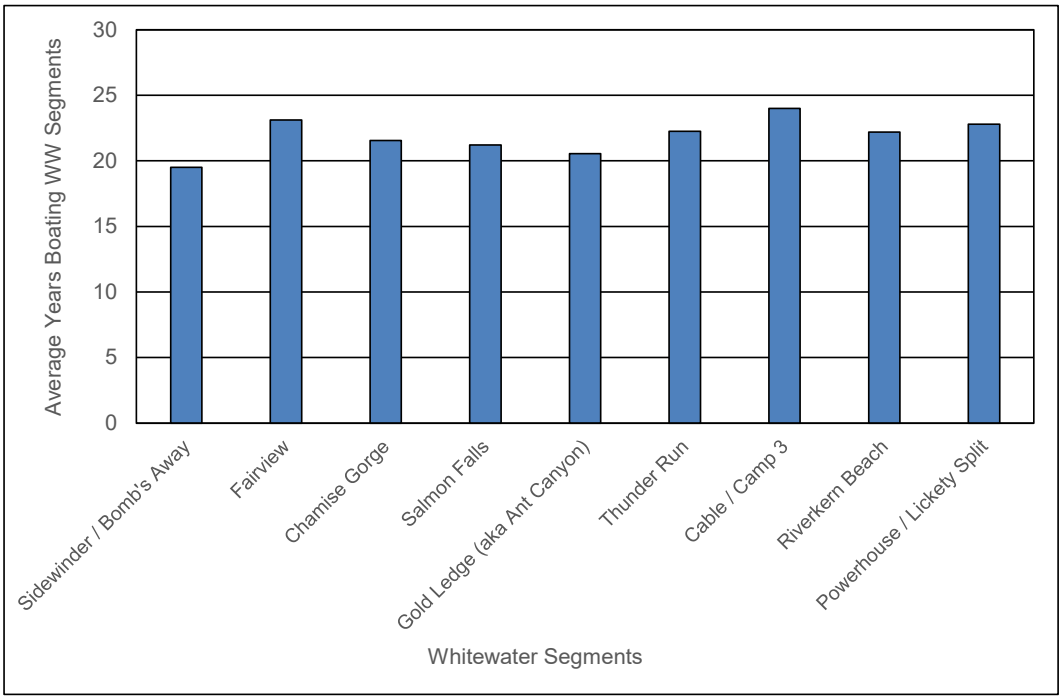

Figure 5.2-9: Average Number of Years Level 2 Participants Boat the North Fork Kern River Whitewater Segments.

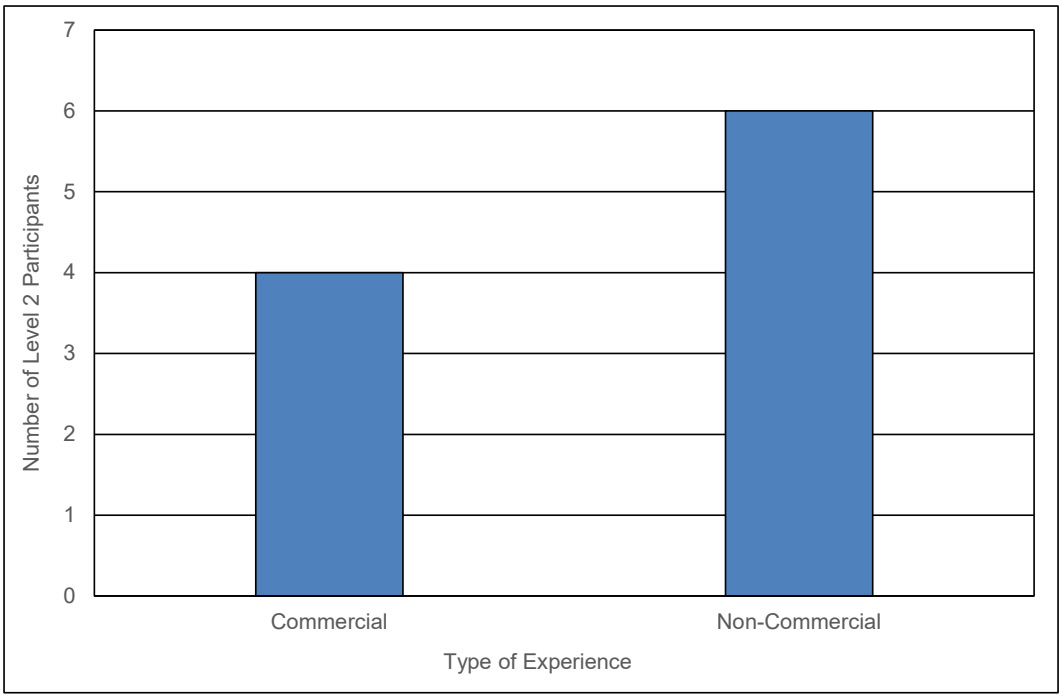

Figure 5.2-10: Level 2 Participant Commercial vs. Non-commercial on the North Fork Kern River.

5.2.2. Level 2 Limited Reconnaissance River Segment Evaluations

Level 2 participants completed a river segment evaluation form followed by a series of focus group questions for each river segment (Appendix B). This section summarizes the river segment evaluation form responses and focus group discussion for each river segment. The river segments are described from upstream to downstream.

5.2.2.1. Sidewinder / Bomb's Away

Sidewinder / Bomb's Away is a short (0.5 mile) river segment starting directly downstream of Fairview Dam. The name of this segment refers to the two more difficult rapids in this section. Focus group participants rated this river segment as Class IV to IV$^+$ whitewater difficulty for flows less than 700 cfs and Class IV and V for flows greater than 700 cfs. The difficulty rating is for the two named rapids. Participants noted that good quality Class III and IV rapids exist in this short segment in addition to the two named rapids. Level 2 participants noted that this river segment is typically boated as part of a "Bridge to Bridge" run (Johnsondale Bridge to Riverside Park in Kernville directly downstream of Highway 178) during high flow periods when the entire bypass reach can be boated in a reasonable amount of time.

Public access to the Sidewinder / Bomb's Away river segment directly below Fairview Dam is restricted with chainlink fence (Figure 5.2-11). Some kayakers gain access by crawling through a culvert under Highway 99 and under the concrete sandbox below the dam. The culvert diameter is too narrow for inflated rafts. In March 2023, floods on the NFKR transported debris into the culvert and under the concrete sandbox further limiting

this access location. Some boaters choose to access this river segment by carrying boats down a gated access road leading to the river gaging station. This access point is located downstream of Sidewinder rapid. The rafters in the focus group noted they had only boated this river segment a couple of times due to the challenging access. The whitewater outfitters stated they do not use this river segment commercially due to the access challenges coupled with lack of warm-up on easier rapids before entering the Class IV^{+} and V rapids. The limited access to this river segment contributes to the lack of knowledge on flow preferences.

Figure 5.2-11: Access restrictions downstream of Fairview Dam.

Focus group participants provided preliminary estimates of flow preferences for a number of watercraft (Table 5.2-1). Preliminary estimates for optimum kayak flows covered a broad range. Preliminary estimates for minimum acceptable flows were only estimated for kayaks and some members of the group lacked sufficient experience boating flows less than 500 cfs to estimate the minimum acceptable. The cataraft focus group participant lacked sufficient experience boating flows less than 700 cfs to estimate the minimum acceptable.

Table 5.2-1. Sidewinder / Bomb's Away Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Sidewinder / Bomb's Away (0.5 mile)	Kayak	500	1,000–5,000 500 for one kayaker	< 500
	Raft		1,500–2,500	
	Cataraft		700–1,000	< 700
	Inflatable Kayak		500–1,000	

cfs = cubic feet per second

5.2.2.2. Fairview

Fairview is a 2.3-mile river segment offering Class II to III boating opportunities suitable for intermediate boaters and used for instruction because it has more features for teaching compared to the other Class II to III segment in the bypass reach. Focus group participants noted that although this segment is only Class II to III in difficulty, it does have Class IV risks due to the strainers and vegetation on the shoreline during higher flow conditions. More advanced boaters use this section as a warm-up for the Chamise segment downstream or as part of a bridge-to-bridge run. Commercial outfitters use this section as a warm-up with groups before tackling more difficult river segments or with groups that have lesser skills.

Commercial outfitters use the boat launch at Road's End to put-in and the Calkin's Flat to take-out. Kayakers in the focus group indicated they use a road pull-out just upstream of Road's End on the curve to put-in. This location gives them access to Class III rapids upstream of the Road's End put-in.

Focus group participants provided preliminary estimates of flow preferences for a number of watercraft in the Fairview segment (Table 5.2-2). Preliminary estimates for optimum kayak flows were grouped by whitewater difficulty. Kayakers desiring higher difficulty listed higher optimum flows. Kayakers aiming for less whitewater difficulty identified a lower starting point for optimum flows. Rafters identified 1,000 to 2,500 cfs for optimum flows.

Preliminary estimates for kayak minimum acceptable flows varied with boater whitewater skills. Higher minimum acceptable flows were identified for boaters with Class II skills to help these boaters navigate through river features. Some of the kayakers in the focus group identified a lack of knowledge to estimate minimum acceptable flows less than 700 cfs and less than 150 cfs. Rafters identified a lack of knowledge for flows less than 500 cfs providing a preliminary estimate for the minimum acceptable at 500 cfs. The catarafter in the focus group also identified a lack of knowledge for flows less than 450 cfs providing a preliminary estimate for the minimum acceptable at 450 cfs. The minimum

acceptable flow for inflatable kayaks was estimated to be 150 cfs. Commercial rafting outfitters identified 700 cfs as the minimum acceptable flow.

Table 5.2-2. Fairview Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Fairview (2.3 miles)	Kayak	Class II: 650 Class III: 150 Class IV: 700	Class II: 650–1500 Class III: 250 (300+)–2,500 Class IV: 1,000+	< 150 < 700
	Raft	500	1,000–2,500	500
	Cataraft	450		450
	Inflatable Kayak	150		

cfs = cubic feet per second

5.2.2.3. Chamise

Chamise is a 2.5-mile river segment rated Class IV for flows from 700 to 2500 cfs and Class V for flows greater than 3500 cfs. One kayaker thought the difficulty decreased to Class III at flows less than 700 cfs although there was some disagreement on this rating among the focus group participants. Chamise contains a high concentration of Class III and IV rapids. All focus group participants rated Chamise as one of the best river segments in the bypass reach. The rapids in Chamise are a steppingstone for intermediate boaters progressing to more advanced skills. The channelized character and large granite boulders are unique compared to other segments in the bypass. Kayakers noted that Chamise is a really good stand-alone run. Chamise is often combined with the Fairview segment upstream or part of a bridge-to-bridge run. Commercial outfitters may combine Fairview and Chamise as well as other runs downstream depending on length of trip and client skill level.

Chamise can be accessed at the Calkin's Flat put-in. Boaters use several unnamed locations to take-out upstream of the Class VI Salmon Falls. None of these take-out locations have an established boat ramp. Boaters typically park in pull-outs on the east side of Highway 99 to complete their run or shuttle around Salmon Falls if continuing downstream.

Preliminary estimates of flow preferences were identified for a number of watercraft in the Chamise segment (Table 5.2-3). There was a difference of opinion on the preliminary estimates for optimum kayak flows in Chamise. One kayaker believed optimum flows ranged from 350 to 2,500 cfs. Other Level 2 participants estimated optimum flows between 800 and 2,500 cfs. Differences of opinion were also expressed for minimum acceptable flows with 150 cfs estimated by one kayaker and others estimating 400 cfs as

the minimum acceptable for kayaks in Chamise. Focus group participants noted that the confined channel makes the Chamise segment boatable across a lower range of flows, and some kayakers do boat in the shoulder season in Chamise when the Project is not operating when flows are between 300 and 400 cfs. Kayakers do not think there are information gaps for estimating minimum acceptable flow preferences in Chamise.

Rafters estimated the optimum flow was between 700 and 3,500 cfs for Chamise with a minimum acceptable of 400 cfs. Commercial rafters listed 700 cfs as their minimum flow for trips. The estimated optimum flow for cataraft was 600 to 2,000 cfs with an estimated minimum acceptable of 450 cfs, although there is a lack of knowledge for flows less than 450 cfs for cataraft. The estimated optimum flow for inflatable kayaks was 250 to 700 cfs. No minimum acceptable was identified for inflatable kayaks. Pack rafts were identified as a watercraft suitable for the Chamise river segment, but none of the focus group participants had experience pack rafting in this segment to estimate a suitable flow range.

Table 5.2-3. Chamise Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Chamise (2.5 miles)	Kayak	150–400	350–2,500 800–2,500 Class III kayaker: 250-700	No gap
	Raft	400	700–3,500	No gap
	Cataraft	450	600–2,000	< 450
	Inflatable Kayak		250–700	
	Pack Raft			Need information

cfs = cubic feet per second

5.2.2.4. Salmon Falls

Salmon Falls is a Class VI river segment 0.9 mile long. This segment is boated by a handful of expert boaters only. Upper and Lower Salmon Falls are the Class VI rapids in this section in addition to Class III and IV rapids. Boaters sometimes put-in just below Lower Salmon Falls to paddle the Class IV rapids connecting into the Goldledge run downstream. A focus group discussion was skipped for this river segment in order to concentrate on other river segments downstream.

5.2.2.5. Goldledge / Ant Canyon

Goldledge / Ant Canyon (Goldledge) is a 3.1-mile river segment rated Class III for flows up to 2,000 cfs and Class IV for flows greater than 2,000 cfs. Goldledge is typically combined with other river segments rather than boated as a standalone river segment.

Goldledge serves as a good warm-up for the Class V Thunder Run immediately downstream. Boaters are also attracted to Goldledge because it is the most upstream river segment in the bypass reach that allows paddlers to boat all the way to town without having to portage around Salmon Falls. Goldledge offers opportunity for boaters to develop skills to step from Class III to Class IV. At higher flows (not specified), Level 2 participants indicated there is good surfing in the Goldledge segment.

Boaters typically put-in for Goldledge at the Ant Canyon dispersed camping site. The take-out is located at the Corral Creek Day Use site although some boaters use an alternate unnamed take-out at a roadside pull-out a short distance downstream.

Preliminary estimates of flow preferences were identified for a number of watercraft in the Goldledge segment (Table 5.2-4). Similar to Chamise, there was a difference of opinion on the preliminary estimates for optimum kayak flows in Goldledge. One kayaker believed optimum flows ranged from 300 to 2,000 cfs while other Level 2 participants estimated optimum flows between 1,200 and 3,500 cfs. Differences of opinion were also expressed for minimum acceptable flows with 175 cfs estimated by one kayaker and others estimating 700 cfs as the minimum acceptable for kayaks in Goldledge. Focus group participants noted that the broader channel in Goldledge makes it less boatable at lower flows. There is a lack of knowledge on minimum acceptable flows for kayaking for flows less than 175 cfs and less than 700 cfs for these two groups of kayakers respectively.

Rafters estimated the optimum flow was between 2,000 and 3,000 cfs for Goldledge with the minimum acceptable between 1,000 and 1,250 cfs. The minimum acceptable is based on the Thunder Run downstream which is typically rafted in combination with Goldledge. Commercial rafters identified 1,200 cfs as their minimum flow for trips and noted this minimum has increased in 2023 due to spring floods creating new bars that require a higher minimum flow to navigate. Rafters identified a lack of knowledge on minimum acceptable flows less than 900 cfs.

The estimated optimum flow for catarafts was 900 to 2,500 cfs, but catarafters were not comfortable estimating a minimum acceptable flow. Catarafters identified a lack of knowledge on minimum acceptable flows less than 700 cfs.

The estimated optimum flow for inflatable kayaks was 250 to 700 cfs with a minimum acceptable flow estimate of 150 cfs. Inflatable kayakers identified a lack of knowledge on minimum acceptable flows less than 500 cfs. Pack rafts were identified as a watercraft suitable for the Goldledge river segment but none of the focus group participants had experience pack rafting in this segment to estimate a suitable flow range.

Table 5.2-4. Goldledge Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Goldledge / Ant Canyon (3.1 miles)	Kayak	175 700	1,200–3,500 300–2,000	< 175 < 700
	Raft	minimum flow constrained by flows for segment below (Thunder Run)	2,000–3,000	< 900
	Cataraft	Don't know	900–2,500	< 700
	Inflatable Kayak	150	250–700	< 500
	Pack Raft		?	

cfs = cubic feet per second

5.2.2.6. Thunder Run

The Thunder Run is a 3.5-mile river segment rated Class IV$^+$ to V for flows between 700 to 2,000 cfs by kayakers in the focus group and Class V by the rafters. Kayakers rated this river segment Class V for flows greater than 2,000 cfs. For flows less than 700 cfs, kayakers rated the Thunder Run Class IV. With the exception of Salmon Falls, the Thunder Run is considered the most difficult segment in the bypass reach. Eight of the focus group participants indicated they boat the Thunder Run. Of those eight participants, six rated the Thunder Run as one of the best river segments in the bypass reach. The Thunder Run is a popular segment for Class V boaters and often paddled after work. During periods of higher flow, boaters often boat the Thunder Run all the way to town combining the downstream segments in a single trip. Boaters will combine the Goldledge segment upstream as a warm-up to the Thunder Run.

Boaters typically put-in for the Thunder Run at the Corral Creek Day Use site. If boating only the Thunder Run then boaters take-out at the Thunderbird access. If continuing downstream, boaters may take-out at a location referred to as Halfway to include the initial rapids in the Cable / Camp 3 (Cable) run or continue to Riverkern beach.

