REC-1 WHITEWATER BOATING TECHNICAL MEMORANDUM: LEVEL 3 RESULTS

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

PREPARED FOR:

SOUTHERN CALIFORNIA EDISON®
Energy for What's Ahead®

KERNVILLE, CALIFORNIA

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LIST OF ACRONYMS AND ABBREVIATIONS

cfs	cubic feet per second
FERC	Federal Energy Regulatory Commission
IK	inflatable kayak
ISR	Initial Study Report
KR3	Kern River No. 3
NFKR	North Fork Kern River
PFD	personal flotation device
Project	Kern River No. 3 Hydroelectric Project (FERC Project No. 2290)
QR code	quick-response code
SCE	Southern California Edison

1.0 INTRODUCTION

On October 9, 2023, Southern California Edison (SCE) filed a Technical Memorandum for the *REC-1 Whitewater Boating Study Plan* as part of its Initial Study Report (ISR) (SCE, 2023) in support of the Kern River No. 3 (KR3) Hydroelectric Project (Project) relicensing, Federal Energy Regulatory Commission (FERC) Project No. 2290, for study components completed to date. As outlined in the revised REC-1 Study Plan (SCE, 2022) and approved in FERC's Study Plan Determination (FERC, 2022), the 2023 REC-1 Technical Memorandum summarized data collected from November 2022 through September 2023 and included most of the Level 1 Desktop Review of Existing Information elements, which included a literature review, hydrology summary and Project facility evaluation, and information obtained during the Level 2 Limited Reconnaissance. The 2023 REC-1 Technical Memorandum also included an overview of the Level 3 Intensive Study Single Flow Survey that was deployed in 2023 and a description of the outstanding tasks scheduled for 2024.

In response to FERC and relicensing participants' comments on the ISR, SCE provided additional information and study results for other ongoing REC-1 Study Plan elements. A brief summary and date of FERC's Orders and subsequent SCE filings is described below:

- In response to relicensing participant comments filed with FERC on the ISR in December 2023, SCE filed a Response to Comments document on January 9, 2024, that stated SCE would voluntarily provide additional information to relicensing participants outside of the standard Integrated Licensing Process reporting schedule, and provide an addendum to the 2023 REC-1 Technical Memorandum that included an analysis of the Level 3 single flow survey (SCE, 2024a).

- On March 1, 2024, SCE filed the results of the Level 1 Structured Interview Questionnaire in response to FERC's February 1, 2024, additional data request (SCE, 2024b). In their letter, FERC also revised the Process Plan and Schedule, extending the public comment period to April 1, 2024, to provide additional time for comments on the information requested (FERC, 2024a).

- SCE filed an *Addendum to REC-1 Whitewater Boating Interim Technical Memorandum: Level 3 Single Flow Survey Results* (SCE, 2024c) on March 30, 2024. As part of this filing, SCE described the remaining Level 3 Intensive Study components, which included: (1) provide four flow enhancements (200 to 800 cubic feet per second [cfs]) to address boater knowledge gaps and host focus group discussions; and (2) complete a flow comparison survey to evaluate boating opportunities across a range of flows.

- FERC's *Determination on Requests for Study Modifications and New Studies* issued on May 30, 2024 (FERC, 2024b), stated that the requested modification to the REC-1 Study was approved with additional modifications. Specifically, FERC recommended SCE work with the boating community to identify additional participants prior to hosting focus group discussions; provide enhanced flow opportunities targeting 200 to 600

cfs; hold Level 3 focus groups; reopen the single flow survey; and distribute the flow comparison survey.

This REC-1 Technical Memorandum describes the implementation and results of the Level 3 Intensive Study that includes the enhanced flow opportunities (including focus group discussions) and flow comparison survey conducted in 2024 (including an updated hydrology summary using minimum acceptable flows for different types of watercraft types), in accordance with FERC's May 30, 2024, determination.

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.

Refer to the 2023 REC-1 Technical Memorandum (SCE, 2023), *Request to File Study Results* (SCE, 2024b), and *Addendum to Initial Study Report* (SCE, 2024c) for additional information collected that supports these study goals and objectives.

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.

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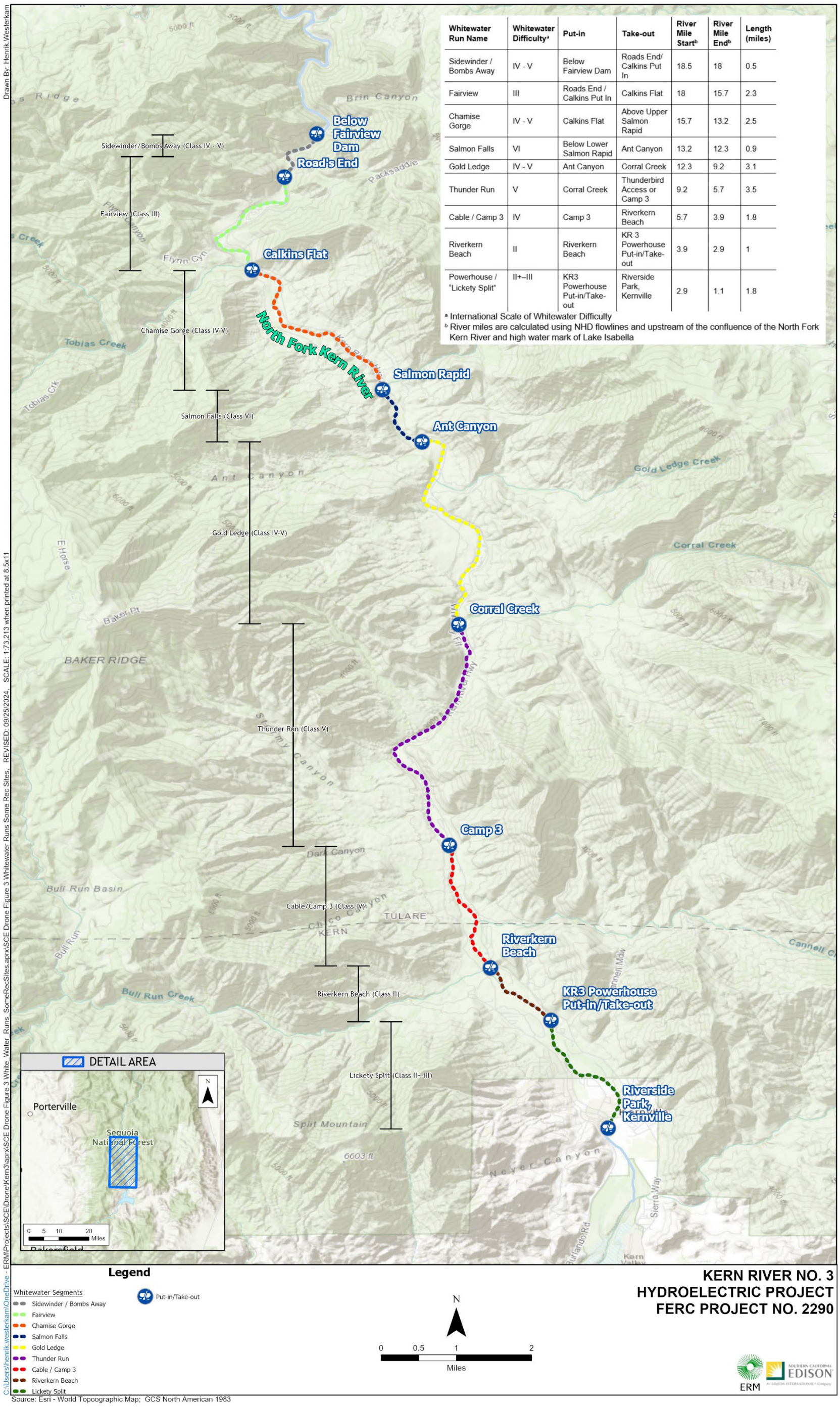

Whitewater Run Name	Whitewater Difficulty[a]	Put-in	Take-out	River Mile Start[b]	River Mile End[b]	Length (miles)
Sidewinder / Bombs Away	IV - V	Below Fairview Dam	Roads End/ Calkins Put In	18.5	18	0.5
Fairview	III	Roads End / Calkins Put In	Calkins Flat	18	15.7	2.3
Chamise Gorge	IV - V	Calkins Flat	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

Source: Esri - World Topoographic Map; GCS North American 1983

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

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4.0 METHODS

This REC-1 Technical Memorandum describes methods for the Level 3 Intensive Study. For Level 1 Desktop Review of Existing Information and Level 2 Limited Reconnaissance, refer to the 2023 REC-1 Technical Memorandum (SCE, 2023); for the Level 1 structured interview analysis, refer to the *Request to File Study Results* (SCE, 2024b). A summary of the Level 3 Single Flow Survey Results are presented in the *Addendum to Initial Study Report* (SCE, 2024c).

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 Fairview Dam 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.

4.1. LEVEL 3: INTENSIVE STUDY

The Level 3 Intensive Study collected 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, enhanced flow opportunities targeting knowledge gaps in boater experience, and a flow comparison survey for a range of flows.

The combination of survey tools was designed to improve the precision of the data when developing flow preference curves for a variety of watercraft types for the respective whitewater segments from Fairview Dam to Riverside Park in Kernville. The survey tools are one of the approaches recommended by Whittaker et al. (2005) for the Level 3 Intensive Study. SCE's approach for Level 3 was outlined in the *Revised Study Plan* (SCE, 2022) and further refined in the Level 3 Single Flow Survey Results (SCE, 2024c). The elements and methods of the Level 3 Intensive Study (initiated in 2023 and continuing into 2024) are summarized below.

- 2023 whitewater single flow survey:
  - Boaters completed the single flow survey to evaluate individual flows shortly after experiencing them (available online April 1 through December 31, 2023).
  - Posters containing the link and a quick-response (QR) code to the single flow survey were installed at river access locations and distributed to local retailers in Kernville; were distributed electronically to local, regional, and national whitewater boating groups; and were made accessible on the KR3 relicensing website.
  - The results were provided as part of SCE's 2024 addendum to REC-1 Technical Memorandum (SCE, 2024c).