Preliminary estimates of flow preferences were identified for a number of watercraft in the Thunder Run segment (Table 5.2-5). Similar to Chamise and Goldledge, there was a difference of opinion on the preliminary estimates for optimum kayak flows in the Thunder Run. One kayaker believed optimum flows ranged from 300 to 2,000 cfs while other Level 2 participants estimated optimum flows between 1,200 and 4,000 cfs. The minimum acceptable flow was estimated to be 700 cfs for the Thunder Run. Kayakers believed they had sufficient experience to estimate the minimum acceptable flows in the Thunder Run.

Rafters estimated the optimum flow was between 2,000 and 3,000 cfs for the Thunder Run with the minimum acceptable between 1,000 and 1,250 cfs. Commercial rafters noted that 1,600 cfs might be the new minimum acceptable flow for the Thunder Run based on changes to channel shape from spring flooding.

The estimated optimum flow for catarafts was 1,200 to 2,000 cfs with a minimum acceptable flow estimate of 1,000 cfs with some hesitation. Catarafters identified a lack of knowledge on minimum acceptable flows less than 1,000 cfs.

The estimated optimum flow for inflatable kayaks was 250 to 700 cfs with a minimum acceptable flow estimate of 150 cfs. Pack rafts were identified as a watercraft suitable for the Thunder Run but none of the focus group participants had experience pack rafting in this segment to estimate a suitable flow range.

Table 5.2-5. Thunder Run Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack knowledge to estimate minimum acceptable flow (cfs)
Thunder Run (3.5 miles)	Kayak	700	1,200–4,000 300–2,000	none
	Raft	1,000–1,250	2,000–3,000	none
	Cataraft	at least 1,000 maybe lower	1,200–2,000	< 1000
	Inflatable Kayak	150	250–700	
	Pack Raft	?	?	

cfs = cubic feet per second

5.2.2.7. Cables / Camp 3

The Cables / Camp 3 (Cables) is a 1.8-mile river segment rated Class III to III$^+$ for flows less than 2,000 cfs and III$^+$ to IV for flows greater than 2,000 cfs. The Cables river segment is a popular run due to its close proximity to town, intermediate difficulty and ability to combine with other river segments for a trip ending at Riverside Park in Kernville. Focus group participants described the Cables as average compared to other river segments noting that it lacked the beauty found in other segments upstream.

Boaters put-in at the Thunderbird access for the start of Cables or move downstream to the Camp 3 put-in to avoid the first rapid called the Wall considered the most difficult in this river segment. Boaters may take-out at Riverkern beach or add the Powerhouse / Lickety Split river segment (KR3 Powerhouse) and take-out at Riverside Park in Kernville.

Preliminary estimates of flow preferences were identified for a number of watercraft in the Cables river segment (Table 5.2-6). Similar to other river segments, there was a

difference of opinion on the preliminary estimates for optimum kayak flows in the Cables river segment. One kayaker believed optimum flows ranged from 500 to 4,500 cfs while other Level 2 participants estimated optimum flows between 1,400 and 2,200 for Class III boaters and 1,500 to 4,500 cfs for Class IV boaters. The minimum acceptable flow was estimated to be 700 cfs for kayakers although one kayaker noted they boated from the Cables put-in to Tequila rapid at 150 cfs but did not boat below that section. Tequila is located where the Kern River channel splits dividing the water into two channels between an island.

Rafters estimated the optimum flow was between 2,000 and 3,000 cfs for the Cables river segment with the minimum acceptable between 700 and 750 cfs. The estimated optimum flow for catarafts was 1,000 to 6,000 cfs with a minimum acceptable flow estimate of 500 cfs. Catarafters identified a lack of knowledge on minimum acceptable flows less than 1,000 cfs. The estimated optimum flow for inflatable kayaks was 250 to 700 cfs with a minimum acceptable flow estimate of 150 to 200 cfs. Pack rafts were identified as a watercraft suitable for the Cables river segment but none of the focus group participants had experience pack rafting in this segment to estimate a suitable flow range. The estimated optimum flow for stand-up paddleboards was 1,500 to 2,500 cfs with a minimum acceptable flow estimate of 1,000 cfs. None of the focus participants identified a lack of experience in the Cables river segment to estimate the minimum acceptable flows with the exception of no one having direct experience with pack rafts.

Table 5.2-6. Cables Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Cables / Camp 3 (1.8 miles)	Kayak	700 One kayaker boated 150 in upper half of run but stopped upstream of Tequila—has not boated below Tequila at 150 cfs	Class III: 1,400–2,200 Class IV: 155–4,500 500–4,500	
	Raft	700–750	2,000–3,000	
	Cataraft	500	1,000–6,000	
	Inflatable Kayak	150–200	250–700	
	Pack Raft	?	?	
	Stand-up Paddleboard	1,000	1,500–2,500	

cfs = cubic feet per second

5.2.2.8. Riverkern

The Riverkern run is a 1-mile river segment rated Class II. The focus group participants limited discussion of the Riverkern segment to listing of special attributes, identification of minimum acceptable flows and knowledge gaps on minimum acceptable flows. The Riverkern river segment is a great addition to the Powerhouse segment downstream. The run is relatively safe and good for novice boaters to develop skills. Riverkern is less aesthetic compared to upstream river segments.

Boaters access this river segment using the established boat launch at Riverkern Beach or just upstream at a roadside pull-out. Boaters can take-out at the KR3 Powerhouse launch site but typically combine this segment with the Powerhouse run and take-out at Riverside Park in Kernville.

Focus group participants provided preliminary estimates of minimum acceptable flows for a number of watercraft in the Riverkern river segment (Table 5.2-7). The group noted there was no upper limit on flows and did not specify an optimum flow range. Kayakers were divided on the minimum acceptable flow with some identifying 200 cfs as the minimum while others commented they would not boat below 500 cfs. Some of the kayakers noted a lack of direct experience for flows less than 500 cfs to assess the minimum acceptable flow.

Rafters listed 500 cfs as the minimum acceptable flow. The catarafter in the group identified 350 to 400 cfs as the minimum acceptable. The minimum acceptable flow for inflatable kayaks was 150 to 200 cfs. Stand-up paddleboarders identified 600 cfs as the minimum acceptable flow. None of the focus participants had direct experience boating pack rafts in the Riverkern segment to estimate minimum acceptable flows.

Table 5.2-7. Riverkern Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Riverkern (1.0 miles)	Kayak	200 (for some) 500 for others	Focus group did not to discuss optimum flows for this river segment	< 500
	Raft	500		
	Cataraft	350–400		
	Inflatable Kayak	150–200		
	Pack Raft	200–250 (there might not be a minimum acceptable limit)		
	Stand-up Paddleboard	600		

cfs = cubic feet per second

5.2.2.9. Powerhouse / Lickety Split

The Powerhouse run is a 1.8-mile river segment rated Class II for flows less than 700 cfs and Class II to III for flows greater than 700 cfs. The Powerhouse segment is boated more than any other segment simply because it has more reliable flows below the powerhouse resulting in a longer boating season than segments in the bypass reach upstream. This river segment is relatively safe for beginning kayakers and stand-up paddleboarders to develop skills. This section is also popular for tubers. This Powerhouse run is less aesthetic compared to upstream segments and contains less river features to practice river skills.

Boaters access this river segment using SCE's launch site downstream of the KR3 Powerhouse. Boaters take-out at Riverside Park in Kernville or continue downstream to the old cemetery. In 2023, high pool elevations on Isabella Lake required boaters to paddle on the reservoir to reach the old cemetery take-out.

Focus group participants provided preliminary estimates of flow preferences for a number of watercraft in the Powerhouse river segment (Table 5.2-8). Kayakers were divided on the optimum flow and minimum acceptable flows for the Powerhouse segment with some identifying flows from 300 cfs to infinity as the optimum flow while others preferred flows greater than 1,000 cfs for optimum. Minimum acceptable flows for kayakers were divided between 150 cfs for some and 350 cfs for others.

Rafters identified 2,000 cfs to infinity for optimum flows and 400 cfs as the minimum acceptable flow. The catarafter in the group identified 1,000 cfs to infinity for optimum flows and 200 cfs as the minimum acceptable. The optimum flow for inflatable kayaks was 700 to 2000 cfs and the minimum acceptable flow was 150 to 200 cfs. The optimum flow for stand-up paddleboards was greater than 1,000 cfs and the minimum acceptable flow was 700 cfs. The optimum flow for tubes was greater than 250 to 600 cfs and the minimum acceptable flow was 150 cfs. Focus group participants noted that high flows in 2023 may have altered the channel shape in this river segment resulting in new minimum acceptable flows for respective watercraft that will not be known until the hydrograph recedes in the fall season. None of the focus participants had direct experience boating packrafts in the Powerhouse segment to estimate optimum and minimum acceptable flows.

Table 5.2-8. Powerhouse Preliminary Flow Preferences

River Segment	Watercraft	Minimum Acceptable Flow (cfs)	Optimum Flow (cfs)	Lack Knowledge to Estimate Minimum Acceptable Flow (cfs)
Powerhouse / Lickety Split (1.8 miles)	Kayak	150; this year might have changed channel 350 for some members	> 1,000 300–infinity	Flooding may have altered the channel this year; need to assess at lower flows
	Raft	400	2,000–infinity	
	Cataraft	200	1,000–infinity	
	Inflatable Kayak	150–250	700–2,000	
	Pack Raft		?	
	Stand-up Paddleboard	700	1,000–up	
	Inner Tube	150	250–600	

cfs = cubic feet per second

5.2.2.10. Flow Information Sources

Level 2 study participants predominantly use several online information sources to check if flow conditions are suitable for their respective watercraft. The online information sources include Dreamflows, SCE flow information, AW, and the U.S. Army Corps of Engineers. Several participants also use physical markers in the river channel to determine if flow levels are suitable in Sidewinder / Bomb's Away, Fairview, Chamise, Salmon Falls, and Goldledge / Ant Canyon.

5.3. LEVEL 3 INTENSIVE STUDY

SCE launched the Level 3 Intensive Study single flow whitewater boating survey (single flow survey) on April 1, 2023. Information obtained in the Level 1 Desktop Review of Existing Information and planning for the Level 2 Limited Reconnaissance investigation was used to support and guide planning and implementation for the Level 3 single flow survey. The broad range of flows forecasted for WY 2023 presented an opportunity to collect boater flow evaluations encompassing high challenge flows through the spring and summer months to low flow conditions at or below minimum acceptable in the late summer and fall.

SCE notified Project Stakeholders announcing the launch of the single flow survey including a hyperlink to the survey and a QR code (Appendix E). The electronic notification encouraged boaters to complete the single flow survey for each trip completed on the NFKR between Fairview Dam and Riverside Park in Kernville and informing

boaters the survey will remain open through the remainder of 2023. SCE forwarded the single flow survey Announcement to AW, Friends of the River, Gold Country Paddlers, Kern River Alliance, KRB, Los Angeles Kayak Club, and the River Management Society requesting these organizations make the information available to their membership via their respective websites. SCE provided information about the single flow survey to commercial outfitters operating on the NFKR encouraging their guides to complete a survey after each trip. SCE resent the single flow survey announcement periodically throughout the spring and summer months to the Project Stakeholder list and whitewater boating organizations to encourage boater participation in the online survey. SCE posted the single flow survey announcement on the Relicensing Project website (www.SCE.com/kr3) including hyperlinks to the survey and QR code. Laminated 8.5- by 11-inch posters were distributed to commercial whitewater outfitters in Kernville, the SQF office, Kern River Brewery, Sierra Gateway Store, Riverkern Store, and bathrooms at developed river access locations along the NFKR. The posters described the single flow survey including the URL and QR code. The staff administering the REC-2 Visitor Intercept Survey monitored the posters at the developed river access locations, replacing posters as needed.

The single flow survey was accessible through a smartphone or computer using the URL link (https://www.surveymonkey.com/r/KR3WWSingleflow) or the QR code. Providing access to the survey via a smartphone allowed boaters to complete the single flow survey shortly after completing a trip. Alternatively, boaters can complete the single flow survey using a computer. As of September 20, 2023, 401 boaters have participated in the single flow survey providing information on their boating trips on the NFKR. single flow survey responses were distributed across the months of April, May, June, July, August and September (Figure 5.3-1) evaluating flows ranging from 250 cfs in September to 8,500 cfs in May. Single flow surveys have been completed for all nine river segments using a variety of watercraft. The single flow survey will remain open through December 31, 2023, allowing boaters to continue evaluating flows in the NFKR as they hydrograph decreases through the fall and early winter months. Analysis of the single flow survey data will occur in the winter of 2024. Information obtained in the single flow survey will be used to support and guide planning and implementation for the Level 3 Comparative Flow Survey in 2024. The results of the Level 3 Single Flow Survey and Flow Comparison Survey will be reported in the USR.

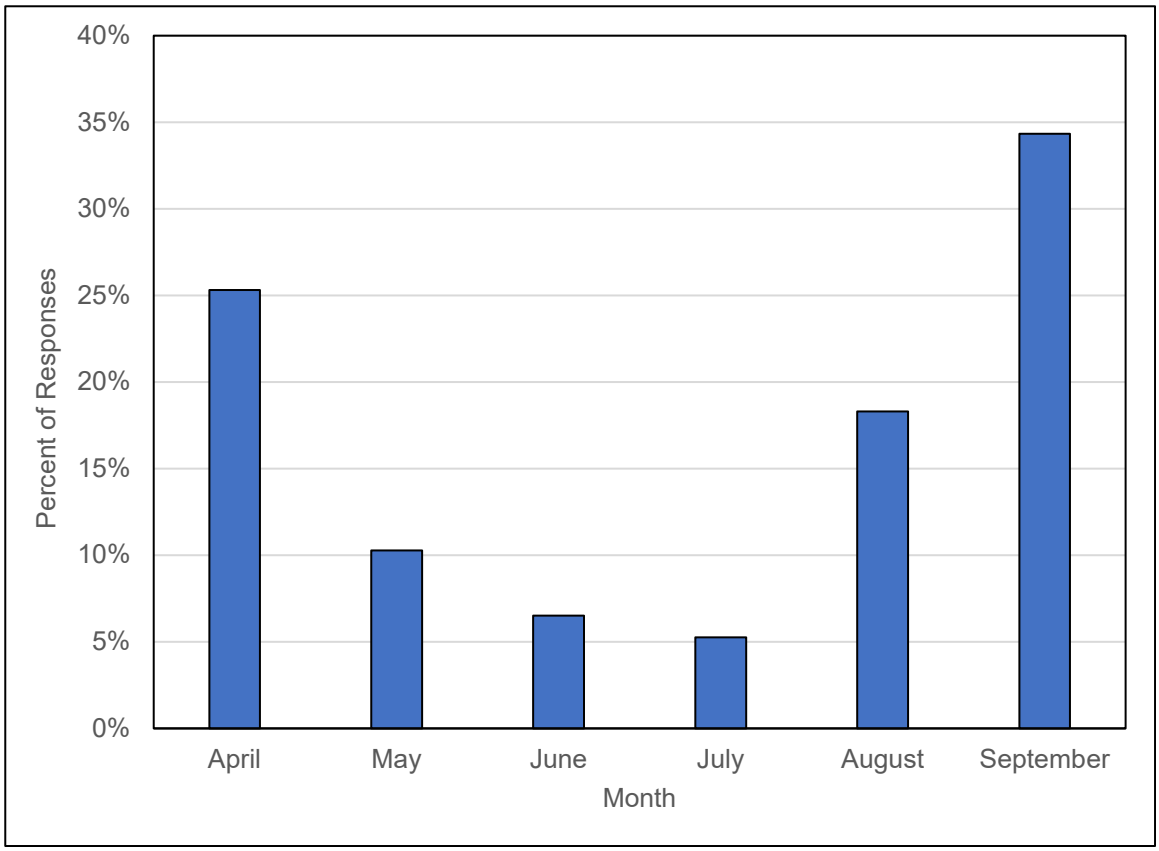

Figure 5.3-1: Single Flow Survey Monthly Boating Flow Evaluations.

5.3.1. NEED FOR CONTROLLED FLOW STUDY

SCE committed to completing a Level 3 Intensive Study using both the Multiple Flow Reconnaissance Assessment Approach and Flow Comparison Survey approach approved in the FERC SPD (FERC, 2022). SCE implemented the single flow survey April 1, 2023. The single flow survey is the Multiple Flow Reconnaissance Assessment approach described in Whittaker et al. (2005). The single flow survey allows boaters in a range of watercraft types to evaluate flows for every boating trip on the river segments in the Fairview Dam Bypass Reach as well as the river segment directly downstream of KR3 Powerhouse. The single flow survey will remain open through December 31, 2023, allowing boaters to evaluate a broad range of flows spanning volumes likely less than minimum acceptable to high challenge flows during peak run-off. Evaluation of broad range of flows by a large number of boaters in a variety of watercraft in all the river segments addresses the limitations identified by Whittaker et al. (2005) in the controlled flow approach.

In 2024, SCE will conduct a Level 3 Flow Comparison Survey described in Whittaker et al. (2005): the Flow Comparison Survey combined with the single flow survey data will allow SCE to develop minimum acceptable and optimum flow preferences using a robust set of quantitative data derived from boaters using a variety of watercraft types in the respective river segments. The results of the Level 3 single flow survey and Flow Comparison Survey will be reported in the USR.