- 2024 enhanced flow opportunities and focus groups:
  - Enhanced flow opportunities targeted knowledge gaps in boater experience between 200 and 900 cfs on the river segments in the Fairview Dam Bypass Reach in April and July 2024.
  - Study participants completed an enhanced flow evaluation form rating the quality of whitewater boating for each enhanced flow opportunity boated.
  - Focus groups convened following the enhanced flow opportunities.
- Flow comparison survey:
  - Boaters completed a whitewater flow comparison survey (available online from July 18 through August 16, 2024).
  - Minimum acceptable and optimum flow preference curves were developed and organized by watercraft types for respective river segments using data from the flow comparison survey and cross-referenced to data collected during the Level 3 single flow surveys, enhanced flow opportunity surveys, and focus group discussions, as applicable.
- Hydrology analysis:
  - Flow preference curves from Level 1, Level 2, and Level 3 data were used to quantify the annual number of whitewater boating days.

The approach to each of these above-referenced activities conducted in 2024 as part of the Level 3 Intensive Study are further described below.

4.1.1. LEVEL 3 INTENSIVE STUDY PARTICIPANT OUTREACH

SCE worked with the boating community to compile a list of interested study participants prior to implementing the Level 3 activities, including the flow enhancements and flow comparison survey. SCE developed an electronic enhanced flow self-nomination form (Appendix A). All boaters were encouraged to sign up to participate in the evaluation of the flow enhancements. SCE worked with the boating community to compile a list of participants representative of the broader boating community, including information such as type of watercraft, geographic location, skill level, and gender. However, ensuring full representation of the boating community was out of SCE's control. SCE used the list of interested boaters to directly communicate information about the flow enhancement schedule and links to surveys to evaluate each flow enhancement.

Documentation of the outreach efforts is included in Appendix B.

4.1.2. Enhanced Flow Opportunities

Boaters participating in the enhanced flow opportunities completed an enhanced flow evaluation form following each enhanced flow (Appendix C). SCE collected video (drone footage) for each enhanced flow opportunity at key locations in the respective river segments. Representative screen shots from the video footage are provided in Appendix D. The drone footage is available for viewing via a link on SCE's website (www.sce.com/kr3).

Rather than re-opening the single flow survey used in 2023, per FERC's *Determination on Requests for Study Modifications and New Studies* (FERC, 2024b), SCE refined the survey questions to specifically address the quality of the whitewater opportunity for each enhanced flow in the respective river segments.

SCE hosted five focus group discussions in the evening following each enhanced flow opportunity with the exception of Sunday, April 14, 2024. This focus group was cancelled as the flow was nearly the same as the previous day and many participants stated they could not attend due to travel commitments to return home that day.

The focus group discussions were designed to facilitate input from boaters immediately following each enhanced flow opportunity about their experience and preferences regarding that particular flow. Copies of the meeting notes recorded during the focus group discussions are provided in Appendix E.

4.1.3. Flow Comparison Survey

SCE published an online flow comparison survey for boaters to evaluate the quality of whitewater boating opportunities for a variety of watercraft types across a range of flows (Appendix F). The whitewater flow comparison survey was 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 asked respondents to rate the acceptability of a range of flows for each whitewater segment and watercraft type, timing of use, flow information needs, and comparison with other whitewater opportunities in the Kern River basin. Information collected in Levels 1 and 2 as well as the Level 3 single flow survey was used to develop the whitewater flow comparison survey. The link to the online whitewater flow comparison survey was distributed to local, regional, and national whitewater boating groups and was accessible via the KR3 relicensing website. SCE requested recommendations from the boating community for expanding their communication efforts to include additional boaters and whitewater groups.

SCE developed flow preference curves for the minimum acceptable and optimum flow for respective watercraft types in each river segment using data from flow comparison survey responses. Data collected in the 2023 single flow survey, the 2024 enhanced flow opportunity survey, and the focus group discussions were cross-referenced with the results from the 2024 flow comparison survey to corroborate the findings.

4.1.4. HYDROLOGY ANALYSIS

The annual number of potential days of whitewater boating opportunities were quantified for inflows to Fairview Dam (i.e., unimpaired hydrology) and flows in the Fairview Dam Bypass Reach under historical Project operations (i.e., impaired). The frequency counts of annual days used minimum acceptable flows for different types of watercraft developed from flow preference curves and analysis of participant minimum acceptable flow responses to open-ended questions in the enhanced flow opportunities and flow comparison surveys and supplemented with information obtained in focus group discussions.

4.1.5. RECREATION USE CONFLICTS AND PUBLIC SAFETY

Public safety concerns associated with whitewater boating flows were documented using available information from the Kernville Chamber of Commerce, Sequoia National Forest, California Department of Boating and Waterways, and the American Whitewater accident database, as well as other FERC proceedings where whitewater releases occur.

Potential recreation use conflicts associated with whitewater boating flows were identified where possible. Recreation uses occurring in and adjacent to the NFKR documented as part of the *REC-2 Recreation Facilities Use Assessment Study Plan* (SCE, 2022), presented in the REC-2 Technical Memorandum (SCE, 2024d) and summarized in this REC-1 Technical Memorandum were applicable. Potential flow-related conflicts were described based, in part, on REC-2 survey responses.

5.0 DATA SUMMARY

The data summary in this REC-1 Technical Memorandum is limited to the 2024 Level 3 Intensive Study components comprising the enhanced flow opportunities, focus groups, and the flow comparison survey.

5.1. LEVEL 3 INTENSIVE STUDY OUTREACH AND PARTICIPATION

This section describes SCE's outreach efforts and participant composition for each component of the study in 2024.

5.1.1. ENHANCED FLOW OPPORTUNITY OUTREACH

The self-nomination form allowed boaters to sign up as study participants for the enhanced flow opportunities. The form collected demographic information, whitewater skill level, watercraft type, and email addresses. This information was compiled and used, in part, to provide targeted communication about upcoming whitewater boating events to interested study participants.

SCE sent an email announcing the publication of the self-nomination form for the enhanced flow opportunities on March 11, 2024, to the entire KR3 Stakeholder list, the REC-1 Level 1 structured interview participants, as well as local, regional, and national whitewater groups and included a link on the Project's relicensing website. Table 5.1-1

provides a summary of the outreach associated with the enhanced flow self-nomination form.

The self-nomination form remained open for boaters to sign up to participate in the enhanced flow opportunities through July 15, 2024. In addition, boaters could sign up and participate on the same day of an enhanced flow release (refer to Section 5.1.2, *Enhanced Flow Opportunity Participation*).

Table 5.1-1. Level 3 Self-Nomination Form Outreach

Date	Format	Distribution	Summary
3/7/2024	Electronic	NA	L3 participant self-nomination form opened to collect responses.
3/11/2024	Electronic	KR3 Stakeholder list	Email announcement to KR3 relicensing Stakeholder group that L3 Enhanced Flow Participant Self-nomination Form is open for sign-ups. Link included in email. Inform Stakeholders to respond by April 1, 2024.
3/13/2024	Electronic	Los Angeles Kayak Club	Email to Anthea Raymond requesting participant sign-up announcement be posted to the Los Angeles Kayak Club Facebook page.
3/13/2024	Electronic	American Whitewater	Email to Jeff Venturino requesting participant sign-up announcement be posted to the American Whitewater website.
3/13/2024	Electronic	Gold Country Paddlers	Email to Jeff Venturino requesting participant sign-up announcement be posted to the Gold Country Paddlers Facebook page.
3/13/2024	Electronic	Kern River Boaters	Email to Liz Duxbury and Bret Duxbury requesting participant sign-up announcement be posted to the Kern River Boaters Facebook page.
3/27/2024	Electronic	Structured Interview participant list	Email to individuals that completed the L1 Structured Interview Questionnaire informing them of enhanced flow participant sign-up announcement.
3/27/2024	Electronic	American Whitewater	Second email to Jeff Venturino requesting participant sign-up announcement be posted to the American Whitewater website.
3/27/2024	Electronic	Sierra South: Tom and Evan Moore	Email to Tom and Evan informing them of enhanced flow participant sign-up announcement and asking them to forward to their guides. Follow-up phone call from Evan requesting more information on flows and potential dates.

Date	Format	Distribution	Summary
3/27/2024	Electronic	Whitewater Voyages: Luther Stephens and Chis Brown	Email to Luther and Chris informing them of enhanced flow participant sign-up announcement and asking them to forward to their guides.

KR3 = Kern River No. 3; L1 = Level 1; L3 = Level 3; NA = not applicable

SCE used the enhanced flow participant list to communicate the proposed dates and flow volumes for the enhanced flow opportunities electronically. This notification also included the KR3 Stakeholder list as well as local, regional, and national whitewater groups (Table 5.1-2). The dates of the enhanced flow opportunities were also posted on the Project website. The frequency of the electronic communication to these groups increased closer to the date for the enhanced flow opportunities, including notifications the day of an enhanced flow informing boaters of the flow volume, logistics, and electronic links to complete the enhanced flow opportunity evaluation form (refer to Section 5.1.2, *Enhanced Flow Opportunity Participation*). The notification also informed boaters about the opportunity to participate in the focus group following each enhanced flow opportunity.

Table 5.1-2. Level 3 Enhanced Flow Opportunity Notifications

Date	Format	Distribution	Summary
4/3/2024	Electronic	Enhanced flow participant list and KR3 Stakeholder list	Email notification to enhanced flow participants and KR3 relicensing Stakeholder list informing them of the L3 enhanced flow schedule and logistics.
4/9/2024	Electronic	All participants signed-up for enhanced flow opportunities including new sign-ups from previous day's enhanced flows	Daily email notification to enhanced flow participants updating them on daily flows, schedule, and logistics.
4/11/2024	Electronic	All participants signed-up for enhanced flow opportunities including new sign-ups from previous day's enhanced flows	Daily email notification to enhanced flow participants updating them on daily flows, schedule, and logistics.
4/12/2024	Electronic	All participants signed-up for enhanced flow opportunities including new sign-ups from previous day's enhanced flows	Daily email notification to all enhanced flow participants updating them on daily flows, schedule, and logistics.

Date	Format	Distribution	Summary
4/13/2024	Electronic	All participants signed-up for enhanced flow opportunities including new sign-ups from previous day's enhanced flows	Daily email notification to all enhanced flow participants updating them on daily flows, schedule, and logistics.
4/14/2024	Electronic	All participants signed-up for enhanced flow opportunities including new sign-ups from previous day's enhanced flows	Daily email notification to all enhanced flow participants updating them on daily flows, schedule, and logistics.
7/1/2024	Electronic	All participants signed-up for enhanced flow opportunities as of 4/14/2024	Email notification to all enhanced flow participants informing them of July enhanced flow schedule and logistics.
7/2/2024	Electronic	American Whitewater	Email notification to Jeff Venturino at American Whitewater informing him of July enhanced flow schedule and logistics.
7/2/2024	Electronic	LA Kayak Club and ACA	Email notification to Anthea Raymond informing her of July enhanced flow schedule and logistics.
7/2/2024	Electronic	Kern River Boaters	Email notification to Brett and Liz Duxbury at Kern River Boaters informing them of July enhanced flow schedule and logistics.
7/2/2024	Electronic	Sierra South: Tom and Evan Moore	Email notification to Tom and Evan Moore at Sierra South informing them of July enhanced flow schedule and logistics.
7/2/2024	Electronic	Whitewater Voyages: Luther Stephens and Chis Brown	Email notification to Luther Stephens and Chris Brown at Whitewater Voyages informing them of July enhanced flow schedule and logistics.
7/2/2024	Electronic	Momentum Raft Company	Email notification to Momentum Raft Company informing them of July enhanced flow schedule and logistics.
7/2/2024	Electronic	Packraft.org	Email notification to Packraft.org informing them of July enhanced flow schedule and logistics.

Date	Format	Distribution	Summary
7/3/2024	Electronic	Relicensing stakeholder list, REC-1 Level 1 structured interview list and Enhanced flow participant list	Email notification to KR3 relicensing Stakeholder list, REC-1 Level 1 structured interview list, and enhanced flow participant list updating them on the REC-1 Study Plan, the KR3 Draft License Application (SCE, 2024d), and dates for July enhanced flow opportunities.
7/9/2024	Electronic	Enhanced flow participant list	Email notification to enhanced flow participant list updating them on July enhanced flow schedule and logistics.
7/9/2024	Electronic	Enhanced flow participant list	Email notification to enhanced flow participant list updating them on July enhanced flow schedule and logistics.
7/10/2024	Electronic	Enhanced flow participant list	Email notification to enhanced flow participant list updating them on July enhanced flow schedule and logistics.
7/12/2024	Electronic	Enhanced flow participant list	Email notification to enhanced flow participant list updating them of July 12 enhanced flow schedule and logistics.
7/13/2024	Electronic	Enhanced flow participant list	Email notification to enhanced flow participant list updating them of July 13 enhanced flow schedule and logistics.

KR3 = Kern River No. 3; L3 = Level 3

5.1.2. Enhanced Flow Opportunity Participation

SCE provided six enhanced flow opportunities in 2024 targeting flows where boaters lacked knowledge on flow preferences (Table 5.1-3). Scheduling the enhanced flow opportunities far in advance was not possible due to the unpredictable snowmelt run-off patterns on the NFKR. Nonetheless, SCE was able to notify boaters 10 days in advance of scheduled enhanced flow opportunities. SCE Project operations can divert up to approximately 600 cfs at Fairview Dam; therefore, to provide flows between 200 and 800 cfs in the river channel below Fairview Dam, inflows needed to be approximately 1,000 cfs or less over consecutive days to help facilitate the enhanced flow opportunities.

Table 5.1-3. Level 3 Enhanced Flow Dates and Volume

Enhanced Flow Number	Date	Flow (SCE Gage 401 Below Fairview Dam)
Enhanced Flow 1	4/11/2024	450
Enhanced Flow 2	4/12/2024	770
Enhanced Flow 3	4/13/2024 [a]	874
Enhanced Flow 4	4/14/2024 [a]	835

Enhanced Flow Number	Date	Flow (SCE Gage 401 Below Fairview Dam)
Enhanced Flow 5	7/12/2024	550
Enhanced Flow 6	7/13/2024	250

SCE = Southern California Edison
Note:
[a] Saturday and Sunday (April 13 and 14, 2024) the previous running day average for NFKR inflows to Fairview Dam was greater than 1,000 cfs requiring SCE to comply with FERC license article 422 requiring SCE to divert a minimum of 700 cfs into the river channel below Fairview Dam.

A total of 88 individuals completed the self-nomination form; however, not all interested individuals were able to participate in all the enhanced flow opportunities due in part to the unpredictable timing of the snowmelt run-off coupled with personal conflicts limiting their ability to attend. Additionally, a number of individuals showed up on the day of and participated in the enhanced flow opportunities but did not complete the self-nomination form prior to participation.

The enhanced flow evaluation form was designed to collect information from participants for each enhanced flow opportunity for each of the nine river segments. Boaters were encouraged to complete the enhanced flow evaluation form following each enhanced flow opportunity. SCE provided the electronic link to the enhanced flow evaluation form in all enhanced flow notifications as well as a QR code to the evaluation form. This information was also provided at the sign-up table in Riverside Park the day of each enhanced flow opportunity and at the focus groups.

A total of 131 enhanced flow evaluation forms were submitted for the 6 enhanced flow opportunities consisting of 63 individual boaters. The highest number of enhanced flow opportunity responses occurred on April 11 and 12, 2024, with 27 and 26 responses, respectively (Figure 5.1-1). The lowest number of enhanced flow opportunity responses occurred on July 13, 2024, with 15 responses.

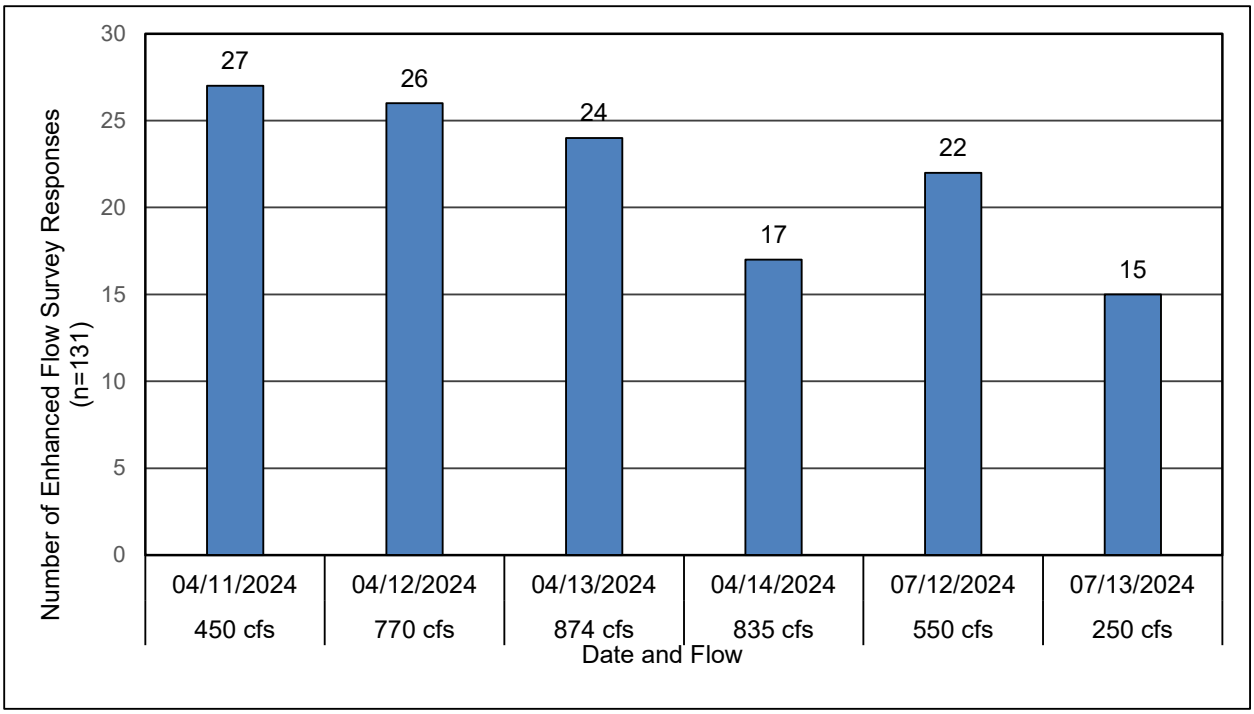

Figure 5.1-1. Level 3 Enhanced Flow Opportunity Evaluation Form Responses.

The enhanced flow opportunity participants included a mix of genders and whitewater skill levels (Table 5.1-4): 68 percent of the participants were male and 29 percent female. Out of the enhanced flow participants, 46 percent self-identified as possessing advanced whitewater skills. Intermediate and expert boaters comprised the next two largest groups of participants, 27 and 24 percent, respectively. Novice boaters comprised only 3 percent of the participants.

Table 5.1-4. Level 3 Enhanced Flow Participants Gender and Whitewater Skill

Gender	Count		Skill Level			
	No.	%	Novice	Intermediate	Advanced	Expert
Male	43	68%	2%	13%	33%	21%
Female	18	29%	2%	14%	10%	3%
Choose not to answer	2	3%	0%	0%	3%	0%
Total	63		3%	27%	46%	24%

The enhanced flow opportunity participants were composed of boaters from each of the age groups (Figure 5.1-2). Individuals aged 60 and older made up the largest percentage of participants (25 percent), followed by those between the ages of 40 and 49 (24 percent). Individuals aged 18 to 19 represented the smallest percentage of participants (2 percent).