In addition, SCE will analyze the single flow survey data, in combination with results from Levels 1 and 2, to determine if there are gaps in the boating community's knowledge or experience to evaluate specific flows. SCE will attempt to enhance flows where potential gaps exist in boater knowledge and experience for specific flow ranges. Flow enhancement may include diverting a portion of flow over Fairview Dam to target specific flow ranges where knowledge gaps were identified in Levels 1 and 2 of the study as well as the single flow survey. Enhanced flows will be opportunistic, not scheduled in advance, and subject to available inflows and tunnel flow needs. The single flow survey may be reopened for additional data collection if quantitative data does not exist for developing flow preference curves.

The REC-1 Study Plan methods included the Level 3 Intensive Study as a study level that needed to be completed in order to identify the minimum acceptable and optimum flow preferences for whitewater boating in the Fairview Dam Bypass Reach. The Controlled Flow Study is just one of three approaches for Level 3 Intensive Study described in Whittaker et al (2005). The REC-1 Study Level 3 Intensive Study selected two Level 3 approaches described in Whittaker et al. (2005) that are better suited to the Fairview Dam Bypass Reach rather than the Controlled Flow Study approach. The two approaches selected for the REC-1 Study include the Multiple Flow Reconnaissance Assessments and Flow Comparison Surveys.

Whittaker et al. (2005) list "Additional Issues" and "Cautions and Limitations" associated with conducting Controlled Flow Studies. These issues and limitations include insufficient storage to provide flows across boatable flow range, number of boatable flow releases needed for investigation, inability to insure consistent panel of participants across controlled releases, length of bypass reach, complexity of whitewater opportunities in bypass reach, and variety of watercraft being evaluated. Each of these issues exist in the Project Area; for these reasons, SCE determined the Controlled Flow Study approach was not suitable for the Fairview Dam Bypass Reach.

Controlled flow studies are best suited for short bypass reaches where flows can be controlled to provide a range of flows in a 2- to 3-day period for a team of boaters to evaluate in succession. The 2- to 3-day timeframe for a controlled flow study helps ensure the same group of boaters evaluate the full range of flows under similar conditions to eliminate other variables.

The Fairview Dam Bypass Reach comprised of eight different whitewater segments varying in difficulty is not suited for the experimental design necessary for a controlled flow study. In addition, the lack of storage in the reservoir at Fairview Dam, coupled with the uncertainty of the snowmelt hydrograph of the NFKR (Table 5.3-1), severely limits the ability to schedule a controlled flow study with advanced notification let-alone conduct it over a 2- to 3-day timeframe. Predictable advance scheduling is necessary in controlled flow studies to insure a diverse composition of participants representative of a range of watercraft types, skill levels, geographic areas, ages and genders. The lack of storage above Fairview Dam will require boaters to participate on an unpredictable schedule thus severely limiting the potential pool of participants and has the potential to introduce bias to the study results.

The flows in a controlled flow study should include a broad range that includes flows estimated to be lower than the minimum acceptable and greater than the optimum range of flows with several flows between the estimated minimum and optimum. For the Fairview Dam Bypass Reach, the range of flows that need to be evaluated in a comparative flow evaluation need to be between approximately 200 cfs to 2,500 cfs based on information collected in Levels 1 and 2 of the REC-1 Study. Fairview Dam is unable to provide this range of flows over a 2- to 3-day period. KR3 operations can only adjust flows in the bypass reach by 600 cfs and there is no storage behind Fairview Dam to supplement flow diversion from the canal to the bypass reach. The lack of storage at in the reservoir upstream of Fairview Dam and limited capacity of the canal prohibit a comparative whitewater evaluation investigating flows between 200 cfs and 2,500 cfs using a controlled flow study design.

Table 5.3-1. Monthly Mean Flow for the Fairview Dam Bypass Reach, WYs 1997–2022 (USGS Gage 11186000)

Month	Monthly Mean Daily Flow (cfs)
October	133
November	133
December	136
January	268
February	212
March	370
April	693
May	1,449
June	1,427
July	620
August	188
September	126

Sources: SCE, 2023; USGS, 2023
cfs = cubic feet per second

6.0 STUDY SPECIFIC CONSULTATION

Interested resource agencies were invited to participate in the Level 2 Limited Reconnaissance site visit. SQF participated in the Level 2 Limited Reconnaissance on August 25, 2023, but the SWRCB responded to a message on the day of the Level 2 Limited Reconnaissance site visit informing SCE they were not able to attend.

7.0 OUTSTANDING STUDY PLAN ELEMENTS

Analysis of the Structured Interview Questionnaire responses will occur in early 2024 and be reported in the USR. Information obtained from the structured interview responses and the single flow survey will be used to help develop the comparative flow evaluation survey for the Level 3 Intensive Study.

The Level 3 Intensive Study is partially complete. The Level 3 single flow survey was launched in April 2023 to collect boater flow evaluations associated with the run-off from the snowmelt hydrograph available for the spring and summer seasons of 2023. The Level 3 single flow survey will remain open for responses through December 2023. The Level 3 comparative flow survey will be launched in January 2024. Results from the Level 3 single flow survey and comparative flow survey will be included in the USR.

Date	Activity
Fall 2023	Continue Level 3 Intensive Study: Single Flow Survey
Winter 2023/2024	Analyze Structured Interview Questionnaire and Single Flow Survey responses
Spring 2024	Implement Level 3 Intensive Study: Flow Comparison Survey
Fall 2024	Provide Level 3 results in the USR

USR = Updated Study Report

8.0 REFERENCES

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APPENDIX A
LEVEL 2 LIMITED RECONNAISSANCE SITE VISIT NOMINATION FORM AND OUTREACH

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Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

Southern California Edison (SCE) will host a Level 2 limited reconnaissance site visit in the bypass reach on the North Fork of the Kern River (NFKR) as part of the REC-1 Whitewater Boating Study. Per FERC's Study Plan Determination, the site visit is limited to 12 study participants, plus interested agency staff. The self-nomination form helps identify boaters wanting to participate in the Level 2 site visit.

SCE encourages the diverse interest groups in the boating community to work internally to identify an individual to complete the self-nomination form that represents their group's interests. Ideally, the 12 boaters participating in the Level 2 site visit will be a diverse cross-section of the boating community representing a range of watercraft, skill levels and knowledge of the whitewater boating segments in the bypass as well as commercial and non-commercial backgrounds.

If you would like to be considered for this site visit, then please complete the self-nomination form to request participation in the Level 2 site visit before May 15, 2023. SCE will notify the 12 Level 2 site visit participants via email. SCE will work with the boating community to identify representatives if more than 12 individuals self-nominate. The Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern bypass. We anticipate holding the site visit in the 2nd or 3rd quarter of this year.

If you are not selected to participate in this Level 2 limited reconnaissance site visit, there will be additional opportunities to participate in this study over the next year. Please refer to SCE's Relicensing Project website (www.SCE.com/kr3) for information about study participation opportunities.

Thank you,

Dave Moore (SCE KR3 Relicensing Project Manager)

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 1. Please provide your contact information.

First and Last Name

Email Address

Phone Number

* 2. Please provide the five-digit zip code for your primary address

Five-digit zip code

* 3. What is your age?

- ◯ Under 18
- ◯ 18-19
- ◯ 20-29
- ◯ 30-39
- ◯ 40-49
- ◯ 50-59
- ◯ 60 or older

* 4. What is your gender?

- ◯ Female
- ◯ Male
- ◯ Non-binary
- ◯ Choose not to answer

* 5. How would you rate your overall whitewater skill level?

- ◯ Novice (comfortable boating Class I-II)
- ◯ Intermediate (comfortable boating Class II-III)
- ◯ Advanced (comfortable boating Class IV)
- ◯ Expert (comfortable boating Class V)

* 6. In general, how many days a year do you spend whitewater boating?

- ◯ 1
- ◯ 2-5
- ◯ 6-10
- ◯ 11-20
- ◯ 21-30
- ◯ 31-50
- ◯ >50

* 7. Do you boat on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville?

- ◯ Yes
- ◯ No

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 8. Which whitewater segments have you boated on the North Fork Kern? (select all that apply even if you boat only a portion of one of the named segments)

- [ ] Sidewinder / Bomb's Away
- [ ] Fairview
- [ ] Chamise Gorge
- [ ] Salmon Falls
- [ ] Gold Ledge (aka Ant Canyon)
- [ ] Thunder Run
- [ ] Cable / Camp 3
- [ ] Riverkern Beach
- [ ] Powerhouse / Lickety Split

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 9. How many years have you boated the whitewater segments you selected in the previous question.

Sidewinder / Bomb's Away	
Fairview	
Chamise Gorge	
Salmon Falls	
Gold Ledge (aka Ant Canyon)	
Thunder Run	
Cable / Camp 3	
Riverkern Beach	
Powerhouse / Lickety Split	

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 10. What types of watercraft do you use on the whitewater segments in the bypass? (select all that apply)

- [ ] Whitewater kayak (k1 or K2)
- [ ] Closed-deck canoe (C1 or C2)
- [ ] Open canoe (OC1 or OC2)
- [ ] Inflatable Kayak (IK)
- [ ] Paddle raft
- [ ] Oar raft
- [ ] Cataraft
- [ ] Shredder
- [ ] Stand-up paddleboard
- [ ] Inner tube
- [ ] Other (please specify)

* 11. What types of watercraft do you have direct experience boating on the respective whitewater segments. (check all watercraft types for each whitewater segment that apply but only those where you have direct experience)

	Whitewater kayak (k1 or K2)	Closed-deck canoe (C1 or C2)	Open canoe (OC1 of OC2)	Inflatable Kayak (IK)	Paddle raft	Oar raft	Cataraft	Shredder	Stand-up paddlboard	Inner tube
Sidewinder / Bomb's Away	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fairview	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Chamise Gorge	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Salmon Falls	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Gold Ledge (aka Ant Canyon)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Thunder Run	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Cable / Camp 3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Riverkern Beach	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Powerhouse / Lickety Split	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 12. Please list the names of any local, regional or national whitewater groups or river organizations in which you are a member. If you are not a member of any whitewater groups or river organizations respond with "none". The objective in this question is to get representation from local, regional and national whitewater organizations in the site visit.

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 13. Do you currently (or in the past) work as a commercial river guide on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville?

- ◯ Yes
- ◯ No

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

* 14. Please list the commercial companies you currently or previously worked for on the North Fork Kern River guiding trips between Fairview Dam and Riverside Park in Kernville.

Participant Self-Nomination Form for the Level 2 Limited Reconnaissance
REC-1 Whitewater Boating Study
Kern River No. 3 Hydroelectric Project (FERC No. 2290)

Thank you for your interest in the REC-1 Whitewater Boating Study. SCE will contact you via email with further information for the Level 2 limited reconnaissance site visit. The list of participants will be posted on SCE's Relicensing Project website (www.SCE.com/kr3) as well as additional opportunities to participate in this study.

Please select the done button at the bottom of this page to submit your self-nomination form.

Level 2 Limited Reconnaissance Site Visit Outreach					
Item	**Date**	**Format**	**Distribution**	**By**	**Notes**
L2 Participant Self-nomination Form	4/10/2023	electronic	NA	John Gangemi	L2 Participant Self-nomination Form opened to collect responses. Automatically closes 12 AM on May 16, 2023
L2 Participant Self-nomination Form	4/12/2023	electronic	KR3 Stakeholder list	Jilllian Roach	email announcement to KR3 stakeholder group that L2 Participant Self-nomination Form is open for responses. URL and QR code included in email. Inform stakeholders form will close May 15, 2023
L2 Participant Self-nomination Form	5/13/2023	electronic	KR3 Stakeholder list	Jilllian Roach	email announcement to KR3 stakeholder group reminding them that L2 Participant Self-nomination Form is open for responses. URL and QR code included in email. Inform stakeholders form will close mid May 15, 2023. See email PDF in report appendix.
L2 Participant Self-nomination Form	5/30/2023	electronic	L2 Site Visit Participants	Jilllian Roach	email to each L2 Participant (13) confirming their nomination to the L2 Limited Reconnaissance Site Visit and proposed dates for the site visit. See pdf in appendix.
L2 Participant Self-nomination Form	5/30/2023	electronic	Agency stakeholders	Jilllian Roach	email to agency stakeholders informing them that the L2 Limited Reconnaissance Site Visit participants have been self-nominated and proposed dates for the site visit. See pdf in appendix.
L2 Limited Reconnaisance Site Visit	7/14/2023	electronic	Agency and L2 Site Visit Participants	Jilllian Roach	email to agency and L2 Site Visit Participants confirming Date, meeting location and logistics for L2 Site Visit. See pdf in appendix.
L2 Limited Reconnaisance Site Visit	8/11/2023	electronic	Agency and L2 Site Visit Participants	Jilllian Roach	email to agency and L2 Site Visit Participants confirming Date, meeting location and logistics for L2 Site Visit. See pdf in appendix.
L2 Limited Reconnaisance Site Visit	8/17/2023	Phone	Agency and L2 Site Visit Participants	Samantha Bennett	Phone calls to L2 Site Visit Participants confirming attendance. Left a voicemail when no answer and requested that they provide their RSVP for the L2 Limited Reconnaissance Site Visit, by replying to one of the reminder emails.
L2 Limited Reconnaisance Site Visit	8/18/2023	Phone	Agency and L2 Site Visit Participants	Samantha Bennett	Phone calls to L2 Site Visit Participants confirming attendance. Left a voicemail when no answer and requested that they provide their RSVP for the L2 Limited Reconnaissance Site Visit, by replying to one of the reminder emails.
L2 Limited Reconnaisance Site Visit	8/22/2023	electronic	Agency and L2 Site Visit Participants	Jilllian Roach	email reminder to agency and KR3 stakeholders confirming Date, meeting location and logistics for L2 Site Visit. See pdf in appendix.
L2 Limited Reconnaisance Site Visit	8/22/2023	Phone	Agency and L2 Site Visit Participants	Samantha Bennett	Phone calls to L2 Site Visit Participants confirming attendance. Left a voicemail when no answer and requested that they provide their RSVP for the L2 Limited Reconnaissance Site Visit, by replying to one of the reminder emails.

nordich2o@centurytel.net

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Wednesday, April 12, 2023 6:09 PM
Cc: David Moore
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 2 Participant Self-Nomination Form for the Level 2 Limited Reconnaissance Site Visit

Sent on behalf of Southern California Edison (SCE)

Dear Stakeholder:

Southern California Edison (SCE) will host a Level 2 limited reconnaissance site visit in the bypass reach on the North Fork Kern River (NFKR) as part of the REC-1 Whitewater Boating Study. Per FERC's Study Plan Determination, the site visit is limited to 12 study participants, plus interested agency staff. The self-nomination form helps identify boaters wanting to participate in the Level 2 site visit.

SCE encourages the diverse interest groups in the boating community to work internally to identify an individual to complete the self-nomination form that represents their group's interests. Ideally, the 12 boaters participating in the Level 2 site visit will be a diverse cross-section of the boating community representing a range of watercraft, skill levels and knowledge of the whitewater boating segments in the bypass as well as commercial and non-commercial backgrounds.

If you would like to be considered for this site visit, then **please complete the self-nomination form** to request participation in the Level 2 site visit **before May 15, 2023.** SCE will notify the 12 Level 2 site visit participants via email. SCE will work with the boating community to identify representatives if more than 12 individuals self-nominate. The Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern bypass. We anticipate holding the site visit in the 2nd or 3rd quarter of this year.

If you are not selected to participate in this Level 2 limited reconnaissance site visit, there will be additional opportunities to participate in this study over the next year. Please refer to SCE's Relicensing Project website (www.SCE.com/kr3) for information about study participation opportunities.

Level 2 self-nomination participant Form url and QR code
https://www.surveymonkey.com/r/Level2SiteVisit

Thank you,

Jillian Roach
Senior Consultant

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T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

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From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Saturday, May 13, 2023 9:09 PM
Cc: David Moore
Subject: SCE Kern River No. 3: REC 1-Whitewater Boating Study Plan - Data Collection Efforts

Sent on behalf of Southern California Edison (SCE)

Dear Stakeholder:

Southern California Edison (SCE) initiated the Federal Energy Regulatory Commission (FERC) approved REC-1 Whitewater Boating Study Plan in support of the Kern River No. 3 (KR3) hydroelectric relicensing process. As a reminder, the public data collection efforts underway for the REC-1 Whitewater Boating Study include:

- **Level 1 Desktop Analysis**: On May 5, 2023, SCE launched the **structured interview questionnaire.** The questionnaire is designed to gather information about your overall experiences on the North Fork Kern River (NFKR) between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information. You only need to complete the structured interview questionnaire one time. The questionnaire will take you 20 to 30 minutes to complete and will be open through mid-August 2023.

  Direct link to questionnaire: Structured Interview Questionnaire
  Scan the QR code and save it on your phone

- **Level 2 Limited Reconnaissance Site Visit**: On April 12, 2023, SCE launched a **Level 2 Limited Reconnaissance self-nomination participant form**. If you have not already done so, but would like to be considered for this site visit, please complete the self-nomination form by **May 15, 2023** to request participation in the Level 2 site visit. The Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern River bypass reach. We anticipate holding the site visit in the 3rd quarter of this year.

  Direct link to Self-Nomination Participant Form
  Scan the QR code and save it on your phone

- **Level 3 Intensive Study:** On April 1, 2023, SCE launched the **single flow whitewater boating survey** to capture boater survey responses this spring and summer as the NFKR is experiencing high flows. Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the NFKR between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip. Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

  Direct link to survey: Single Flow Whitewater Boating Survey
  Scan the QR code and save it on your phone

Thank you,

SCE Relicensing Team

Jillian Roach
Senior Consultant

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nordich2o@centurytel.net

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, May 30, 2023 2:11 PM
Cc: nordich2o@centurytel.net; David Moore
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 2 Participant Self-Nomination Form Submission

On behalf of Southern California Edison (SCE)

Dear Whitewater Boating Stakeholder:

Thank you for your interest in SCE's Level 2 limited reconnaissance site visit as part of the REC-1 Whitewater Boating Study. SCE received 13 self-nominations and has elected to invite all who signed up to participate in the Level 2 limited reconnaissance site visit in the bypass reach on the North Fork Kern River (NFKR).

We anticipate holding the site visit in the 3rd quarter of this year, contingent on run-off patterns through the summer season and early fall. Potential target dates may include: Friday August 25th or Friday September 15th. However, the specific date will be confirmed approximately 4 weeks in advance with additional instructions to participants. Please note, the Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern River bypass reach.

Thank you for your interest in the KR3 Relicensing and Whitewater Boating Study.

Jillian Roach
Senior Consultant

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From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, May 30, 2023 2:13 PM
Cc: David Moore; John Gangemi
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 2 - Agency Participation

On behalf of Southern California Edison (SCE)

Dear Agency Representative:

Southern California Edison (SCE) will host a Level 2 limited reconnaissance site visit in the bypass reach on the North Fork Kern River (NFKR) as part of the REC-1 Whitewater Boating Study. Per FERC's Study Plan Determination, the site visit is limited to 12 study participants, plus interested agency staff. The public stakeholders have been identified, and SCE is reaching out to you regarding your agencies interest in participating in this site visit.

We anticipate holding the site visit in the 3rd quarter of this year, contingent on run-off patterns through the summer season and early fall. Potential target dates may include: Friday August 25th or Friday September 15th. However, the specific date will be confirmed approximately 4 weeks in advance with additional instructions to participants. Please note, the Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern River bypass reach.

Please respond to this email with your agencies representative contact information so we can include them on focused upcoming communication regarding this site visit. If you do not wish to participate in the Level 2 site visit, please respond to this email for our records.

If you have any further questions, please reach out to SCE's Relicensing Manager, Dave Moore at David.moore@sce.com.

Thank you.

Jillian Roach
Senior Consultant

ERM
980 9th Street, Suite 750 | Sacramento, California | 95814
T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Friday, July 14, 2023 3:54 PM
Cc: David Moore
Subject: SCE KR3 REC-1 Whitewater Boating Study Level 2: SAVE THE DATE-August 25th

Sent on behalf of Southern California Edison (SCE)

Dear Agency and Whitewater Boating Stakeholder:

Thank you for your participation in SCE's Level 2 limited reconnaissance site visit as part of the REC-1 Whitewater Boating Study. SCE has scheduled the Level 2 limited reconnaissance site visit for:

DATE: Friday, August 25, 2023
TIME: 9am to 5pm
MEETING LOCATION: KR3 Powerhouse Put-in/Take-Out Parking Lot

The site visit will include stopping at various whitewater river segments between Fairview Dam and Riverside Park in Kernville. For the site visit, here are a few reminders:

- This site visit is land-based and includes road-side discussions only, no in-water boating as part of Level 2 Limited Reconnaissance
- Please dress accordingly for potentially hot weather and a long day in the sun
- Bring snacks and lunch with you

Study participants: if you are no longer able to participate in the Level 2 site visit or if you have any questions, please contact Jillian Roach at: jillian.roach@erm.com

Resource agency staff: please RSVP to jillian.roach@erm.com if you are interested in participating on the 25th so we can plan accordingly.

Thank you,

Jillian Roach
Senior Consultant

ERM
980 9th Street, Suite 750 | Sacramento, California | 95814
T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Friday, August 11, 2023 11:09 AM
Cc: David Moore
Subject: REMINDER: SCE KR3 REC-1 Whitewater Boating Study Level 2: SAVE THE DATE-August 25th

Sent on behalf of Southern California Edison (SCE)

Dear Agency and Whitewater Boating Stakeholder:

This is a reminder about SCE's Level 2 limited reconnaissance site visit as part of the REC-1 Whitewater Boating Study. SCE has scheduled the Level 2 limited reconnaissance site visit for:

DATE: Friday, August 25, 2023
TIME: 9am to 5pm
MEETING LOCATION: KR3 Powerhouse Put-in/Take-Out Parking Lot

The site visit will include stopping at various whitewater river segments between Fairview Dam and Riverside Park in Kernville. For the site visit, here are a few reminders:

- This site visit is land-based and includes road-side discussions only, no in-water boating as part of Level 2 Limited Reconnaissance
- Please dress accordingly for potentially hot weather and a long day in the sun
- Bring water, snacks, and lunch with you (we will find a spot to eat riverside)

If you have not already done so, please RSVP to jillian.roach@erm.com to confirm your attendance at the site visit on the 25th so we can plan transportation logistics accordingly.

Thank you,

Jillian Roach
Senior Consultant

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T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

From: Jillian Roach
Cc: David Moore
Subject: REMINDER: SCE KR3 REC-1 Whitewater Boating Study Level 2 Scheduled for August 25th
Date: Tuesday, August 22, 2023 8:45:46 AM
Attachments: image001.png

KR3 Whitewater Study Site Visit Participant:

This is a reminder for the upcoming Level 2 limited reconnaissance site visit as part of the REC-1 Whitewater Boating Study. The site visit is scheduled for:

DATE: Friday, August 25, 2023

TIME: 9am to 5pm

MEETING LOCATION: KR3 Powerhouse Put-in/Take-Out Parking Lot

While the NFKR flows may have increased due to the recent storm events, there are no in-water activities planned for this site visit. The site visit includes stopping at various whitewater river segment access points between Fairview Dam and Riverside Park in Kernville. Please keep in mind that Highway 178 has a small segment with 1-lane traffic controls, so account for a bit of extra time if you are traveling up from Bakersfield.

For the site visit, here are a few reminders:

- This site visit is land-based and includes road-side discussions only, no in-water boating as part of Level 2 Limited Reconnaissance
- Please dress accordingly for potentially hot weather and a long day in the sun
- Bring water, snacks, and lunch with you (we will find a spot to eat riverside)

If you have not already done so, please RSVP to jillian.roach@erm.com to confirm your attendance at the site visit on the 25th so we can plan transportation logistics accordingly.

Jillian Roach
Senior Consultant

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APPENDIX B
LEVEL 3 INTENSIVE STUDY SINGLE FLOW SURVEY

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KR3 Single Flow Whitewater Boating Survey

Welcome to the single flow whitewater boating survey for the Kern River No. 3 (KR3) Hydroelectric Project.

Southern California Edison (SCE) is the owner and operator of the KR3 Project which is currently undergoing a relicensing proceeding with the Federal Energy Regulatory Commission (FERC) to renew its long-term operating license. This single flow whitewater boating survey is one part of the REC-1 Whitewater Boating Study being conducted to support the relicensing process.

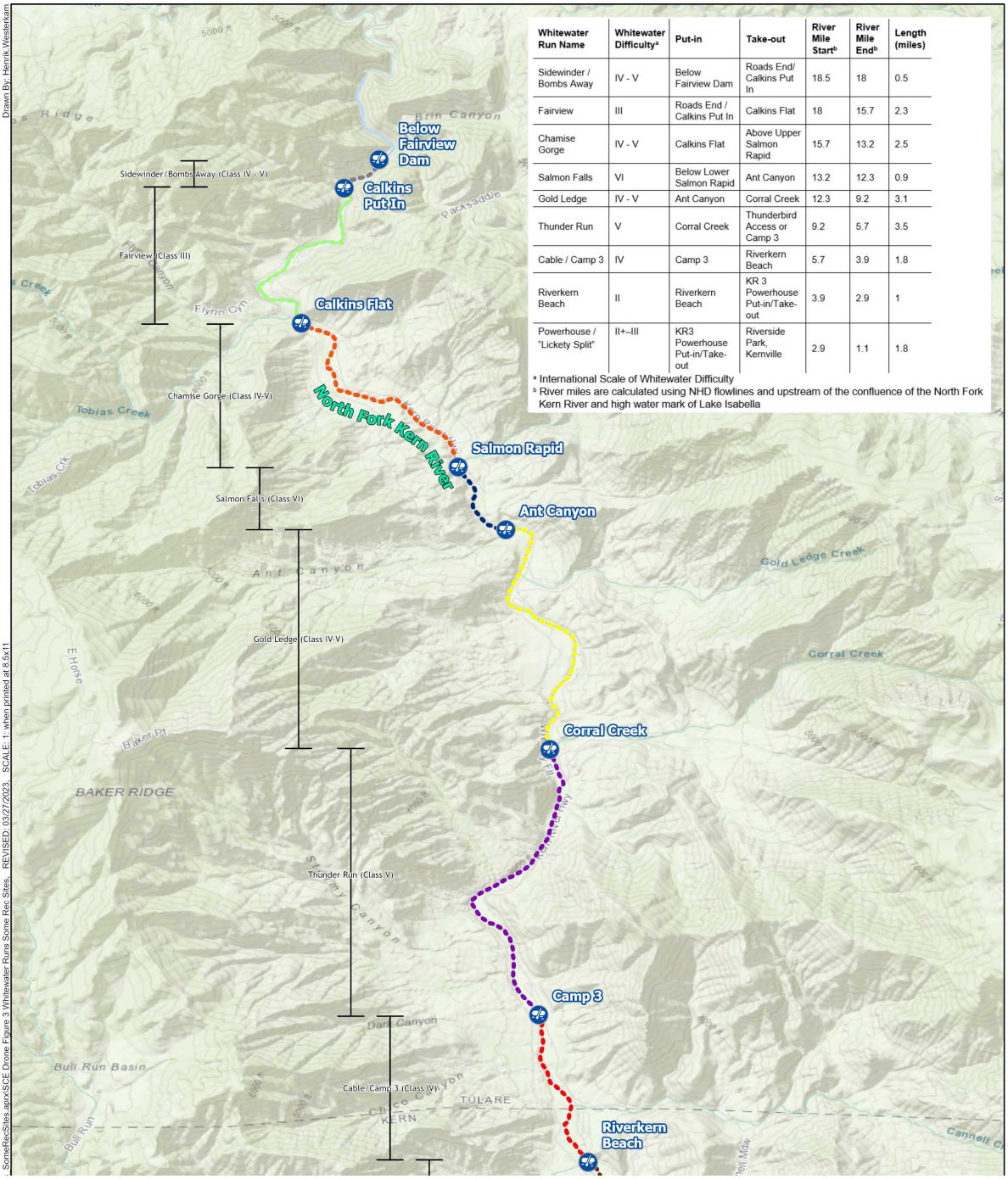
Please complete the single flow whitewater boating survey for each boating trip you do on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The following survey questions will ask you to specify which whitewater segment you boated on your trip. For your convenience, a map delineating the whitewater segments is provided at the start of the survey. Your trip may use different access points or overlap one or more whitewater segments. Please select all the whitewater segments you boated during this trip regardless if you used all or part of the segment.

Before starting the single flow whitewater boating survey, please confirm the flow (cfs) for your trip at the time of your launch using the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville. Alternatively, keep the flow information open in a separate browser page to refer back to as you go through the survey questions focused on flow during your trip. Knowing the correct flow you boated will be important to answer several questions in the survey.

Thank you for participating in the single flow whitewater boating survey. Your feedback is important, please encourage your boating friends to document their trips.

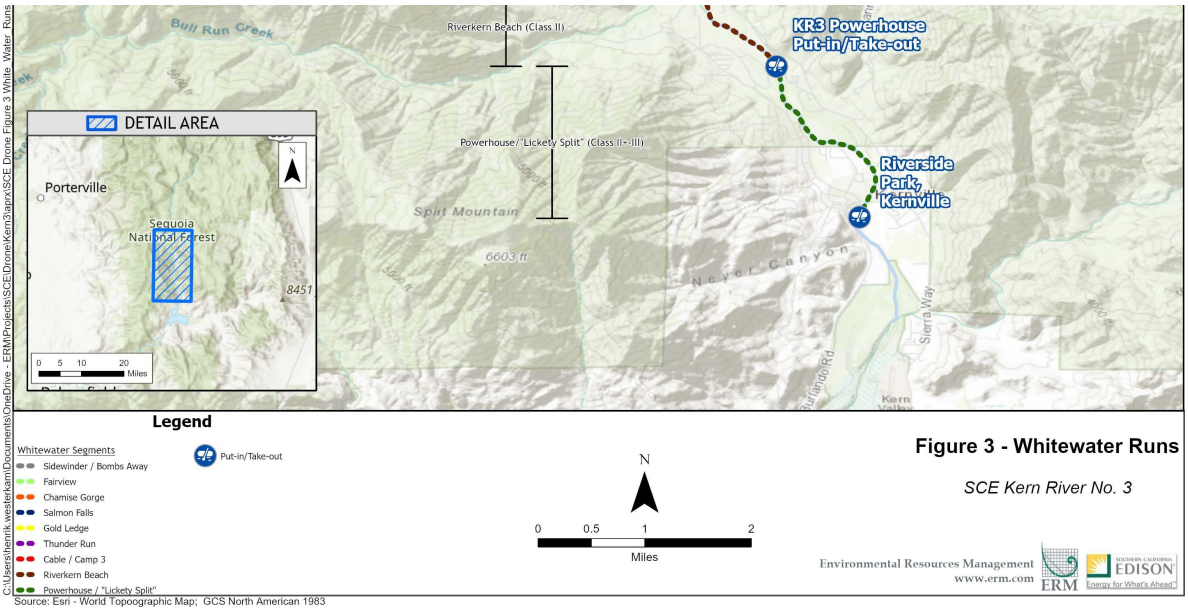
KR3 Single Flow Whitewater Boating Survey

Whitewater segments for the single flow whitewater boating survey commonly delineated on the North Fork Kern River.



Whitewater Run Name	Whitewater Difficulty[a]	Put-in	Take-out	River Mile Start[b]	River Mile End[b]	Length (miles)
Sidewinder / Bombs Away	IV - V	Below Fairview Dam	Roads End/ Calkins Put In	18.5	18	0.5
Fairview	III	Roads End / Calkins Put In	Calkins Flat	18	15.7	2.3
Chamise Gorge	IV - V	Calkins Flat	Above Upper Salmon Rapid	15.7	13.2	2.5
Salmon Falls	VI	Below Lower Salmon Rapid	Ant Canyon	13.2	12.3	0.9
Gold Ledge	IV - V	Ant Canyon	Corral Creek	12.3	9.2	3.1
Thunder Run	V	Corral Creek	Thunderbird Access or Camp 3	9.2	5.7	3.5
Cable / Camp 3	IV	Camp 3	Riverkern Beach	5.7	3.9	1.8
Riverkern Beach	II	Riverkern Beach	KR 3 Powerhouse Put-in/Take-out	3.9	2.9	1
Powerhouse / "Lickety Split"	II+–III	KR3 Powerhouse Put-in/Take-out	Riverside Park, Kernville	2.9	1.1	1.8

[a] International Scale of Whitewater Difficulty
[b] River miles are calculated using NHD flowlines and upstream of the confluence of the North Fork Kern River and high water mark of Lake Isabella


Bull Run Creek
Riverkern Beach (Class II)
KR3 Powerhouse
Put-in/Take-out
DETAIL AREA
Porterville
Sequoia
National Forest
8451
Powerhouse/ "Lickety Split" (Class II- III)
Split Mountain
6603 ft
Riverside
Park,
Kernville
Never Canyon
Sierra Way
Rufiando Rd
Kern
0 5 10 20
Miles
N
Legend
Whitewater Segments
Sidewinder / Bombs Away
Fairview
Chamise Gorge
Salmon Falls
Gold Ledge
Thunder Run
Cable / Camp 3
Riverkern Beach
Powerhouse / "Lickety Split"
Put-in/Take-out
N
0 0.5 1 2
Miles
Figure 3 - Whitewater Runs
SCE Kern River No. 3
Environmental Resources Management
www.erm.com
ERM
SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead
C:\Users\henrik.westerkam\Documents\OneDrive - ERM\Projects\SCE\Drone\Kern3\aprx\SCE Drone Figure 3 White Water Runs
Source: Esri - World Topoographic Map; GCS North American 1983

KR3 Single Flow Whitewater Boating Survey

* 1. Please provide your full name (used for data sorting purposes only).

First and Last Name

* 2. Please provide the five-digit zip code for your primary address.

Five-digit zip code

* 3. Is this the first time you have completed the **single flow whitewater boating survey** for the KR3 project?

- ◯ Yes
- ◯ No

* 4. What is your age?

- ◯ Under 18
- ◯ 18-19
- ◯ 20-29
- ◯ 30-39
- ◯ 40-49
- ◯ 50-59
- ◯ 60 or older

* 5. What is your gender?

- ◯ Female
- ◯ Male
- ◯ Non-binary
- ◯ Choose not to answer

* 6. How would you rate your overall whitewater skill level?

- ◯ Novice (comfortable boating Class I-II)
- ◯ Intermediate (comfortable boating Class II-III)
- ◯ Advanced (comfortable boating Class IV)
- ◯ Expert (comfortable boating Class V)

* 7. What type of watercraft did you use for this trip? (choose one)

- ◯ Whitewater kayak (k1 or K2)
- ◯ Closed-deck canoe (C1 or C2)
- ◯ Open canoe (OC1 of OC2)
- ◯ Inflatable Kayak (IK)
- ◯ Paddle raft
- ◯ Other (please specify)
- ◯ Oar raft
- ◯ Cataraft
- ◯ Shredder
- ◯ Stand-up paddleboard
- ◯ Inner tube

* 8. Date and time you launched on the river for this boating trip:

Date / Time

Date MM/DD/YYYY Time hh mm AM/PM -

* 9. On this trip, did you boat a whitewater segment between Fairview Dam and the KR3 powerhouse (also known as the "bypass")?