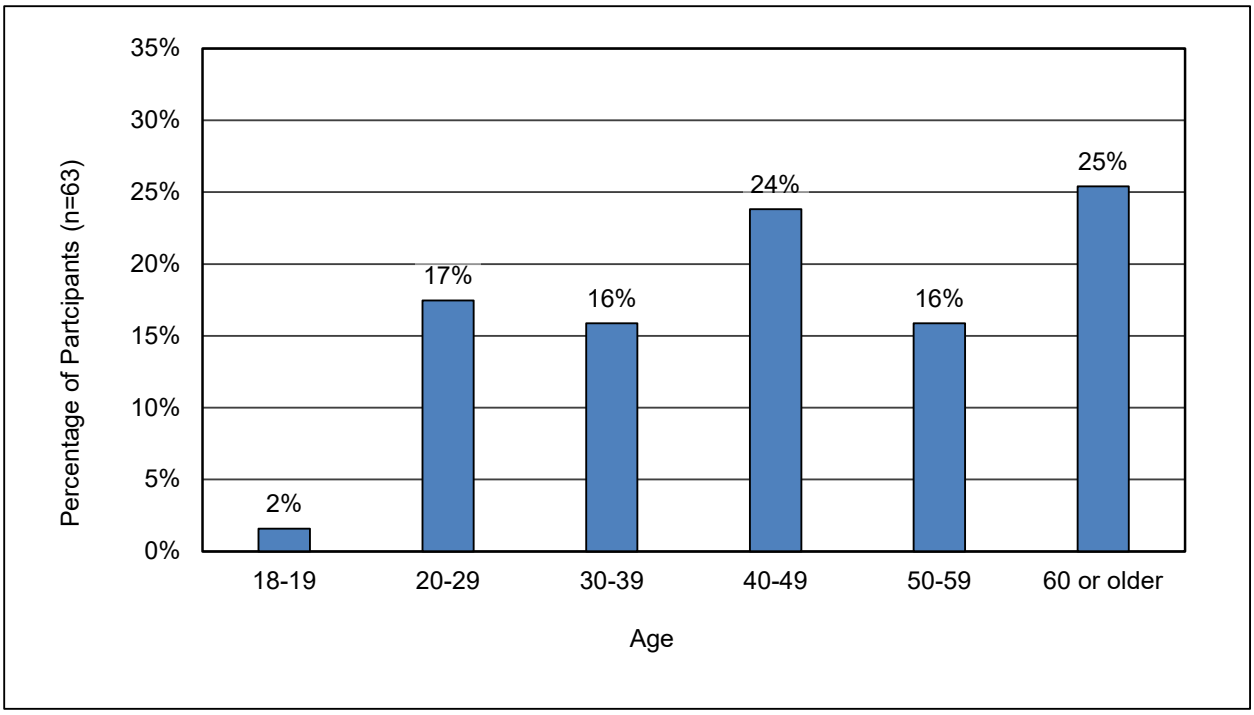

Figure 5.1-2. Level 3 Enhanced Flow Opportunity Participant Age Range.

The majority of enhanced flow opportunity participants (49 percent) identified Kern County as their primary residence (Figure 5.1-3). Los Angeles County and Orange County were represented by 22 percent and 8 percent of the participants, respectively. Northern California comprised 10 percent of the participants.

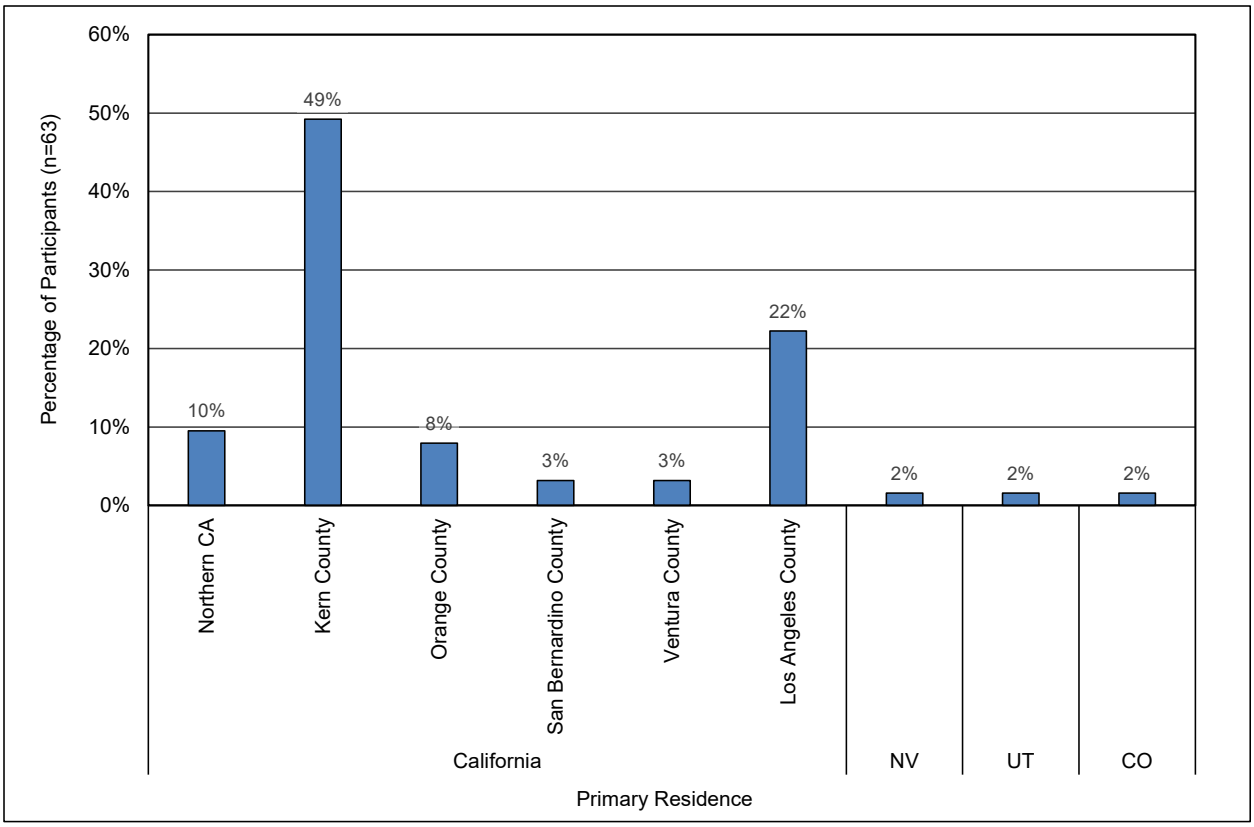

Figure 5.1-3. Level 3 Enhanced Flow Opportunity Participant Primary Residence.

Whitewater kayaks were the dominant watercraft type (69 percent) for the enhanced flow opportunity responses (Figure 5.1-4) and paddle rafts were a distant second watercraft type (11 percent), with the remaining watercraft types each comprising 5 percent or less.

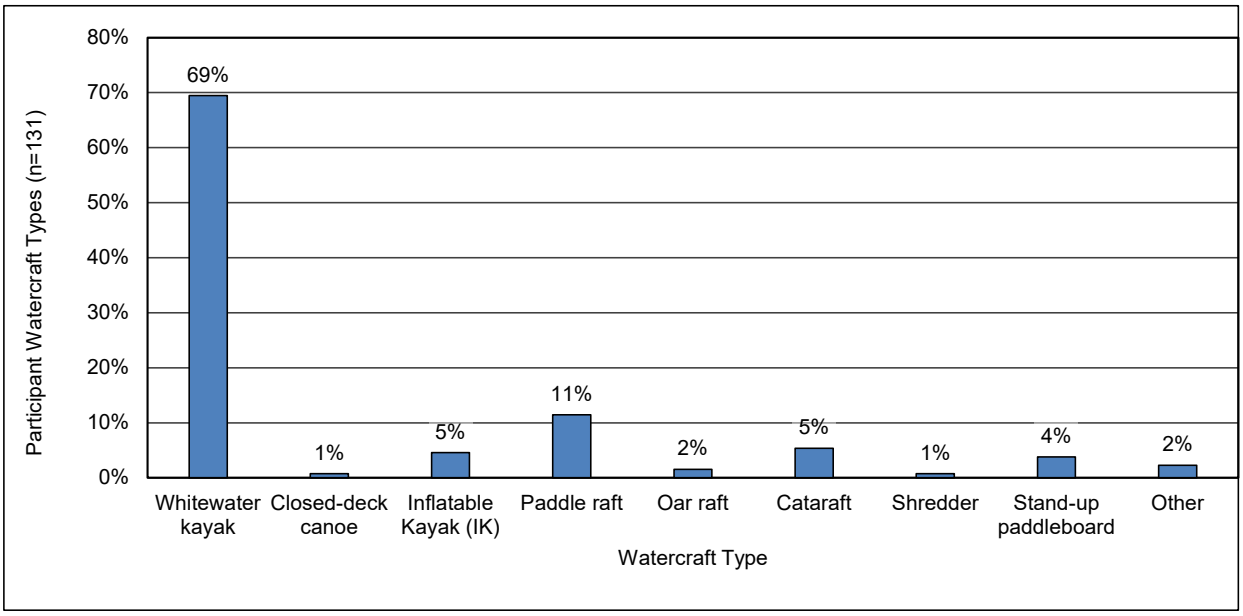

Figure 5.1-4. Level 3 Enhanced Flow Opportunity Watercraft Type.

Participant responses were submitted for all nine river segments but the number of responses varied across the individual enhanced flow opportunities (Figure 5.1-5). Sidewinder / Bomb's Away and Salmon Falls river segments received the least number of evaluations. Cable / Camp 3 and Riverkern received the greatest number of participant evaluations, followed closely by Fairview and Chamise Gorge river segments. Fairview and Chamise Gorge river segments received the greatest number of evaluations for the lowest enhanced flow opportunity (250 cfs).

Enhanced flow opportunity evaluations represented a variety of watercraft types (Figure 5.1-6). Kayaks were the predominant watercraft type selected by enhanced flow opportunity respondents across the nine river segments (Figure 5.1-6). The highest number of whitewater kayak responses was 65 on Chamise Gorge. Enhanced flow opportunity evaluations for paddle rafts and catarafts increased on the lower river segments (Camp 3 / Cables, Riverkern and Lickety Split). Table 5.1-5 tabulates the number of enhanced flow opportunity evaluation responses by watercraft and discharge across the nine river segments.