- ◯ Yes
- ◯ No

KR3 Single Flow Whitewater Boating Survey

* 10. Which whitewater segments in the bypass between Fairview Dam and KR3 powerhouse did you boat on this trip? (select all that apply even if you only boated a portion of one of the named segments)

- [ ] Sidewinder / Bomb's Away
- [ ] Fairview
- [ ] Chamise Gorge
- [ ] Salmon Falls
- [ ] Gold Ledge (aka Ant Canyon)
- [ ] Thunder Run
- [ ] Camp 3 / Cable Run
- [ ] Riverkern Beach

KR3 Single Flow Whitewater Boating Survey

* 11. In general, how would you rate the overall whitewater difficulty for the segment(s) you boated on this trip at this flow?

	Class I	Class II	Class III	Class IV	Class V	Class VI	Not Sure
Sidewinder / Bomb's Away	◯	◯	◯	◯	◯	◯	◯
Fairview	◯	◯	◯	◯	◯	◯	◯
Chamise Gorge	◯	◯	◯	◯	◯	◯	◯
Salmon Falls	◯	◯	◯	◯	◯	◯	◯
Gold Ledge (aka Ant Canyon)	◯	◯	◯	◯	◯	◯	◯
Thunder Run	◯	◯	◯	◯	◯	◯	◯
Camp 3 / Cable Run	◯	◯	◯	◯	◯	◯	◯
Riverkern Beach	◯	◯	◯	◯	◯	◯	◯

* 12. What was the flow (cfs) in the bypass reach measured below Fairview Dam? If you are unable to verify the flow using an online gage then enter your best estimate of the flow (cfs). Please use whole numbers.

* 13. Please estimate the number of hits, stops, boat drags and portages you had on this trip at this flow.

Number of times **I hit** rocks and other obstacles (but did not stop):

Number of times I was **stopped** after hitting rocks or other obstacles (but did not have to get out of my boat to continue downstream):

Number of times I had to get out to **drag or pull my boat** off rocks or other obstacles:

Number of times I had to **portage** around unrunnable rapids, log jams, or other obstacles:

* 14. Please rate the flow on this trip for each of the following characteristics. (response required for each characteristic)

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable	Not an important characteristic for my trip
Technical Boating	◯	◯	◯	◯	◯	◯
Powerful hydraulics	◯	◯	◯	◯	◯	◯
Whitewater play	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯

* 15. Are you likely to return to boat the flow you just evaluated for this trip?

◯ Yes

◯ No

* 16. In general, would you prefer a flow that was lower, higher or about the same as this flow?

- ◯ Lower flow
- ◯ Higher flow
- ◯ About the same flow

KR3 Single Flow Whitewater Boating Survey

17. In the previous question , if you prefer a lower or higher flow, please indicate the flow volume in cfs that you would like to paddle. (whole numbers only)

KR3 Single Flow Whitewater Boating Survey

* 18. On this trip, did you boat the Powerhouse / Lickety Split run downstream of the KR3 powerhouse?

- ◯ Yes
- ◯ No

KR3 Single Flow Whitewater Boating Survey

* 19. What was the flow (cfs) downstream of the KR3 Powerhouse (measured at the Army Corps gage for the North Fork Kern at Kernville)? If you are unable to verify the flow using an online gage then enter your best estimate of the flow (cfs). Please use whole numbers.

* 20. Please rate the flow on this trip in the Powerhouse / Lickety Split segment for each of the following characteristics. (response required for each characteristic)

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable	Not an important characteristic for my trip
Technical Boating	◯	◯	◯	◯	◯	◯
Powerful hydraulics	◯	◯	◯	◯	◯	◯
Whitewater play	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯

* 21. Are you likely to return to the Powerhouse / Lickety Split segment to boat this flow you just evaluated?

◯ Yes

◯ No

* 22. For the Powerhouse / Lickety Split segment would you prefer a flow that was lower, higher or about the same as this flow?

- ◯ Lower flow
- ◯ Higher flow
- ◯ About the same flow

KR3 Single Flow Whitewater Boating Survey

23. In the previous question , if you prefer a lower or higher flow, please indicate the flow volume in cfs that you would like to paddle. (use whole numbers)

KR3 Single Flow Whitewater Boating Survey

Be sure to select the **Done** button on the bottom of this page to submit your responses.

Thank you for participating in the single flow whitewater boating survey. Please take the single flow survey for each trip you complete. Encourage other boaters to participate in the survey as well.

The single flow whitewater boating survey results will be included as part of the REC-1 Whitewater Boating Study Technical Report filed with FERC. This is one of several opportunities for the whitewater community to participate in the REC-1 whitewater boating study. For other participation opportunities or additional information about the KR3 relicensing process refer to Southern California Edison's website (www.SCE.com/kr3).

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APPENDIX C
LEVEL 1 STRUCTURED INTERVIEW QUESTIONNAIRE

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KR3 Structured Interview Questionnaire

Welcome to the structured interview questionnaire for the Kern River No. 3 (KR3) Hydroelectric Project.

Southern California Edison (SCE) is the owner and operator of the KR3 Project which is currently undergoing a relicensing proceeding with the Federal Energy Regulatory Commission (FERC) to renew its long-term operating license. This questionnaire is part of the Level 1 desktop analysis for the REC-1 whitewater boating study being conducted to support the relicensing process.

Please complete the structured interview questionnaire to document your whitewater boating experiences on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences and flow information. For your convenience, a map delineating the whitewater segments is provided at the start of the survey. You may use different access points or overlap one or more whitewater segments.

The questionnaire will take you 20 to 30 minutes to complete. Your thorough and thoughtful responses will provide important information about whitewater boating between Fairview Dam and Riverside Park as well as assist with progression to more intensive study. You only need to complete the structured interview questionnaire one time. Please take your time responding to each question.

Thank you for participating in the structured interview questionnaire. Your feedback is important, please encourage other boaters to complete the structured interview questionnaire.

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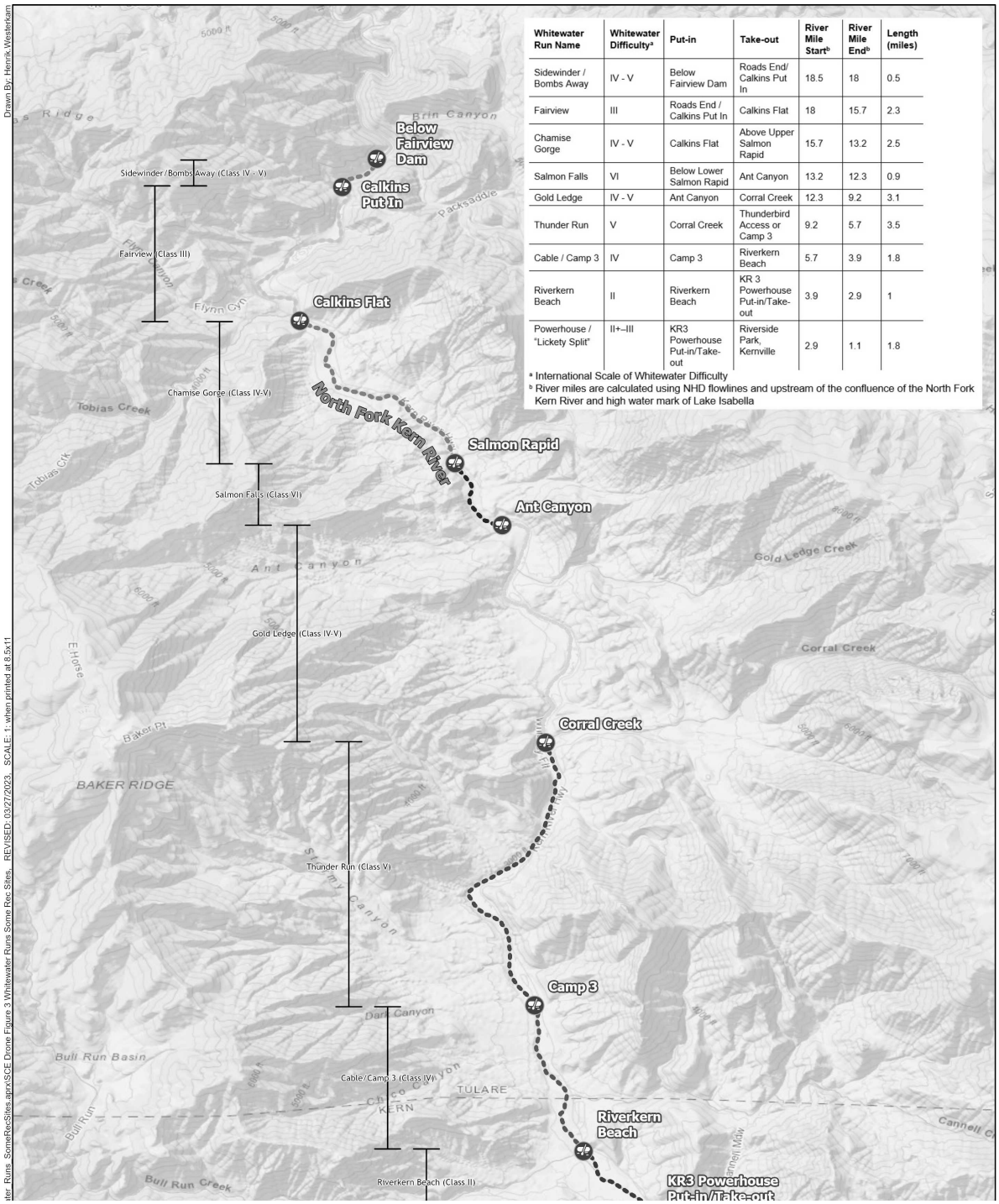
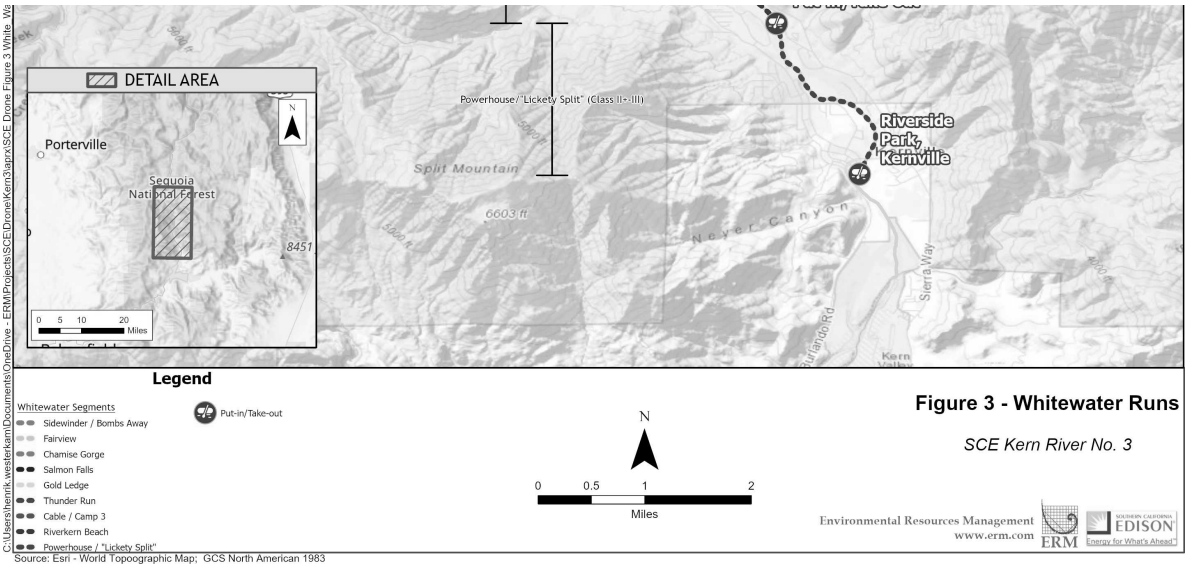
KR3 Structured Interview Questionnaire

Whitewater segments for the REC-1 whitewater boating study on the North Fork Kern River.



Whitewater Run Name	Whitewater Difficulty[a]	Put-in	Take-out	River Mile Start[b]	River Mile End[b]	Length (miles)
Sidewinder / Bombs Away	IV - V	Below Fairview Dam	Roads End/ Calkins Put In	18.5	18	0.5
Fairview	III	Roads End / Calkins Put In	Calkins Flat	18	15.7	2.3
Chamise Gorge	IV - V	Calkins Flat	Above Upper Salmon Rapid	15.7	13.2	2.5
Salmon Falls	VI	Below Lower Salmon Rapid	Ant Canyon	13.2	12.3	0.9
Gold Ledge	IV - V	Ant Canyon	Corral Creek	12.3	9.2	3.1
Thunder Run	V	Corral Creek	Thunderbird Access or Camp 3	9.2	5.7	3.5
Cable / Camp 3	IV	Camp 3	Riverkern Beach	5.7	3.9	1.8
Riverkern Beach	II	Riverkern Beach	KR 3 Powerhouse Put-in/Take-out	3.9	2.9	1
Powerhouse / "Lickety Split"	II+–III	KR3 Powerhouse Put-in/Take-out	Riverside Park, Kernville	2.9	1.1	1.8

[a] International Scale of Whitewater Difficulty
[b] River miles are calculated using NHD flowlines and upstream of the confluence of the North Fork Kern River and high water mark of Lake Isabella


DETAIL AREA
Porterville
Sequoia National Forest
8451
0 5 10 20 Miles
Powerhouse/ "Lickety Split" (Class II- III)
Split Mountain
6603 ft
Riverside Park, Kernville
Nevers Canyon
Sierra Way
Kern Valley
Legend
Whitewater Segments
Sidewinder / Bombs Away
Fairview
Chamise Gorge
Salmon Falls
Gold Ledge
Thunder Run
Cable / Camp 3
Riverkern Beach
Powerhouse / "Lickety Split"
Put-in/Take-out
N
0 0.5 1 2
Miles
Figure 3 - Whitewater Runs
SCE Kern River No. 3
Environmental Resources Management
www.erm.com
ERM
EDISON
Energy for What's Ahead™
Source: Esri - World Topoographic Map; GCS North American 1983
C:\Users\henrik.westerkam\Documents\OneDrive - ERM\Projects\SCEDrone\Kern3\apprx\SCE Drone Figure 3 White Wa

KR3 Structured Interview Questionnaire

* 1. Please provide your contact information (used for follow-up questions if needed).

First and Last Name

Email Address

Phone Number

* 2. Please provide the five-digit zip code for your primary address.

Five-digit zip code

* 3. What is your age?

- ◯ Under 18
- ◯ 18-19
- ◯ 20-29
- ◯ 30-39
- ◯ 40-49
- ◯ 50-59
- ◯ 60 or older

* 4. What is your gender?

- ◯ Female
- ◯ Male
- ◯ Non-binary
- ◯ Choose not to answer

* 5. How would you rate your overall whitewater skill level?

- ◯ Novice (comfortable boating Class I-II)
- ◯ Intermediate (comfortable boating Class II-III)
- ◯ Advanced (comfortable boating Class IV)
- ◯ Expert (comfortable boating Class V)

* 6. Do you currently (or in the past) boat on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville in a commercial or non-commercial boating capacity? (check all that apply).

- [ ] Commercial guide
- [ ] Non-commercial recreational boater
- [ ] Other (please specify)

* 7. What type of watercraft do you have experience using on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville? (check all that apply)

- [ ] Whitewater kayak (k1 or K2)
- [ ] Closed-deck canoe (C1 or C2)
- [ ] Open canoe (OC1 of OC2)
- [ ] Inflatable kayak (IK)
- [ ] Paddle raft
- [ ] Oar raft
- [ ] Cataraft
- [ ] Shredder
- [ ] Stand-up paddleboard
- [ ] Inner tube
- [ ] Other (please specify)

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KR3 Structured Interview Questionnaire

* 8. What type of watercraft do you use the most to boat on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville? (choose one)

- ◯ Whitewater kayak (k1 or K2)
- ◯ Closed-deck canoe (C1 or C2)
- ◯ Open canoe (OC1 of OC2)
- ◯ Inflatable kayak (IK)
- ◯ Paddle raft
- ◯ Oar raft
- ◯ Cataraft
- ◯ Shredder
- ◯ Stand-up paddleboard
- ◯ Inner tube
- ◯ [Insert text from Other]

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KR3 Structured Interview Questionnaire

* 9. How many boating trips per year do you typically make to the North Fork of the Kern between Fairview Dam and Riverside Park in Kernville? (also known as the "bypass")?

- ◯ 0 times annually
- ◯ 1 to 5 times annually
- ◯ 6 to 10 times annually
- ◯ 11 to 20 times annually
- ◯ 21 to 30 times annually
- ◯ 31 to 50 times annually
- ◯ 51 to 100 times annually
- ◯ more 100 times annually

* 10. How long is a **TYPICAL** boating trip for you on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville.