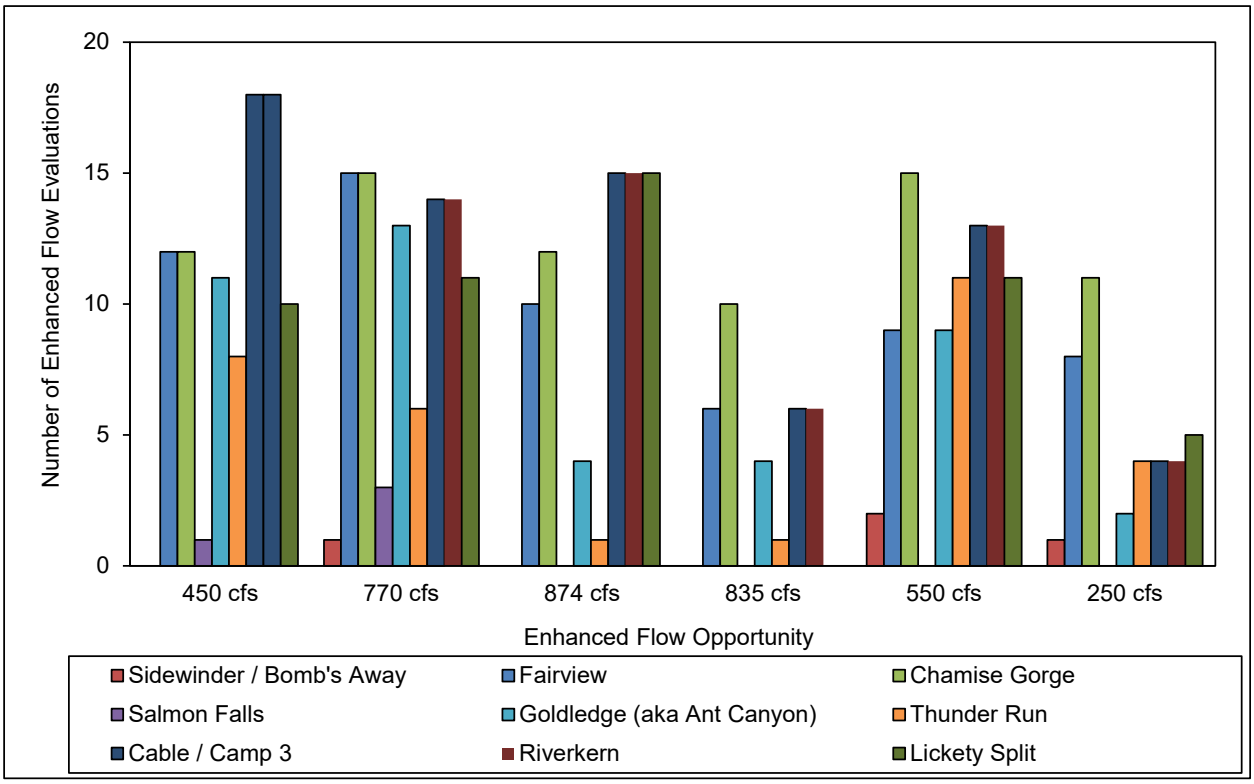

Figure 5.1-5. Participant Responses for each Level 3 Enhanced Flow Opportunity.

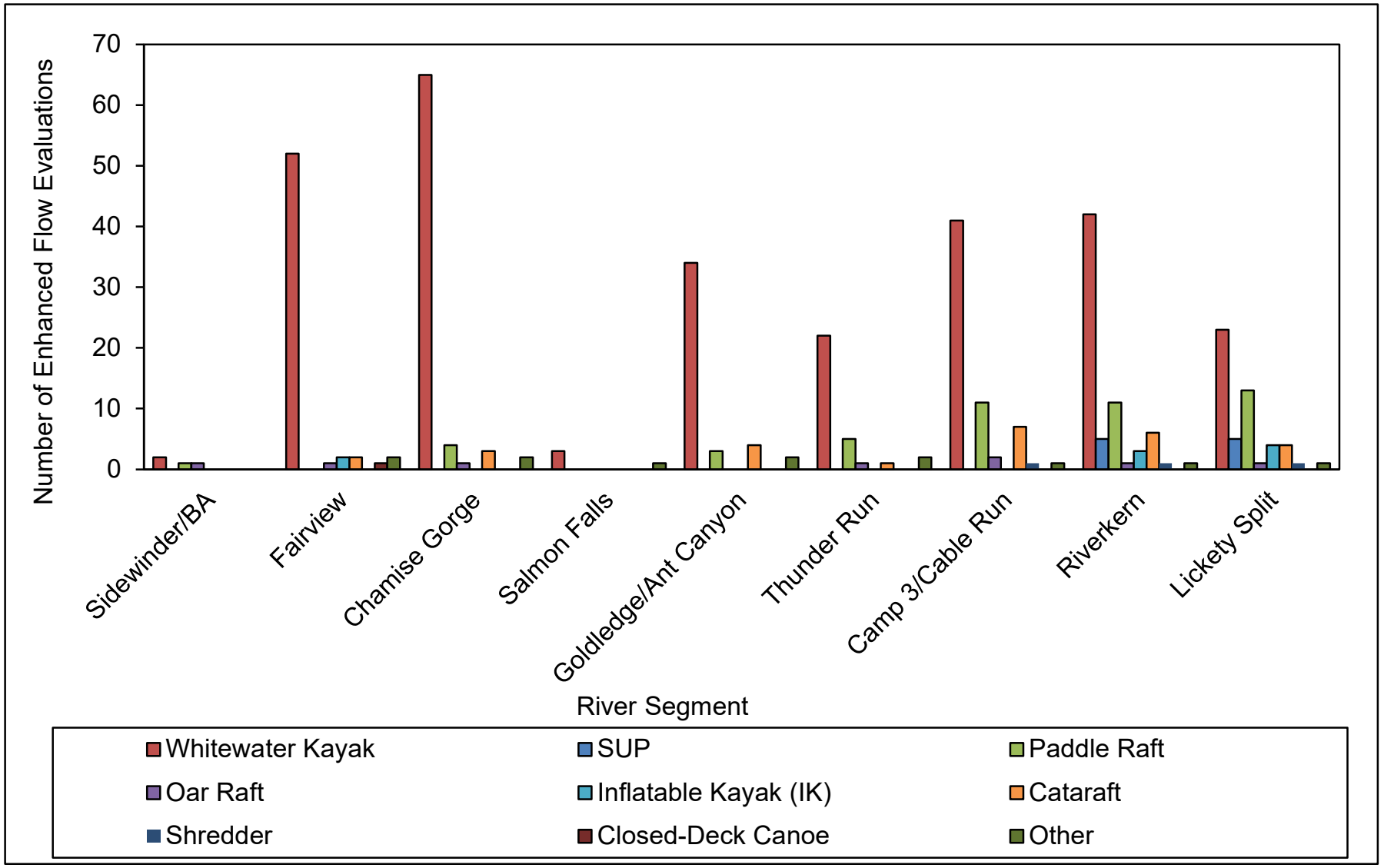

Figure 5.1-6. Watercraft Type Selected in Participant Responses for the Level 3 Enhanced Flow Opportunity Evaluations.

Table 5.1-5. Enhanced Flow Opportunity Evaluation Responses by Watercraft and Discharge Across Nine River Segments

River Segment	Watercraft Type	4/11/2024	4/12/2024	4/13/2024	4/14/2024	7/12/2024	7/13/2024
		450 cfs	770 cfs	874 cfs	835 cfs	550 cfs	250 cfs
Sidewinder / Bomb's Away	Whitewater kayak (K1 or K2)	0	2	0	0	1	0
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	0	0	0	0	0	1
	Oar raft	0	0	0	0	1	0
	Cataraft	0	0	0	0	0	0
	Shredder	0	0	0	0	0	0
	Inflatable Kayak	0	0	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	0	0	0	0	0	0
Fairview	Whitewater kayak (K1 or K2)	9	12	10	6	8	7
	Closed deck canoe (C1 or C2)	0	0	0	0	0	1
	Paddle raft	0	0	0	0	0	0
	Oar raft	0	0	0	0	1	0
	Cataraft	1	1	0	0	0	0
	Shredder	0	0	0	0	0	0
	Inflatable Kayak	1	1	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	1	1	0	0	0	0
Chamise	Whitewater kayak (K1 or K2)	10	13	11	10	12	9
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	0	0	0	0	2	2

River Segment	Watercraft Type	4/11/2024	4/12/2024	4/13/2024	4/14/2024	7/12/2024	7/13/2024
		450 cfs	770 cfs	874 cfs	835 cfs	550 cfs	250 cfs
	Oar raft	0	0	0	0	1	0
	Cataraft	1	1	1	0	0	0
	Shredder	0	0	0	0	0	0
	Inflatable Kayak	0	0	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	1	1	0	0	0	0
Salmon Falls	Whitewater kayak (K1 or K2)	1	2	0	0	0	0
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	0	0	0	0	0	0
	Oar raft	0	0	0	0	0	0
	Cataraft	0	0	0	0	0	0
	Shredder	0	0	0	0	0	0
	Inflatable Kayak	0	0	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	0	1	0	0	0	0
Goldledge / Ant Canyon	Whitewater kayak (K1 or K2)	8	12	3	3	7	1
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	0	0	0	0	2	1
	Oar raft	0	0	0	0	0	0
	Cataraft	2	0	1	1	0	0
	Shredder	0	0	0	0	0	0
	Inflatable Kayak	0	0	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	1	1	0	0	0	0

River Segment	Watercraft Type	4/11/2024	4/12/2024	4/13/2024	4/14/2024	7/12/2024	7/13/2024
		450 cfs	770 cfs	874 cfs	835 cfs	550 cfs	250 cfs
Thunder Run	Whitewater kayak (K1 or K2)	7	5	1	0	7	2
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	0	0	0	0	3	2
	Oar raft	0	0	0	0	1	0
	Cataraft	0	0	0	1	0	0
	Shredder	0	0	0	0	0	0
	Inflatable Kayak	0	0	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	1	1	0	0	0	0
Cable / Camp 3	Whitewater kayak (K1 or K2)	10	6	12	5	7	1
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	6	0	0	0	3	2
	Oar raft	0	0	0	0	2	0
	Cataraft	2	2	2	1	0	0
	Shredder	0	1	0	0	0	0
	Inflatable Kayak	0	0	0	0	0	0
	Stand-up paddleboard	0	0	0	0	0	0
	Other (please specify)	1	0	0	0	0	0
Riverkern	Whitewater kayak (K1 or K2)	9	8	10	5	9	1
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	5	0	0	0	3	3
	Oar raft	0	0	0	0	1	0
	Cataraft	1	2	2	1	0	0
	Shredder	0	1	0	0	0	0

River Segment	Watercraft Type	4/11/2024	4/12/2024	4/13/2024	4/14/2024	7/12/2024	7/13/2024
		450 cfs	**770 cfs**	**874 cfs**	**835 cfs**	**550 cfs**	**250 cfs**
	Inflatable Kayak	0	1	2	0	0	0
	Stand-up paddleboard	2	2	1	0	0	0
	Other (please specify)	1	0	0	0	0	0
Lickety Split	Whitewater kayak (K1 or K2)	1	5	10	0	6	1
	Closed deck canoe (C1 or C2)	0	0	0	0	0	0
	Paddle raft	6	0	0	0	4	3
	Oar raft	0	0	0	0	1	0
	Cataraft	0	2	2	0	0	0
	Shredder	0	1	0	0	0	0
	Inflatable Kayak	1	1	2	0	0	0
	Stand-up paddleboard	2	2	1	0	0	0
	Other (please specify)	0	0	0	0	0	1

cfs = cubic feet per second

Analysis of respondent flow preferences in the enhanced flow evaluation form and associated focus group discussions will be included in Section 5.2, *Flow Preferences*.

5.1.3. Flow Comparison Survey Outreach and Participation

SCE published the Level 3 flow comparison survey on July 18, 2024. The flow comparison survey collected background demographic information on gender, age, whitewater skill level, and watercraft type for aggregating participant responses where appropriate.

SCE sent an email announcing publication of the Level 3 flow comparison survey on July 18, 2024 (Appendix G). The Level 3 flow comparison survey notification was posted on the KR3 relicensing website and distributed to the KR3 Stakeholder list, REC-1 Level 1 structured interview participants, Level 2 site visit reconnaissance participants, Level 3 enhanced flow opportunity participants, as well as local, regional, and national whitewater groups (Table 5.1-6). SCE sent a reminder notification to the same list on August 1 and 12, 2024. Boaters were instructed to complete the Level 3 flow comparison survey for each type of watercraft used on the NFKR. The Level 3 flow comparison survey remained open for boaters to complete through August 16, 2024.

Table 5.1-6. Level 3 Flow Comparison Survey Notifications

Date	Format	Distribution	Summary
7/18/2024	Electronic	REC-1 Study participants and relicensing Stakeholder list	Flow comparison survey notification on 7/18/2024 to REC-1 Study participants (L1 structured interview list, L2 site visit focus group, L3 enhanced flow participants list) and relicensing Stakeholder list to complete the flow comparison evaluation form by August 16, 2024.
8/1/2024	Electronic	REC-1 Study participants and relicensing stakeholder list	Flow comparison survey notification on 8/01/2024 to REC-1 Study participants (L1 structured interview list, L2 site visit focus group, L3 enhanced flow participants list) and relicensing Stakeholder list to complete the flow comparison evaluation form by August 16, 2024.
8/12/2024	Electronic	REC-1 Study participants and relicensing stakeholder list	Flow comparison survey notification on 8/12/2024 to REC-1 Study participants (L1 structured interview list, L2 site visit focus group, L3 enhanced flow participants list) and relicensing Stakeholder list to complete the flow comparison evaluation form by August 16, 2024.

L1 = Level 1; L3 = Level 3

Fifty individuals participated in the flow comparison survey comprising a mix of genders and whitewater skill levels (Table 5.1-7); however, some individuals completed multiple surveys for different watercraft type. Sixty-four percent of the participants were male and 20 percent female. Fifty-four percent of the flow comparison survey participants self-identified as possessing advanced whitewater skills. Intermediate and expert boaters comprised 18 and 28 percent of the participants, respectively. Novice boaters did not submit a flow comparison survey.

Table 5.1-7. Level 3 Flow Comparison Survey Participants Gender and Whitewater Skill

Gender	Count		Skill Level			
	No.	%	Novice	Intermediate	Advanced	Expert
Male	32	64%	0%	4%	36%	24%
Female	10	20%	0%	8%	8%	4%
Choose not to answer	8	16%	0%	6%	10%	0%
Total	50		0%	18%	54%	28%

The flow comparison survey participants comprised boaters from each of the age groups except 18- and 19-year-olds (Figure 5.1-7). The majority of participants were older than 39 years.

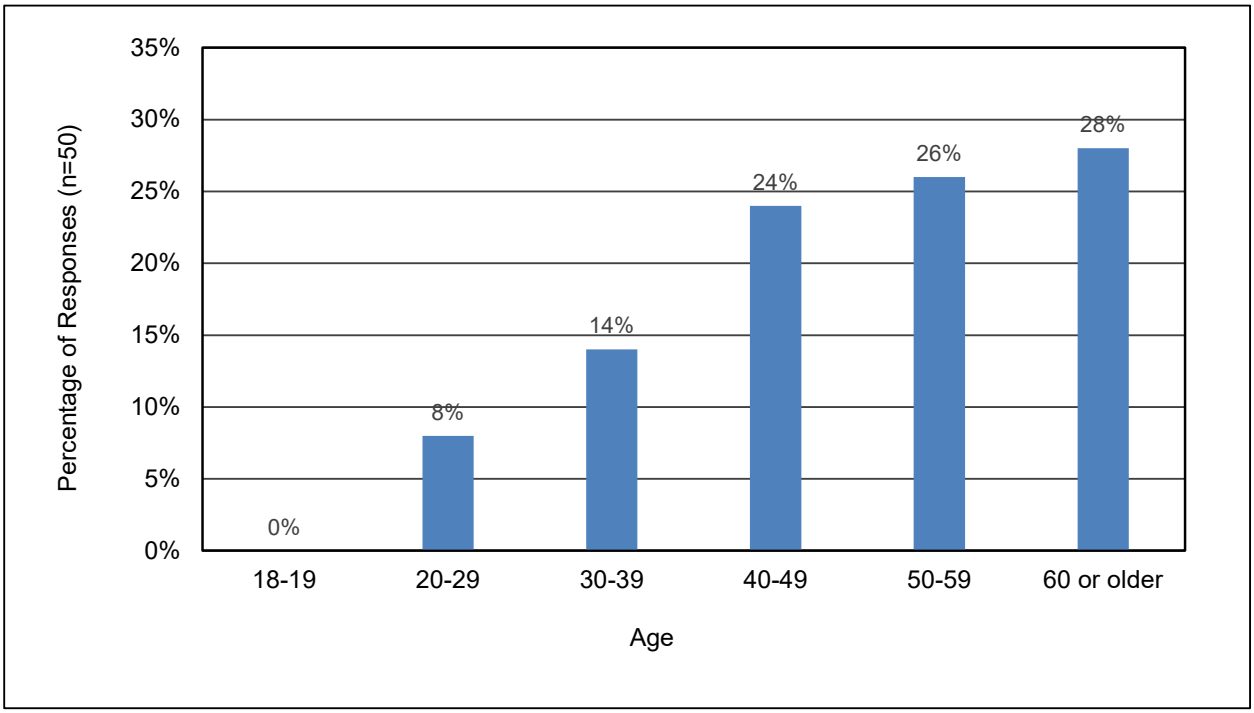

Figure 5.1-7. Level 3 Flow Comparison Survey Participant Age Range.

The majority of flow comparison survey participants (44 percent) identified Kern County as their primary residence (Figure 5.1-8). Los Angeles County and Northern California were represented by 14 percent and 22 percent of the participants, respectively.

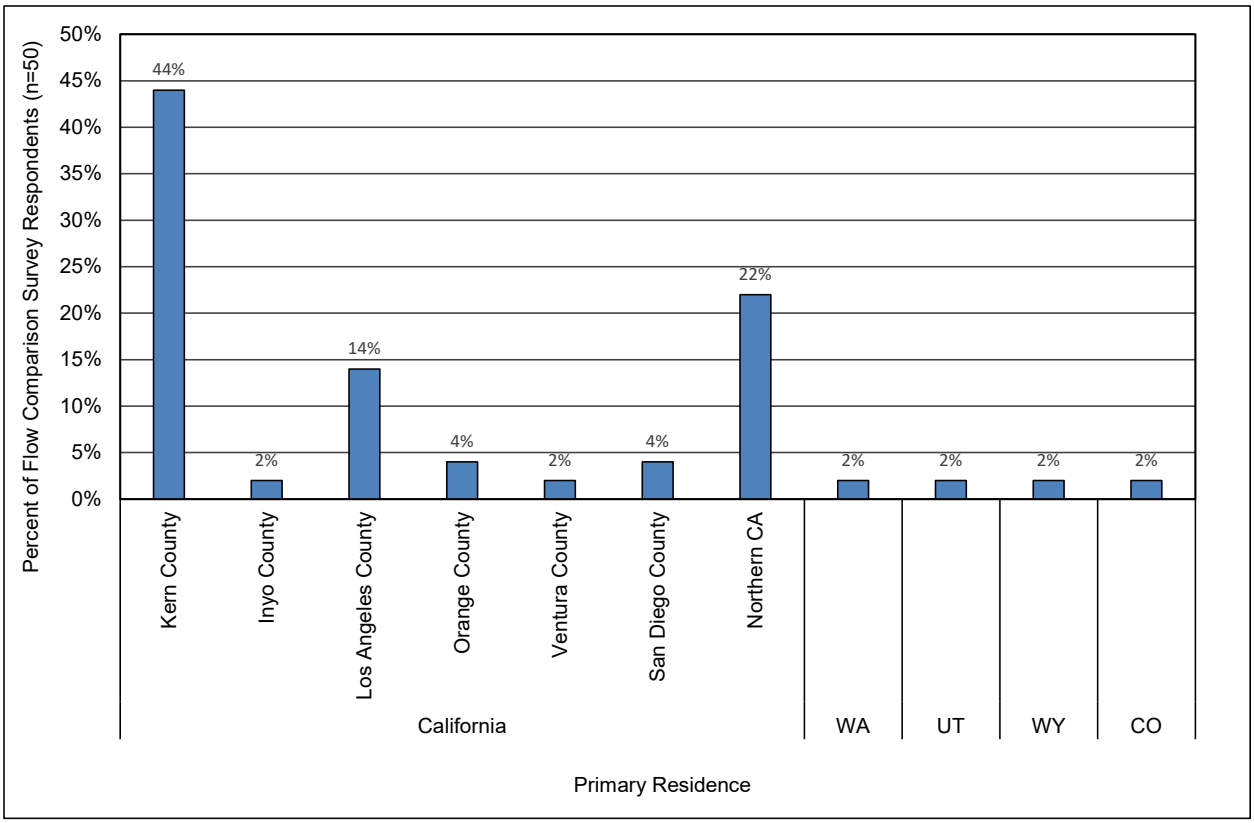

Figure 5.1-8. Level 3 Flow Comparison Survey Participant Primary Residence.