- ◯ 1 - 2 hours
- ◯ 3 - 4 hours
- ◯ 5 - 6 hours
- ◯ > 6 hours

* 11. When do you typically boat on the North Fork Kern River between Fairview Dam and Riverside Park. (check all that apply)

- ☐ Weekdays between 8 AM and 5 PM
- ☐ Weekdays after 5 PM
- ☐ Weekends
- ☐ Holiday Weekends (not including holiday)
- ☐ Holidays (not including associated weekend)

* 12. Why do you choose to boat on the North Fork Kern between Fairview Dam and Riverside Park in Kernville? (check all that apply)

- [ ] Quality of the whitewater
- [ ] Diversity of whitewater segments
- [ ] Whitewater difficulty
- [ ] River access
- [ ] Landscape and scenery
- [ ] Closest boating to where I live
- [ ] Camping
- [ ] Spending time with friends
- [ ] Other (please specify)

KR3 Structured Interview Questionnaire

* 13. Which whitewater segments do you boat on the North Fork Kern River between Fairview Dam and Riverside Park? (select all that apply even if you only boat a portion of one of the named segments)

- [ ] Sidewinder / Bomb's Away
- [ ] Fairview
- [ ] Chamise Gorge
- [ ] Salmon Falls
- [ ] Gold Ledge (aka Ant Canyon)
- [ ] Thunder Run
- [ ] Camp 3 / Cable Run
- [ ] Riverkern Beach
- [ ] Powerhouse / Lickety Split

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KR3 Structured Interview Questionnaire

* 14. Please rank the whitewater segments in your order of preference from your favorite (1) to least favorite (9) that you boat on the North Fork Kern River between Fairview Dam and Riverside Park. Use the arrows next to each river segment name to move it up or down to reflect your favorite to least favorite segment.

- Sidewinder / Bomb's Away
- Fairview
- Chamise Gorge
- Salmon Falls
- Gold Ledge (aka Ant Canyon)
- Thunder Run
- Camp 3 / Cable Run
- Riverkern Beach
- Powerhouse / Lickety Split

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KR3 Structured Interview Questionnaire

15. In general, how would you rate the overall whitewater difficulty for the river segments you are familiar with at a flow between **700 cfs and 2000 cfs** below Fairveiw Dam?

	Class I	Class II	Class III	Class IV	Class V	Class VI	Not Sure
Sidewinder / Bomb's Away	○	○	○	○	○	○	○
Fairview	○	○	○	○	○	○	○
Chamise Gorge	○	○	○	○	○	○	○
Salmon Falls	○	○	○	○	○	○	○
Gold Ledge (aka Ant Canyon)	○	○	○	○	○	○	○
Thunder Run	○	○	○	○	○	○	○
Camp 3 / Cable Run	○	○	○	○	○	○	○
Riverkern Beach	○	○	○	○	○	○	○
Powerhouse / Lickety Split	○	○	○	○	○	○	○

16. In general, how would you rate the overall whitewater difficulty for the river segments you are familiar with at a flow between **2000 cfs and 3500 cfs** below Fairveiw Dam?

	Class I	Class II	Class III	Class IV	Class V	Class VI	Not Sure
Sidewinder / Bomb's Away	○	○	○	○	○	○	○
Fairview	○	○	○	○	○	○	○
Chamise Gorge	○	○	○	○	○	○	○
Salmon Falls	○	○	○	○	○	○	○
Gold Ledge (aka Ant Canyon)	○	○	○	○	○	○	○
Thunder Run	○	○	○	○	○	○	○
Camp 3 / Cable Run	○	○	○	○	○	○	○
Riverkern Beach	○	○	○	○	○	○	○
Powerhouse / Lickety Split	○	○	○	○	○	○	○

17. In general, how would you rate the overall whitewater difficulty for the river segments you are familiar with at a flow **greater than 3500 cfs** below Fairveiw Dam?

	Class I	Class II	Class III	Class IV	Class V	Class VI	Not Sure
Sidewinder / Bomb's Away	○	○	○	○	○	○	○
Fairview	○	○	○	○	○	○	○
Chamise Gorge	○	○	○	○	○	○	○
Salmon Falls	○	○	○	○	○	○	○
Gold Ledge (aka Ant Canyon)	○	○	○	○	○	○	○
Thunder Run	○	○	○	○	○	○	○
Camp 3 / Cable Run	○	○	○	○	○	○	○
Riverkern Beach	○	○	○	○	○	○	○
Powerhouse / Lickety Split	○	○	○	○	○	○	○

18. In general, how would you rate the overall whitewater difficulty for the river segments you are familiar with at a flow **less than 700 cfs** below Fairveiw Dam?

	Class I	Class II	Class III	Class IV	Class V	Class VI	Not Sure
Sidewinder / Bomb's Away	○	○	○	○	○	○	○
Fairview	○	○	○	○	○	○	○
Chamise Gorge	○	○	○	○	○	○	○
Salmon Falls	○	○	○	○	○	○	○
Gold Ledge (aka Ant Canyon)	○	○	○	○	○	○	○
Thunder Run	○	○	○	○	○	○	○
Camp 3 / Cable Run	○	○	○	○	○	○	○
Riverkern Beach	○	○	○	○	○	○	○
Powerhouse / Lickety Split	○	○	○	○	○	○	○

KR3 Structured Interview Questionnaire

19. Which type of watercraft do you have direct experience boating on the river segments you identified previously? (check all watercraft that apply for each river segment you boat)

	WW kayak	Closed-deck canoe	Open-deck canoe	Inflatable kayak (IK)	Paddle raft	Oar frame raft	Cataraft	Shredder	SUP	Inner tube
Sidewinder / Bomb's Away	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fairview	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Chamise Gorge	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Salmon Falls	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Gold Ledge (aka Ant Canyon)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Thunder Run	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Camp 3 / Cable Run	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Riverkern Beach	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Powerhouse / Lickety Split	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

KR3 Structured Interview Questionnaire

20. The next three questions ask you to identify your flow preferences for your watercraft type for the river segments where you have direct experience. Your responses to these questions will help us develop more intensive investigation as part of this study. Please base your response on your experience and preferences for your watercraft rather than guidebook recommendations or group suggestions.

Please estimate the **minimum acceptable flow** for the river segments where you have boating experience. The minimum acceptable flow is **defined as the flow you would return to boat a specific river segment**.

Write in the **type of watercraft and flow for your watercraft**. If you have experience with more than one type of watercraft then enter the flow for each watercraft type with correct watercraft label. Be sure to specify the watercraft type for your responses (**example: kayak 400 cfs; raft 900 cfs; shredder 600 cfs**).

If you are unsure of the minimum acceptable flow for a river segment then leave it blank. (**Important: Specify WATERCRAFT TYPE and FLOW (cfs) in your responses**)

Sidewinder / Bomb's Away	
Fairview	
Chamise Gorge	
Salmon Falls	
Gold Ledge (aka Ant Canyon)	
Thunder Run	
Camp 3 / Cable Run	
Riverkern Beach	
Powerhouse / Lickety Split	

21. Please estimate your **optimum flow** for your watercraft for the river segments where you have boating experience. The optimum flow is **defined as your preferred flow for your watercraft** for the specific river segment.

Write in the **type of watercraft and optimum flow for that watercraft**. If you have experience with more than one type of watercraft then enter the optimum flow for each watercraft type with correct watercraft label. Your optimum flow preference may be different for different types of watercraft. The optimum flow may be a single flow number or a range. Be sure to specify the watercraft type for your responses (**example: kayak 1200 - 1500 cfs; raft 1400 - 2000 cfs; shredder 1200 cfs**).

If you are unsure of the optimum flow for a river segment then leave it blank. Please base your response on your experience and preferences rather than guidebook recommendations or group suggestions (**Important: Specify WATERCRAFT TYPE and FLOW (cfs) in your responses**)

Sidewinder / Bomb's Away	
Fairview	
Chamise Gorge	
Salmon Falls	
Gold Ledge (aka Ant Canyon)	
Thunder Run	
Camp 3 / Cable Run	
Riverkern Beach	
Powerhouse / Lickety Split	

22. There is a potential lack of direct boating experience and knowledge about flows in the bypass reach particularly between 40 cfs and and 700 cfs. Identifying these **flow knowledge gaps** in the whitewater boating community will help target flow ranges for more intensive study.

For each of the river segments listed below please specify the flow range where **YOU** personally **DO NOT have direct experience boating on a previous trip**. Include the type of watercraft where you do not have direct experience.

If you are uncertain for a river segment or are satisfied with your experience and knowledge of flows for a river segment then leave that row blank. Please provide a flow range (or more than one range of flows) using whole numbers. (**example responses: Kayak 200 - 400; Kayak 200 - 400 and 600 - 800, paddle raft <700**)

Sidewinder / Bomb's Away	
Fairview	
Chamise Gorge	
Salmon Falls	
Gold Ledge (aka Ant Canyon)	
Thunder Run	
Camp 3 / Cable Run	
Riverkern Beach	
Powerhouse / Lickety Split	

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KR3 Structured Interview Questionnaire

23. Do you **TYPICALLY** access the river using developed river access sites, campgrounds, day use sites, dispersed locations or a combination of all? (check all that apply)

	Developed river access sites	Campgrounds	Developed day-use sites	Dispersed locations	Combination of all
Sidewinder / Bomb's Away	☐	☐	☐	☐	☐
Fairview	☐	☐	☐	☐	☐
Chamise Gorge	☐	☐	☐	☐	☐
Salmon Falls	☐	☐	☐	☐	☐
Gold Ledge (aka Ant Canyon)	☐	☐	☐	☐	☐
Thunder Run	☐	☐	☐	☐	☐
Camp 3 / Cable Run	☐	☐	☐	☐	☐
Riverkern Beach	☐	☐	☐	☐	☐
Powerhouse / Lickety Split	☐	☐	☐	☐	☐

24. Do the river access locations you typically use meet your needs to access the respective river segments for whitewater boating?

- ◯ Yes
- ◯ No

KR3 Structured Interview Questionnaire

25. You indicated the river access locations you typically access do not meet your needs currently. Please describe what river access needs are not being met by the existing developed and dispersed sites. In your response try to describe the location, river segment and river access need.

KR3 Structured Interview Questionnaire

* 26. Do you check flow levels in advance to determine if flows are suitable before choosing to boat on the river segments between Fairview Dam and Riverside Park?

- ◯ Yes
- ◯ No

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KR3 Structured Interview Questionnaire

27. Where do you obtain flow information for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville to determine if flows are suitable for your watercraft? (check all that apply)

- [ ] American Whitewater website
- [ ] Dreamflows website
- [ ] SCE website for flows below Fairview Dam
- [ ] SCE flow phone
- [ ] US Army Corps webpage with flows for gage in Kernville
- [ ] Wait until I arrive at the river for direct observation
- [ ] I don't check flow levels
- [ ] Other source (please specify)

28. Does the available flow information meet your needs?

- ◯ Yes
- ◯ No

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KR3 Structured Interview Questionnaire

29. If the available flow information does not meet your needs, what type of flow information improvements could be made to keep you better informed of flow levels on the river segments between Fairview Dam and Riverside Park in Kernville?

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KR3 Structured Interview Questionnaire

30. How does boating on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville compare to other boating opportunities ....

	Worse	Similar	Better	Among the best
on the North Fork Kern upstream of Fairview Dam	◯	◯	◯	◯
tributaries on the North Fork Kern	◯	◯	◯	◯
below Isabella on the Kern River	◯	◯	◯	◯
in southern California	◯	◯	◯	◯
in northern California	◯	◯	◯	◯

KR3 Structured Interview Questionnaire

31. Do you have any other information to share about whitewater boating use patterns, flow preferences, access or other comments about whitewater boating on the river segments between Fairview Dam and Riverside Park in Kernville?

KR3 Structured Interview Questionnaire

Be sure to select the **Done** button on the bottom of this page to submit your responses.

Thank you for participating in the structured interview questionnaire for the REC-1 whitewater boating study. You only need to complete the structured interview questionnaire one time. Please encourage other members of the whitewater community to participate in the questionnaire.

The structured interview questionnaire results will be included as part of the REC-1 Whitewater Boating Study Technical Report filed with FERC. This is one of several opportunities for the whitewater community to participate in the REC-1 whitewater boating study. For other participation opportunities or additional information about the KR3 relicensing process refer to Southern California Edison's website (www.SCE.com/kr3).

APPENDIX D
LEVEL 1 STRUCTURED INTERVIEW QUESTIONNAIRE OUTREACH

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Level 1 Structured Interview Questionnaire Outreach					
Item	**Date**	**Format**	**Distribution**	**By**	**Notes**
L1 Structured Interview Questionnaire	5/4/2023	electronic	NA	John Gangemi	L1 Structured Interview Questionnaire opened to collect responses. Automatically closes 12 AM on August 16, 2023
L1 Structured Interview Questionnaire	5/5/2023	electronic	KR3 Stakeholder list	Jilllian Roach	email announcement to KR3 stakeholder group that L1 Structured Interview Questionnaire is open for responses. URL and QR code included in email. Inform stakeholders form will close mid August 2023
L1 Structured Interview Questionnaire	5/10/2023	Poster	Sierra South Mountain Sports	John Gangemi	provided Structured interview Questionnaire poster to store. Employee said will post in back for guides and and up front on counter for customers
L1 Structured Interview Questionnaire	5/10/2023	Poster	Whitewater Voyages - Kern Outdoor Center	John Gangemi	provided Structured interview Questionnaire poster to Chris Brown at Whitewater Voyages. Discussed purpose of questionnaire. Requested he encourage his guides to participate in questionnaire
L1 Structured Interview Questionnaire	5/11/2023	Poster	Sierra South Mountain Sports	John Gangemi	Met with Tom and Evan Moore at Sierra South. Explained purpose of Structured interview Questionnaire and difference from Single Flow Survey. Requested they encourage their guides to participate in questionnaire
L1 Structured Interview Questionnaire	5/11/2023	Poster	Sequoia National Forest Office	John Gangemi	Met with Bob Frenes and Veronica at front desk. Provided Structured interview Questionnaire poster. Requested they post the poster in their information kiosk at the Kernville office.
L1 Structured Interview Questionnaire	5/13/2023	electronic	KR3 Stakeholder list	Jilllian Roach	email announcement to KR3 stakeholder group reminding them that L1 Structured Interview Questionnaire is open for responses. URL and QR code included in email. Inform stakeholders form will close mid August 2023. See email PDF in report appendix
L1 Structured Interview Questionnaire	5/30/2023	electronic	Los Angeles Kayak Club	John Gangemi	Email to Anthea Raymond requesting Structured Interview Questionnaire be posted to the Los Angeles Kayak Club Facebook page.
L1 Structured Interview Questionnaire	5/30/2023	electronic	American Whitewater	John Gangemi	Email to Jeff Venturino and Theresa Simsiman requesting Structured Interview Questionnaire be posted to the American Whitewater website.

Level 1 Structured Interview Questionnaire Outreach					
Item	**Date**	**Format**	**Distribution**	**By**	**Notes**
L1 Structured Interview Questionnaire	5/30/2023	electronic	Gold Country Paddlers	John Gangemi	Email to Jeff Venturino and Theresa Simsiman requesting Structured Interview Questionnaire be posted to the Gold Country Paddlers Facebook page.
L1 Structured Interview Questionnaire	7/7/2023	electronic	Kern River Boaters	John Gangemi	Email to Liz Duxbury and Bret Duxbury requesting Structured Interview Questionnaire be posted to the Kern River Boaters Facebook page.

From:	Jillian Roach
Cc:	David Moore
Subject:	SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 1 Structured Interview Questionnaire
Date:	Friday, May 5, 2023 5:10:09 PM
Attachments:	image001.png image002.png

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **structured interview questionnaire** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This questionnaire is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Please complete the structured interview questionnaire to document your whitewater boating experiences on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information.

The questionnaire will take you 20 to 30 minutes to complete. Your thorough and thoughtful responses will provide important information about whitewater boating between Fairview Dam and Riverside Park as well as assist with progression to more intensive study. You only need to complete the structured interview questionnaire one time. Please take your time responding to each question.

Thank you for participating in the structured interview questionnaire. Your feedback is important, please encourage other boaters to complete the structured interview questionnaire. The structured interview questionnaire will be open through mid-August 2023.

Direct link to survey: Structured Interview Questionnaire
Scan the QR code and save it on your phone

Jillian Roach
Senior Consultant

ERM
th

980 9 Street, Suite 750 | Sacramento, California | 95814
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KR3 Relicensing Website

REC-1 Level 1 Structured Interview Questionnaire and Level 3 Single Flow Survey Announcements

nordich2o@centurytel.net

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Saturday, May 13, 2023 9:09 PM
Cc: David Moore
Subject: SCE Kern River No. 3: REC 1-Whitewater Boating Study Plan - Data Collection Efforts

Sent on behalf of Southern California Edison (SCE)

Dear Stakeholder:

Southern California Edison (SCE) initiated the Federal Energy Regulatory Commission (FERC) approved REC-1 Whitewater Boating Study Plan in support of the Kern River No. 3 (KR3) hydroelectric relicensing process. As a reminder, the public data collection efforts underway for the REC-1 Whitewater Boating Study include:

- **Level 1 Desktop Analysis**: On May 5, 2023, SCE launched the **structured interview questionnaire.** The questionnaire is designed to gather information about your overall experiences on the North Fork Kern River (NFKR) between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information. You only need to complete the structured interview questionnaire one time. The questionnaire will take you 20 to 30 minutes to complete and will be open through mid-August 2023.

  Direct link to questionnaire: Structured Interview Questionnaire
  Scan the QR code and save it on your phone

- **Level 2 Limited Reconnaissance Site Visit**: On April 12, 2023, SCE launched a **Level 2 Limited Reconnaissance self-nomination participant form**. If you have not already done so, but would like to be considered for this site visit, please complete the self-nomination form by **May 15, 2023** to request participation in the Level 2 site visit. The Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern River bypass reach. We anticipate holding the site visit in the 3rd quarter of this year.

  Direct link to Self-Nomination Participant Form
  Scan the QR code and save it on your phone

- **Level 3 Intensive Study:** On April 1, 2023, SCE launched the **single flow whitewater boating survey** to capture boater survey responses this spring and summer as the NFKR is experiencing high flows. Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the NFKR between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip. Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

  Direct link to survey: Single Flow Whitewater Boating Survey
  Scan the QR code and save it on your phone

Thank you,

SCE Relicensing Team

Jillian Roach
Senior Consultant

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980 9th Street, Suite 750 | Sacramento, California | 95814
T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

Structured Interview Questionnaire for Whitewater Boaters

Southern California Edison (SCE) is conducting a Structured Interview Questionnaire for whitewater boaters as part of the Federal Energy Regulatory Commission relicensing of the Kern River No. 3 (P-2290) Hydroelectric Project. Whitewater boaters are encouraged to complete the **structured interview questionnaire** one time.

The online questionnaire can be accessed at:

https://www.surveymonkey.com/r/KR3StructQuestionnaire

The questionnaire will be available from May through mid-August 2023.

Thank you in advance for your participation!

Cuestionario de Entrevista Estructurada para Navegantes de Aguas Bravas

Southern California Edison (SCE) está realizando un cuestionario de entrevista estructurada para los navegantes de aguas bravas como parte de la renovación de la licencia de la Comisión Federal de Regulación de Energía del Proyecto Hidroeléctrico Kern River No. 3 (P-2290). Se alienta a todos los navegantes de aguas bravas a completar el **cuestionario de la entrevista estructurada** una vez.

Se puede acceder a la encuesta en línea en:

https://www.surveymonkey.com/r/KR3StructQuestionnaire

El cuestionario estará disponible

De mayo a mediados de agosto de 2023.

¡Gracias de antemano por su participación!

nordich2o@centurytel.net

From: nordich2o@centurytel.net
Sent: Tuesday, May 30, 2023 10:01 AM
To: 'Jeff Venturino'
Cc: 'theresa@americanwhitewater.org'
Subject: FW: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 1 Structured Interview Questionnaire

Jeff
Below is the announcement and associated links to the Structured Interview Questionnaire for the North Fork Kern River. This is part of the Level 1 data collection effort described in the FERC SPD.

Can you post this to the American Whitewater website and the Gold Country Paddlers Facebook page? If yes, please send a link to the posts when published.

Thank you.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Friday, May 5, 2023 5:10 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 1 Structured Interview Questionnaire

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **structured interview questionnaire** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This questionnaire is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Please complete the structured interview questionnaire to document your whitewater boating experiences on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information.

The questionnaire will take you 20 to 30 minutes to complete. Your thorough and thoughtful responses will provide important information about whitewater boating between Fairview Dam and Riverside Park as well as assist with progression to more intensive study. You only need to complete the structured interview questionnaire one time. Please take your time responding to each question.

Thank you for participating in the structured interview questionnaire. Your feedback is important, please encourage other boaters to complete the structured interview questionnaire. The structured interview questionnaire will be open through mid-August 2023.

Direct link to survey: Structured Interview Questionnaire
Scan the QR code and save it on your phone

Jillian Roach
Senior Consultant

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E jillian.roach@erm.com | **W** www.erm.com

Kern River Questionnaire to Identify Knowledge Gaps (CA)

Posted: 06/13/2023
By: Jeff Venturino

Southern California Edison (SCE) is in the process of conducting a questionnaire in support of relicensing KR3, the North Fork Kern River hydropower project that includes Fairview Dam and Kern #3 Powerhouse. American Whitewater has been actively engaged in the KR3 relicensing and working to make sure that the Whitewater Boating Study accurately reflects whitewater recreation use within the project-affected reach.

The Structured Interview Questionnaire is a thorough survey designed to help SCE narrow the focus for other components of the Whitewater Boating Study. It will take 20-30 minutes to complete and should only be taken once. Taking some time to complete this study will help identify where gaps in information about the project reach exist in the boating community.

This is the second of several surveys that SCE is conducting over the course of the 2023 paddling season on the Kern. Sharing your knowledge about the North Fork Kern, flows, and

difficulty, will help to inform further investigation of boating on the Kern 3 section. A particular interest of this study is identifying knowledge and experience gaps. If there is a specific flow and section that you have not been able to paddle because of the current KR3 operation schedule, please make note of it in the Structured Interview Survey. American Whitewater has negotiated with SCE to provide additional releases, as possible, for identified flow range knowledge gaps.

The structured interview questionnaire will be open through mid-August 2023. If you anticipate gaining quite a bit of knowledge on paddling the Kern in the coming months, consider setting a reminder to take survey closer to its closure date. Thank you for taking the time to participate in the REC-1 Boating Study!

Use the link below.
https://www.surveymonkey.com/r/KR3StructQuestionnaire

Photo of Macy Burnham by Ian Buckley

Theresa Simsiman

Sacramento, CA

Full Profile

Associated Rivers

Kern CA
3) Johnsondale Bridge to Powerhouse #3 III-V

Kern CA
3.5) Powerhouse #3 to Riverside Park II-III

Gold Country Paddlers

Join group

Discussion People Events Media Files Questions

Theresa L. Lorejo-Simsiman
Yesterday at 8:30 AM ·

Kern River Questionnaire is open until mid August.

Kern River Questionnaire to Identify Knowledge Gaps (CA)

Southern California Edison is in the process of conducting a questionnaire in support of relicensing KR3, the North Fork Kern River hydropower project that includes Fairview Dam and Kern #3 Powerhouse. American Whitewater has been actively engaged in the KR3 relicensing and working to make sure that the Whitewater Boating Study accurately reflects whitewater recreation use on the Kern River.

Read more & find the questionnaire link here:
https://www.americanwhitewater.org/.../CWDNEYVNeibhcq4yN.../

Photo of Macy Burnham by Ian Buckley

Like Comment Share

Submit your first comment...

nordich2o@centurytel.net

From: nordich2o@centurytel.net
Sent: Tuesday, May 30, 2023 9:57 AM
To: 'anthea.raymond@gmail.com'
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 1 Structured Interview Questionnaire

Anthea
Below is the announcement and associated links to the Structured Interview Questionnaire for the North Fork Kern River.

Can you post this to the Los Angeles Kayak Club Face Book page? If yes, please send a link to the post when published.

Thank you.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Friday, May 5, 2023 5:10 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Level 1 Structured Interview Questionnaire

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **structured interview questionnaire** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This questionnaire is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Please complete the structured interview questionnaire to document your whitewater boating experiences on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information.

The questionnaire will take you 20 to 30 minutes to complete. Your thorough and thoughtful responses will provide important information about whitewater boating between Fairview Dam and Riverside Park as well as

assist with progression to more intensive study. You only need to complete the structured interview questionnaire one time. Please take your time responding to each question.

Thank you for participating in the structured interview questionnaire. Your feedback is important, please encourage other boaters to complete the structured interview questionnaire. The structured interview questionnaire will be open through mid-August 2023.

Direct link to survey: Structured Interview Questionnaire
Scan the QR code and save it on your phone

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E jillian.roach@erm.com | **W** www.erm.com

Los Angeles Kayak Club

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Anthea Cicchino Raymond
June 7 at 1:09 PM ·

Do you have some history paddling the Upper Kern River? Want to do so more often?

The dam system that often leaves the Upper Kern River unavailable for boating is being relicensed. Advocacy groups like Kern River Boaters and American Whitewater have been playing important roles in speaking to the utility and the federal government. Now, you can give your own feedback in an online survey created as part of the licensing process. It's called the Level 1 Structured Interview Questionnaire:

There is also a link to it here:

https://www.surveymonkey.com/r/KR3StructQuestionnaire

It is a one time survey, unlike the Single Flow Boater Survey, which you can fill out every time you boat the Upper Kern, especially when flows go below 740 cfs:

https://www.surveymonkey.com/r/KR3WWSingleflow

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Friday, July 7, 2023 12:31 PM
To: lizbrackbill@gmail.com; kernriverboaters@gmail.com
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Structured Interview Questionnaire and Single Flow Whitewater Boating Survey

Brett and Liz
Reaching out again to see if KRB can post the announcements copied below for the Structured Interview Questionnaire and the Single Flow Whitewater Boating Survey on the Facebook page. Posting to the KRB facebook page will help increase inform your membership that the structured interview questionnaire and single flow survey are open for responses. KRB membership is encouraged to participate.

Can you notify me with the website url when post it.

Thanks for your assistance getting KRB members to participate.

Subject: SCE Kern River No. 3: REC 1-Whitewater Boating Study Plan - Data Collection Efforts

Sent on behalf of Southern California Edison (SCE)

Dear Stakeholder:

Southern California Edison (SCE) initiated the Federal Energy Regulatory Commission (FERC) approved REC-1 Whitewater Boating Study Plan in support of the Kern River No. 3 (KR3) hydroelectric relicensing process. As a reminder, the public data collection efforts underway for the REC-1 Whitewater Boating Study include:

- **Level 1 Desktop Analysis**: On May 5, 2023, SCE launched the **structured interview questionnaire.** The questionnaire is designed to gather information about your overall experiences on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information. You only need to complete the structured interview questionnaire one time. The questionnaire will take you 20 to 30 minutes to complete and will be open through mid-August 2023.

Direct link to questionnaire: Structured Interview Questionnaire
Scan the QR code and save it on your phone

- **Level 3 Intensive Study:** On April 1, 2023, SCE launched the **single flow whitewater boating survey**. Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip. Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Thank you,

SCE Relicensing Team

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

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APPENDIX E
LEVEL 3 INTENSIVE STUDY SINGLE FLOW SURVEY OUTREACH

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Level 3 Single Flow Survey Outreach					
Survey	**Date**	**Format**	**Distribution**	**URL**	**By**
L3 Single Flow Survey	3/31/2023	Poster	Sierra South Mountain Sports	https://www.sierrasouth.com/	Jillian Roach
L3 Single Flow Survey	3/31/2023	Poster	Sierra Gateway Store	NA	Jillian Roach
L3 Single Flow Survey	3/31/2023	Poster	Kern River Brewery	NA	Jillian Roach
L3 Single Flow Survey	3/31/2023	Poster	Riverken General Store and Deli	NA	Jillian Roach
L3 Single Flow Survey	3/31/2023	Poster	Sequoia National Forest Office		Jillian Roach
L3 Single Flow Survey	4/4/2023	electronic	KR3 Stakeholder list		Jilllian Roach
L3 Single Flow Survey	4/5/2023	electronic	Kern River Brewery	Kern River Brewery	John Gangemi
L3 Single Flow Survey	4/5/2023	electronic	American Whitewater	www.americanwhitewater.org	John Gangemi
L3 Single Flow Survey	4/5/2023	electronic	Kern River Boaters	https://www.kernriverboaters.com/	John Gangemi
L3 Single Flow Survey	4/5/2023	electronic	Kern River Alliance	https://www.kernriver.org/about.html	John Gangemi

Level 3 Single Flow Survey Outreach					
Survey	**Date**	**Format**	**Distribution**	**URL**	**By**
L3 Single Flow Survey	4/5/2023	electronic	Sierra South Mountain Sports	https://www.sierrasouth.com/	John Gangemi
L3 Single Flow Survey	4/5/2023	electronic	Whitewater Voyages - Kern Outdoor Center	NA	John Gangemi
L3 Single Flow Survey	4/25/2023	electronic	Friends of the River	https://www.friendsoftheriver.org/	John Gangemi
L3 Single Flow Survey	4/25/2023	electronic	Los Angeles Kayak Club	https://losangeleskayakclub.wordpress.com/	John Gangemi
L3 Single Flow Survey	4/25/2023	electronic	Gold Country Paddlers	|||3ltqihtzsyw~ufiiqjwx3twl	John Gangemi
L3 Single Flow Survey	5/10/2023	Poster	Sierra South Mountain Sports	https://www.sierrasouth.com/	John Gangemi
L3 Single Flow Survey	5/10/2023	Poster	Whitewater Voyages - Kern Outdoor Center	http://www.whitewatervoyages.com/	John Gangemi
L3 Single Flow Survey	5/11/2023	Poster	Sierra South Mountain Sports	https://www.sierrasouth.com/	John Gangemi
L3 Single Flow Survey	5/11/2023	Poster	McNally's Resort	https://www.johnnymcnallys.com/	John Gangemi
L3 Single Flow Survey	5/11/2023	Poster	Sequoia National Forest Office	NA	John Gangemi

Level 3 Single Flow Survey Outreach					
Survey	**Date**	**Format**	**Distribution**	**URL**	**By**
L3 Single Flow Survey	5/12/2023	Poster	Kernville Chamber of Commerce	www.gotokernville.com	John Gangemi
L3 Single Flow Survey	5/12/2023	Poster	Sierra Gateway Store	NA	John Gangemi
L3 Single Flow Survey	5/12/2023	Poster	Riverken General Store and Deli	NA	John Gangemi
L3 Single Flow Survey	5/12/2023	Poster	Sequoia National Forest Recreation Sites	NA	John Gangemi
L3 Single Flow Survey	5/12/2023	Poster	Riverside Park	NA	John Gangemi
L3 Single Flow Survey	5/13/2023	electronic	KR3 Stakeholder list	NA	Jilllian Roach
L3 Single Flow Survey	6/12/2023	electronic	Los Angeles Kayak Club	anthea.raymond@gmail.com	John Gangemi
L3 Single Flow Survey	7/7/2023	electronic	KRB	lizbrackbill@gmail.com; kernriverboaters@gmail.com	John Gangemi
L3 Single Flow Survey	7/18/2023	electronic	RMS Pacific Chapter	kristinarylands@gmail.com	John Gangemi
L3 Single Flow Survey	8/5/2023	electronic	RMS Pacific Chapter	kristinarylands@gmail.com	John Gangemi
L3 Single Flow Survey	8/7/2023	electronic	KRB	lizbrackbill@gmail.com; kernriverboaters@gmail.com	John Gangemi

Level 3 Single Flow Survey Outreach					
Survey	**Date**	**Format**	**Distribution**	**URL**	**By**
L3 Single Flow Survey	8/7/2023	electronic	Los Angeles Kayak Club	anthea.raymond@gmail.com	John Gangemi
L3 Single Flow Survey	8/7/2023	electronic	American Whitewater	Jeff Venturino <jeffventurino@americanwhitewater.org>; Theresa L. Lorejo-Simsiman	John Gangemi
L3 Single Flow Survey	8/7/2023	electronic	Sierra South Mountain Sports	tom@sierrasouth.com; evan@sierrasouth.com	John Gangemi
L3 Single Flow Survey	8/7/2023	electronic	Whitewater Voyages - Kern Outdoor Center	chris@whitewatervoyages.com	John Gangemi

johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

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980 9th Street, Suite 750 | Sacramento, California | 95814
T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

KR3 Relicensing Website

REC-1 Level 1 Structured Interview Questionnaire and Level 3 Single Flow Survey Announcements

From:	Jillian Roach
Cc:	David Moore
Subject:	SCE Kern River No. 3: REC 1-Whitewater Boating Study Plan - Data Collection Efforts
Date:	Saturday, May 13, 2023 9:09:22 PM
Attachments:	image001.png image002.png image003.png image004.png

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Sent on behalf of Southern California Edison (SCE)

Dear Stakeholder:

Southern California Edison (SCE) initiated the Federal Energy Regulatory Commission (FERC) approved REC-1 Whitewater Boating Study Plan in support of the Kern River No. 3 (KR3) hydroelectric relicensing process. As a reminder, the public data collection efforts underway for the REC-1 Whitewater Boating Study include:

- **Level 1 Desktop Analysis**: On May 5, 2023, SCE launched the **structured interview questionnaire.** The questionnaire is designed to gather information about your overall experiences on the North Fork Kern River (NFKR) between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information. You only need to complete the structured interview questionnaire one time. The questionnaire will take you 20 to 30 minutes to complete and will be open through mid-August 2023.

  Direct link to questionnaire: Structured Interview Questionnaire
  Scan the QR code and save it on your phone

- **Level 2 Limited Reconnaissance Site Visit**: On April 12, 2023, SCE launched a **Level 2 Limited Reconnaissance self-nomination participant form**. If you have not already done so, but would like to be considered for this site visit, please complete the self-nomination form by **May 15, 2023** to request participation in the Level 2 site visit. The Level 2 limited reconnaissance site visit will require a full day commitment of your time visiting locations in the Kern River bypass reach. We anticipate holding the site visit in the 3rd quarter of this year.

Direct link to Self-Nomination Participant Form
Scan the QR code and save it on your phone

- **Level 3 Intensive Study:** On April 1, 2023, SCE launched the **single flow whitewater boating survey** to capture boater survey responses this spring and summer as the NFKR is experiencing high flows. Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the NFKR between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip. Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

  Direct link to survey: Single Flow Whitewater Boating Survey
  Scan the QR code and save it on your phone

Thank you,

SCE Relicensing Team

Jillian Roach
Senior Consultant

Single Flow Whitewater Boating Survey

Southern California Edison (SCE) is conducting a Whitewater Flow Study as part of the Federal Energy Regulatory Commission relicensing of the Kern River No. 3 (P-2290) Hydroelectric Project. Whitewater boaters are encouraged to complete a **single flow evaluation** shortly after each boating trip. The survey can be completed on your mobile device or computer.

The online survey can be accessed at:

www.surveymonkey.com/r/KR3WWSingleflow

The survey will be available from April through December 2023.

Thank you in advance for your participation!

Encuesta de navegación en aguas bravas de flujo único

Southern California Edison (SCE) está realizando un estudio de flujo de la corriente de agua como parte de la renovación de la licencia de la Comisión Reguladora de Energía Federal del Proyecto Hidroeléctrico Kern River No. 3 (P-2290). Se alienta a los navegantes de aguas a completar **una sola evaluación de flujo** poco después de cada viaje en bote. La encuesta se puede completar en su dispositivo móvil o computadora.