Whitewater kayaks were the dominant watercraft type (68 percent) for the flow comparison survey responses (Figure 5.1-9). All other watercraft types comprised less than 10 percent of the participant responses, respectively. The “other” watercraft types written in by respondents included a packraft and a traditional tule boat. Table 5.1-8 tabulates the number of flow comparison survey participant responses for each river segment by watercraft type.

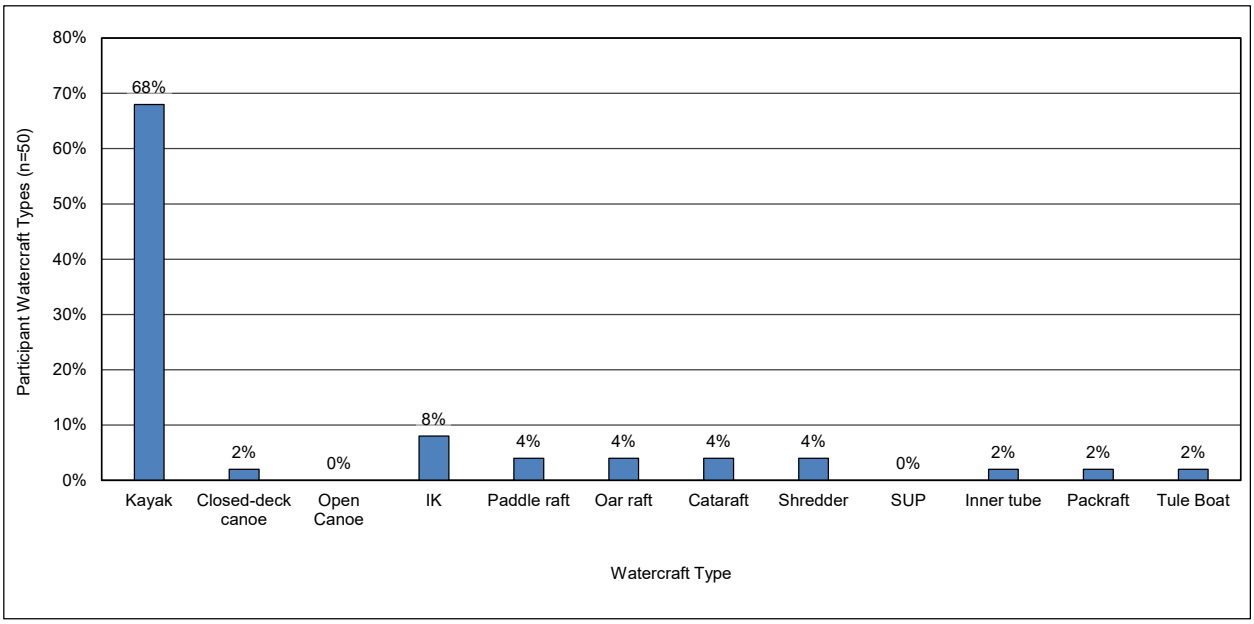

Figure 5.1-9. Level 3 Flow Comparison Survey Participant Watercraft Types.

Table 5.1-8. Number of Level 3 Flow Comparison Survey Participant Responses per River Segment for each Watercraft Type

Watercraft Type	River Segment								
	Sidewinder / Bombs Away	Fairview	Chamise Gorge	Salmon Falls	Goldledge / Ant Canyon	Thunder Run	Camp 3 / Cable Run	Riverkern	Lickety Split
Whitewater Kayak	13	32	31	13	29	26	30	30	31
Closed Deck Canoe	0	1	1	0	0	0	1	1	1
Open Canoe	0	0	0	0	0	0	0	0	0
Inflatable Kayak	1	4	3	1	3	1	3	4	4
Paddle Raft	1	2	2	0	2	2	2	2	2
Oar Raft	0	2	2	1	2	2	2	2	2
Cataraft	0	2	1	0	2	2	2	2	2

Watercraft Type	River Segment								
	Sidewinder / Bombs Away	**Fairview**	**Chamise Gorge**	**Salmon Falls**	**Goldledge / Ant Canyon**	**Thunder Run**	**Camp 3 / Cable Run**	**Riverkern**	**Lickety Split**
Shredder	1	2	2	1	2	2	2	2	2
Stand-up Paddleboard	0	0	0	0	0	0	0	0	0
Inner Tube	0	1	1	0	1	1	1	1	1
Packraft	0	1	1	0	1	1	1	1	1
Tule Boat	1	1	1	1	1	1	1	1	1

5.2. FLOW PREFERENCES

This section analyzes the flow preferences identified by respondents in the Level 3 flow comparison survey cross-referenced with results from the Level 3 enhanced flow opportunities and associated focus groups as well as the Level 3 single flow survey responses. Flow preferences are analyzed by watercraft type and river segment in the Fairview Dam Bypass Reach. The flow preference curves represent the average participant acceptability responses for a specific watercraft type in a given river segment. In cases where two or fewer flow comparison responses were submitted for a watercraft type then the individual participant responses are presented in the flow preference curve. Flow preference average acceptability ratings for each flow are provided in Appendix H for each watercraft type.

The minimum acceptable flow for a watercraft type occurs where the flow preference curve crosses the marginal rating (3) between unacceptable and acceptable (Whittaker et al. 1993). The optimum flow occurs at the peak of the flow preference curve and typically covers a range of flows where the flow preference curve levels out (Whittaker et al. 1993). In some cases, higher flows may be considered unacceptable for some watercraft types causing the flow preference curve to decline below the marginal line.

5.2.1. Flow Preferences by Watercraft Type

5.2.1.1. Whitewater Kayaks

Minimum Acceptable Flow

Flow preference curves were developed for kayaks for all nine river segments in the Fairview Dam Bypass Reach using participant flow acceptability evaluations from the flow comparison survey (Figure 5.2-1). For eight of the nine river segments, the minimum acceptable flow identified (where the flow preference curve crosses the marginal line) was approximately 300 cfs. The exception was the Sidewinder / Bomb's Away river segment where the flow preference curve crosses the marginal line at approximately 400 cfs. In the Fairview, Chamise Gorge, and Salmon Falls river segments, the minimum acceptable flow for kayaks crosses the marginal line between 250 and 300 cfs.

In the flow comparison survey, kayakers were asked to specify their minimum acceptable flow in response to an open-ended question (i.e., they could write in a number rather than select from a list). The median minimum acceptable flow for the kayak responses was consistent with the flow preference curve marginal flow line for Sidewinder (median value = 400 cfs), Fairview (median value = 300 cfs), Chamise Gorge (median value = 250 cfs), and Salmon Falls (median value = 250 cfs) (Figure 5.2-2; Table 5.2-1). The median minimum acceptable flow calculated from the open-ended question for the Goldledge / Ant Canyon, Thunder Run, and Camp 3 / Cables river segments was 400 cfs while the median minimum acceptable flow for Riverkern and Lickety Split river segments was 350 cfs. These median minimum acceptable flow responses for kayakers on the NFKR from the Goldledge / Ant Canyon river segment to the Lickety Split river segment were approximately 100 cfs higher than indicated by the flow preference curve crossing the marginal line for the respective river segments.

On July 13, 2024, an enhanced flow opportunity of 250 cfs occurred in the Fairview Dam Bypass Reach and nine kayakers completed surveys for this enhanced flow opportunity. The kayakers only boated the Fairview and Chamise Gorge river segments for the 250 cfs enhanced flow opportunity but submitted enhanced flow evaluation forms for the other river segments in the Fairview Dam Bypass Reach. The 250 cfs enhanced flow opportunity was acceptable for seven of the nine river segments based on the average flow preference curve for the kayakers (Figure 5.2-3). The 250 cfs enhanced flow opportunity was unacceptable for the Lickety Split river segment and marginal for the Thunder Run.

In focus group discussions following the 250 cfs enhanced flow opportunity, participants noted that 250 cfs was not an ideal flow but it was boatable for smaller watercraft, offering technical challenges and opportunities to explore new lines in rapids, particularly the Chamise Gorge segment. Kayak participants in the focus group discussions indicated they would return to boat this flow. In 2023, when flows in the Fairview Dam Bypass Reach were equal to or less than 300 cfs, single flow survey responses were limited to individuals boating the Fairview and Chamise Gorge river segments only (see

Figure 5.1-5 in *Addendum to REC-1 Whitewater Boating Interim Technical Memorandum: Level 3 Single Flow Survey Results* [SCE, 2024c]).