Se puede acceder a la encuesta en línea en:

www.surveymonkey.com/r/KR3WWSingleflow

La encuesta estará disponible desde abril hasta la primavera 2023.

¡Gracias de antemano por tu participación!

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Wednesday, April 5, 2023 12:51 PM
To: jeffreyventurino@gmail.com; theresa@americanwhitewater.org
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Jeff and Theresa
SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project (see below). You should have received the announcement in your email inbox yesterday.

I am reaching out to see if American Whitewater can post this announcement on the AW website and link to the information pages for the Kern River. This will help increase awareness in the boating community that the survey is open for responses.

Can you notify me with the website url if you are able to post it.

Thanks for your assistance getting boaters to participate in the survey.

BTW: I was able to design the survey questions so they were compatible with smart phone screens allowing boaters to respond to the survey shortly after a boating trip on the North Fork Kern.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Tuesday, April 25, 2023 10:17 AM
To: info@friendsoftheriver.org
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Friends of the River
SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project. The announcement is located in the email thread below.

I am the study lead and reaching out to see if Friends of the River can post this announcement on the your website and link to the information pages for the Kern River. This will help increase awareness in the boating community that the survey is open for responses.

Can you notify me with the website url if you are able to post it.

Thanks for your assistance getting boaters to participate in the survey.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Tuesday, April 25, 2023 10:03 AM
To: Sean Varvel
Cc: info@goldcountrypaddlers.org
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Sean
Thanks for responding so quickly. The announcement is posted in the email thread below. Feel free to wordsmith for your membership. AW posted an announcement on their website for reference.
https://www.americanwhitewater.org/content/Article/view/article_id/8Klis4enHGHOVkWTzvZ55/

Can you notify me with the website url once you are able to post to Gold Country Paddlers website.

Thanks for your assistance getting boaters to participate in the survey.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

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980 9th Street, Suite 750 | Sacramento, California | 95814
T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Wednesday, April 5, 2023 2:13 PM
To: info@kernriver.org
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Kern River Alliance
SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project (see below). You should have received the announcement in your email inbox yesterday.

I am reaching out to see if Kern River Alliance can post this announcement on the KRA website with the links to the survey. This will help increase awareness in the boating community that the survey is open for responses.

Can you notify me with the website url if you are able to post it.

Thanks for your assistance getting boaters to participate in the survey.

The survey questions are formatted to be compatible with smart phone screens allowing boaters to respond to the survey shortly after a boating trip on the North Fork Kern or they can use a computer.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

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- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

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980 9th Street, Suite 750 | Sacramento, California | 95814
T +1 916.999.8945 | **M** 916.201.7746
E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Wednesday, April 5, 2023 1:02 PM
To: lizbrackbill@gmail.com; kernriverboaters@gmail.com
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Brett and Liz
SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project (see below). You should have received the announcement in your email inbox yesterday.

I am reaching out to see if Kern River Boaters can post this announcement on the KRB website with the links to the survey. This will help increase awareness in the boating community that the survey is open for responses.

Can you notify me with the website url if you are able to post it.

Thanks for your assistance getting boaters to participate in the survey.

The survey questions are formatted to be compatible with smart phone screens allowing boaters to respond to the survey shortly after a boating trip on the North Fork Kern or they can use a computer.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

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From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

ERM
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johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Wednesday, April 5, 2023 1:11 PM
To: eric@kernriverbrewing.com
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Eric
Hope all is well. Looks like the Kern will have a full season of flows this year.

SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project (see below). You should have received the announcement in your email inbox yesterday.

I am reaching out to see if you can help increase awareness in the boating community that the Single Flow Whitewater Boating Survey is open for responses. WE did put a laminated flyer in the brewery this week with information about the survey, URL and QR codes. Can you think of any other way we could increase awareness in the boating community through the brewery?

Thanks for your assistance getting boaters to participate in the survey.

The survey questions are formatted to be compatible with smart phone screens allowing boaters to respond to the survey shortly after a boating trip on the North Fork Kern or they can use a computer.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Tuesday, April 25, 2023 9:40 AM
To: lakayakclub@gmail.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

LA Kayak Club
SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project. I have copied the announcement below.

I am the study lead and reaching out to see if the Los Angeles Kayak Club can post this announcement on your website and facebook page as well as link to the information pages for the Kern River. This will help increase awareness in the boating community that the survey is open for responses.

Can you notify me with the website url if you are able to post it.

Thanks for your assistance getting boaters to participate in the survey.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use

the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

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Scan the QR code and save it on your phone

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Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

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E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Wednesday, April 5, 2023 1:07 PM
To: tom@sierrasouth.com; evan@sierrasouth.com
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Tom and Evan
Hope all is well. Looks like the Kern will have a full season of flows this year.

SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project (see below). You should have received the announcement in your email inbox yesterday.

I am reaching out to see if Sierra South can help increase awareness in the boating community that the Single Flow Whitewater Boating Survey is open for responses. Can Sierra South post the announcement on your website with links to the survey. This will help increase awareness in the boating community that the survey is open for responses. Boaters can complete the survey after each boating trip.

Can you notify me with the website url if you are able to post it.

Thanks for your assistance getting boaters to participate in the survey.

The survey questions are formatted to be compatible with smart phone screens allowing boaters to respond to the survey shortly after a boating trip on the North Fork Kern or they can use a computer.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Wednesday, April 5, 2023 1:24 PM
To: chris@whitewatervoyages.com
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Chris
Hope all is well. Looks like the Kern will have a full season of flows this year.

SCE announced the launch of the Single Flow Whitewater Boating Survey for the KR3 Project (see below). You should have received the announcement in your email inbox yesterday.

I am reaching out to see if you can help increase awareness in the boating community that the Single Flow Whitewater Boating Survey is open for responses. The survey is designed for your guides and non-commercial boaters with direct experience captaining a boat as opposed to commercial guests.

Thanks for your assistance getting your guides and other boaters to participate in the survey.

The survey questions are formatted to be compatible with smart phone screens allowing boaters to respond to the survey shortly after a boating trip on the North Fork Kern or they can use a computer.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

Note: my old email address (nordich2o@centurytel.net) is sunsetting. Please use the new email address above for all future communication.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Stay tuned for other project-related communications as there will be additional opportunities to participate and support the Whitewater Boating Study over the next year. The proposed schedule includes:

- Structured interview questionnaire (on-line questionnaire available Q2 – Q3 2023)
- Reconnaissance level site visit (limited to 12 stakeholders and agency representatives, summer 2023)
- Comparative flow survey (on-line Q4 2023)
- Focus group meeting(s) (virtual or in-person in 2024)

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach
Senior Consultant

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Friday, July 7, 2023 12:31 PM
To: lizbrackbill@gmail.com; kernriverboaters@gmail.com
Cc: david.moore@sce.com; Jillian.Roach@erm.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Structured Interview Questionnaire and Single Flow Whitewater Boating Survey

Brett and Liz
Reaching out again to see if KRB can post the announcements copied below for the Structured Interview Questionnaire and the Single Flow Whitewater Boating Survey on the Facebook page. Posting to the KRB facebook page will help increase inform your membership that the structured interview questionnaire and single flow survey are open for responses. KRB membership is encouraged to participate.

Can you notify me with the website url when post it.

Thanks for your assistance getting KRB members to participate.

Subject: SCE Kern River No. 3: REC 1-Whitewater Boating Study Plan - Data Collection Efforts

Sent on behalf of Southern California Edison (SCE)

Dear Stakeholder:

Southern California Edison (SCE) initiated the Federal Energy Regulatory Commission (FERC) approved REC-1 Whitewater Boating Study Plan in support of the Kern River No. 3 (KR3) hydroelectric relicensing process. As a reminder, the public data collection efforts underway for the REC-1 Whitewater Boating Study include:

- **Level 1 Desktop Analysis**: On May 5, 2023, SCE launched the **structured interview questionnaire.** The questionnaire is designed to gather information about your overall experiences on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The questionnaire asks you to specify which whitewater segments you typically boat, what type of watercraft you use, when you typically boat, river access, flow preferences, and flow information. You only need to complete the structured interview questionnaire one time. The questionnaire will take you 20 to 30 minutes to complete and will be open through mid-August 2023.

Direct link to questionnaire: Structured Interview Questionnaire
Scan the QR code and save it on your phone

- **Level 3 Intensive Study:** On April 1, 2023, SCE launched the **single flow whitewater boating survey**. Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip. Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey
Scan the QR code and save it on your phone

Thank you,

SCE Relicensing Team

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Monday, August 7, 2023 12:15 PM
To: Jeff Venturino; Theresa L. Lorejo-Simsiman
Cc: Jillian Roach; david.moore@sce.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Jeff and Theresa
Reaching out again to see if you can repost the **Single Flow Whitewater Boating Survey** announcement on the American Whitewater website and include in the monthly beta outreach. The flows are dropping on the NFKR. Reposting the Single Flow Survey announcement will help remind your members the survey is available and encourage them to complete the survey each time they boat on the NFKR.

Can you notify me with the website url when you post it.

Thanks for your assistance getting members informed and participating in the data collection effort.

Below is the original announcement for the REC-1 Level 3 Single Flow Survey.

Thank you.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey

Scan the QR code and save it on your phone

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach

Senior Consultant

ERM

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E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Monday, August 7, 2023 11:49 AM
To: lizbrackbill@gmail.com; kernriverboaters@gmail.com
Cc: Jillian Roach; david.moore@sce.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Brett and Liz
Reaching out again to see if KRB can post the Single Flow Survey announcement copied below on the KRB Facebook page. Posting to the KRB facebook page will help gather more data for rating the quality of flows in the NFKR. KRB members are encouraged to participate.

Can you notify me with the website url when you post it.

Thanks for your assistance getting KRB members informed and participating in the data collection effort.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

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Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey

Scan the QR code and save it on your phone

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach

Senior Consultant

ERM

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E jillian.roach@erm.com | **W** www.erm.com

LOS ANGELES KAYAK CLUB

MENU

Kern River

LAKC is supporting efforts to gather data about many of the runs listed below, several of which are impacted by flow diversions to generate energy. Here are two documents you can use to give input on the current quality of the Upper Kern River for whitewater boating at varying flow levels:

- The KR3 Single Flow Whitewater Boating Survey — **https://www.surveymonkey.com/r/KR3WWSingleflow**
- KR3 Structured Interview Questionnaire — **https://www.surveymonkey.com/r/KR3StructQuestionnaire**

For more info about the KR3 Relicensing procedure that is motivating these studies:

https://www.sce.com/pa/regulatory/hydro-licensing/kr3

FEELING LOST ON THE KERN RIVER?

The Kern has many access points along the roads making it easy to get confused. On the plus side, with so many access points, it is easy to customize your run. Here is a rundown of access

points and the common runs. This is not a substitute for guide information. It is just a handy 'Cliff note' reference. More detailed info is available **here**. And **here**. I've provided the class of the rapids directly below each access point so you know what you are getting into at each launch point. The access points open links to Google maps and flow graphs are provided with links to **http://www.dreamflows.com**.

FORKS OF THE KERN

Put in on river **R** – **Forks of the Kern** trail end of **20S67**. **The Forks run.** Class **V Flow**

UPPER KERN

R – **Johnsondale bridge** on hwy 99. **Limestone run. IV Flow**

L Take out – **Willow point** above Fairview dam. (When operating, flow is 500 cfs less between the dam and the KR3 powerhouse access. This is common unfortunately.) **Flow for this section**

L – Turnout 0.4 mi below the dam. **Fairview run. III**

L – **Calkins flat**. **Chamise Gorge run. IV+**

L Take out – Turnout above Salmon falls. V+! Portage

L – Ant Canyon CG. **Ant Canyon run. IV**

L – **Corral creek**. **Thunder run. V**

L – **Thunderbird CG**. **Cables run. IV**

L – **Camp 3 access**. **Alt. Put in below Cables rapid. IV. More IV below**

L – Halfway . **Alt. access below The Wall rapid IV. More IV below.**

L – **Riverkern Beach**. **Powerhouse run. III+**

L – **KR3 access**. **Lickety run. III- Flow from here to the lake**

R – **Riverside park**. **Cemetery run. II**

R Take out – **The Old Cemetery**. **Only Lake Isabella below.**

LOWER KERN

R – **Upper Keysville access** just below hwy 155 bridge. **Jungle run. III+**

As of 2017 the Borel power house is inoperable so this section is fully watered. **Flow for this section**.

L – **Lower Keysville access** off hwy 155. Alt launch. III+

L – **Granite Launch** off highway 178. Alt. Launch below Wallow rock. III+ below

L – Miracle hot spring. **'THE' Lower kern run. IV Flow from here to Democrat take-out**

Portage R Royal flush. V+! No road access

L – **Delonegha access** on highway 178. **Big 5 run. IV**

L Take out – **Democrat access** hwy 178. **Take out before a dam.**

LOWER LOWER KERN INTO BAKERSFIELD

L – **Mouth of the canyon**. **Rio Bravo run. IV** Portage R of dam. (Often dewatered up to 1200 cfs by diversion)

R – **Hiking trail above bridge**. **Rancheria trail run. II+** NO PARKING on the road. Full flow similar to the flow of the 'Lower' Kern sections. (put-in is below powerhouse) **Flow from here to the Hart park take-out**

L – Rancheria bridge parking area (break-ins are common). **Rancheria Bridge run. II+** Put-in options above and below a II+ rapid.

L – **Ming lake** behind golf course. **Alternate launch II-**

L Take out – **Hart park**. **Last good take out.**

PHOTO CREDIT: JONAH GRUBB

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Tuesday, July 18, 2023 10:59 AM
To: kristinarylands@gmail.com
Cc: Jillian Roach
Subject: FW: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Kristina
I just saw the date for the Pacific Chapter of RMS rendezvous on the North Fork of the Kern River Aug 11-13.

I am the study lead for the REC-1 Whitewater Study being conducted as part of the relicensing for Southern California Edison's Kern River No. 3 Hydroelectric Project (FERC No. 2290). We are currently collecting data from whitewater boaters for each trip on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. It would be great if RMS Pacific Chapter members could complete a single flow survey for each trip on the NFKR. This is a two-year study focusing on whitewater recreation. A comparative flow survey will be launched in 2024 to compliment the results from the single flow . You can learn more about the REC-1 Whitewater Study Plan and other relicensing studies on the KR3 Relicensing Page.

I have copied below information about the single flow whitewater boating survey including links and QR codes to the survey. You can complete the survey with a smart phone.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey

Scan the QR code and save it on your phone

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach

Senior Consultant

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E jillian.roach@erm.com | **W** www.erm.com

johngangemi.rsi@outlook.com

From: John Gangemi
Sent: Monday, August 7, 2023 12:23 PM
To: tom@sierrasouth.com; evan@sierrasouth.com
Cc: Jillian Roach; david.moore@sce.com
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Tom and Evan
Reaching out again to see if you can remind your guides to complete the **Single Flow Whitewater Boating Survey** each time they are on the river. The flows are dropping on the NFKR and offer a great opportunity for guides to rate a range of flows for their watercraft types. This information will be valuable for analyzing flow preferences for future management decisions.

Thanks for your assistance getting your staff informed and participating in the data collection effort.

Below is the original announcement for the REC-1 Level 3 Single Flow Survey.

BTW: I'll be in Kernville this week working. Let me know if you need a new poster in the guide area so they can use the QR code with their phones.

Thank you.

John Gangemi
River Science Institute, Inc.
68 Irish Bend Lane
Columbia Falls, MT 59912

406-249-3972
johngangemi.rsi@outlook.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Tuesday, April 4, 2023 5:14 PM
Cc: David Moore <david.moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

On behalf of Southern California Edison (SCE)

Dear Stakeholder:

SCE has launched the **single flow whitewater boating survey** for the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. This survey is part of the REC-1 Whitewater Boating Study being undertaken as part of the relicensing proceeding for the Kern River No. 3 (KR3) Hydroelectric Project.

Boaters are encouraged to take the single flow whitewater boating survey for each boating trip completed on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The survey questions allow boaters to specify which whitewater segments were boated on each trip.

Boaters are encouraged to confirm flows in the North Fork Kern River at the time of their trip before starting the single flow whitewater boating survey. Flows between Fairview Dam and the KR3 powerhouse should use the stream gage data below Fairview Dam. If you boated the Powerhouse / Lickety Split segment, please confirm the flow (cfs) downstream of the powerhouse using the stream gage data for the North Fork Kern at Kernville.

Please share the **single flow whitewater boating survey** QR code / link to other members of the boating community and encourage your boating friends to document their trips.

Direct link to survey: Single Flow Whitewater Boating Survey

Scan the QR code and save it on your phone

Thank you for participating in the single flow whitewater boating survey. Your survey responses will help with the data collection efforts in this study.

Jillian Roach

Senior Consultant

ERM

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From: John Gangemi
Sent: Monday, August 7, 2023 12:25 PM
To: chris@whitewatervoyages.com
Cc: david.moore@sce.com; Jillian Roach
Subject: SCE Kern River No. 3 Hydroelectric Project: Single Flow Whitewater Boating Survey

Chris
Reaching out again to see if you can remind your guides to complete the **Single Flow Whitewater Boating Survey** each time they are on the river. The flows are dropping on the NFKR and offer a great opportunity for guides to rate a range of flows for their watercraft types. This information will be valuable for analyzing flow preferences for future management decisions.

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