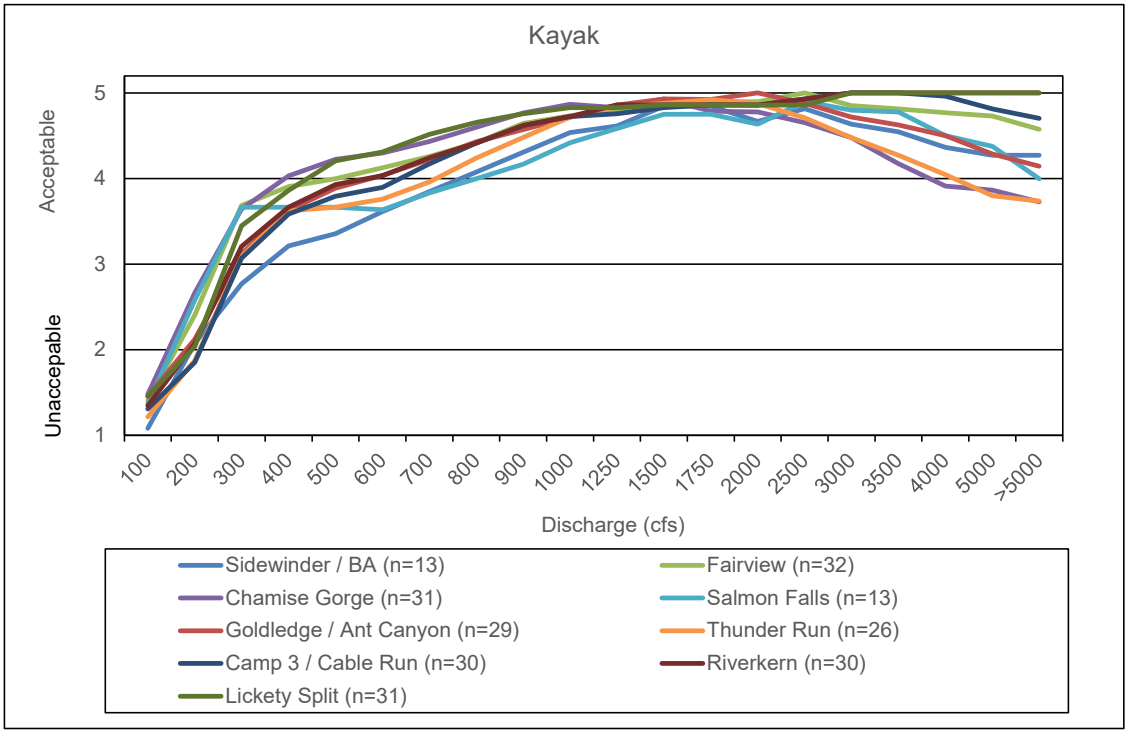

Figure 5.2-1. Whitewater Kayak Flow Preference Curve for Nine River Segments on the North Fork Kern River (Flow Comparison Survey).

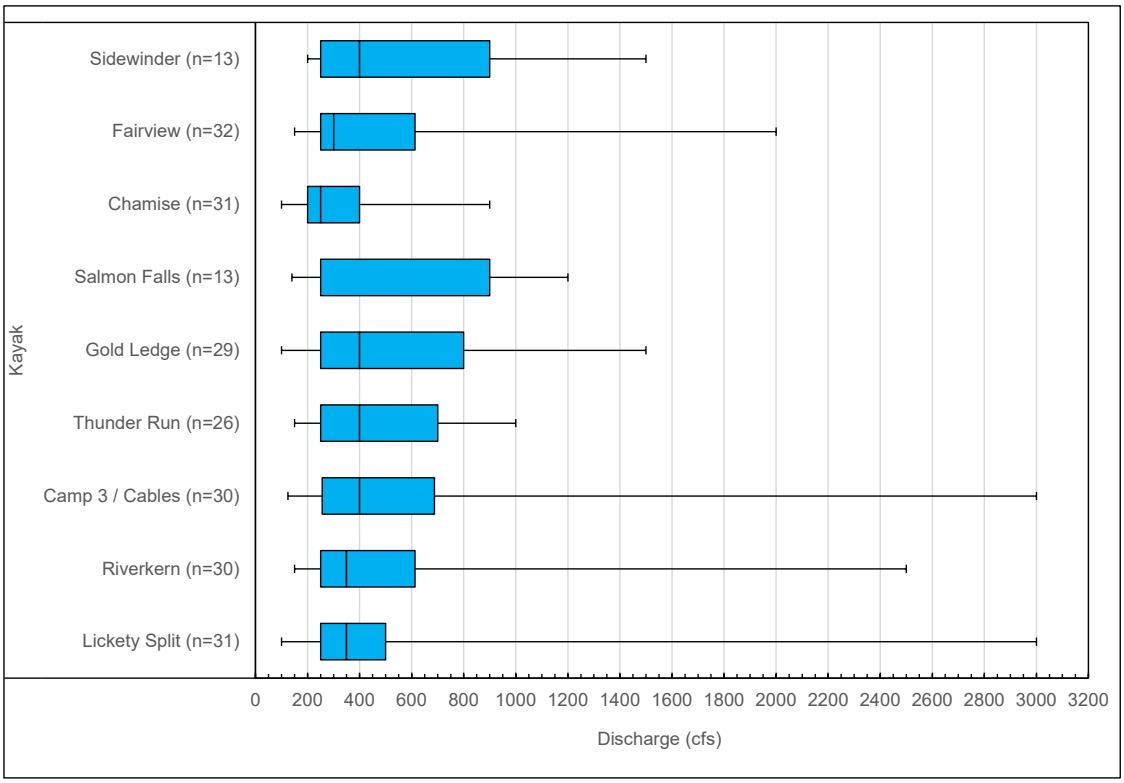

Figure 5.2-2. Whitewater Kayak Minimum Acceptable Flow Preference (Flow Comparison Survey).

Table 5.2-1. Whitewater Kayak Minimum Acceptable Flow Statistics (Flow Comparison Survey)

Descriptive Statistic	Kayak								
	Sidewinder (n=13)	Fairview (n=32)	Chamise (n=31)	Salmon Falls (n=13)	Gold Ledge (n=29)	Thunder Run (n=26)	Camp 3 / Cables (n=30)	Riverkern (n=30)	Lickety Split (n=31)
Mean	610	486	376	501	527	483	547	510	477
Minimum	200	150	100	140	100	150	125	150	100
Q1	250	250	200	250	250	250	256	250	250
Median	400	300	250	250	400	400	400	350	350
Q3	900	613	400	900	800	700	688	613	500
Maximum	1,500	2,000	900	1,200	1,500	1,000	3,000	2,500	3,000

Q1 = 25 percent; Q3 = 75 percent

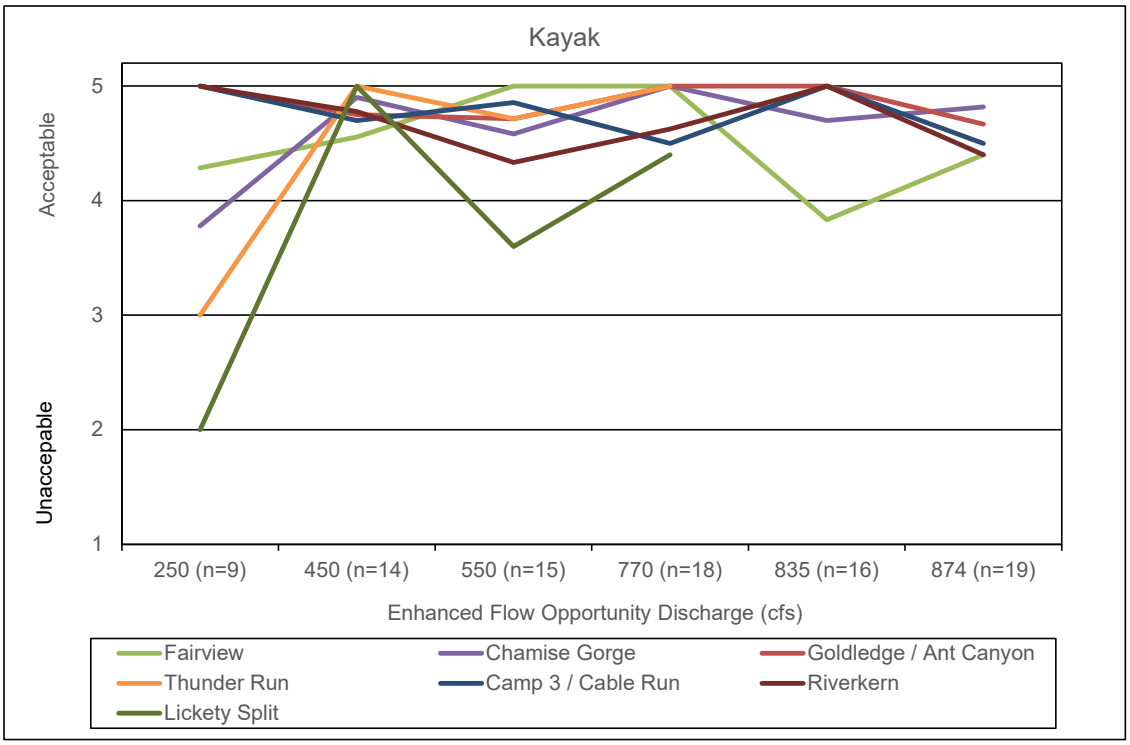

Figure 5.2-3. Whitewater Kayak Flow Preference Curve for Seven River Segments on the North Fork Kern River (Enhanced Flow Opportunities).

Optimum Flow

The optimum flow range for kayaks for the Fairview Dam Bypass Reach was 700 to 3,500 cfs based on participant flow acceptability evaluations from the flow comparison survey. The optimum flow range for individual river segments varied slightly on the low and high end. For example, the optimum flow in Chamise Gorge ranges from 800 to 3,000 cfs for whitewater kayaks. In Goldledge / Ant Canyon and the Thunder Run, flows greater than 3,500 cfs dropped out of the optimum flow range. The optimum flow range in the Lickety Split segment ranged from 700 cfs with no decline in the flow preference curve for flows greater than 5,000 cfs.

Flow comparison survey respondents using kayaks were asked to specify their optimum flow in an open-ended question (Figure 5.2-4; Table 5.2-2). The median kayak optimum flow for the respective river segments went from a low of 800 cfs in the Sidewinder / Bomb's Away river segment to a high of 2,100 cfs in the Riverkern river segment. The quartiles reflect a range of optimum flows for 25 to 75 percent of the survey respondents.

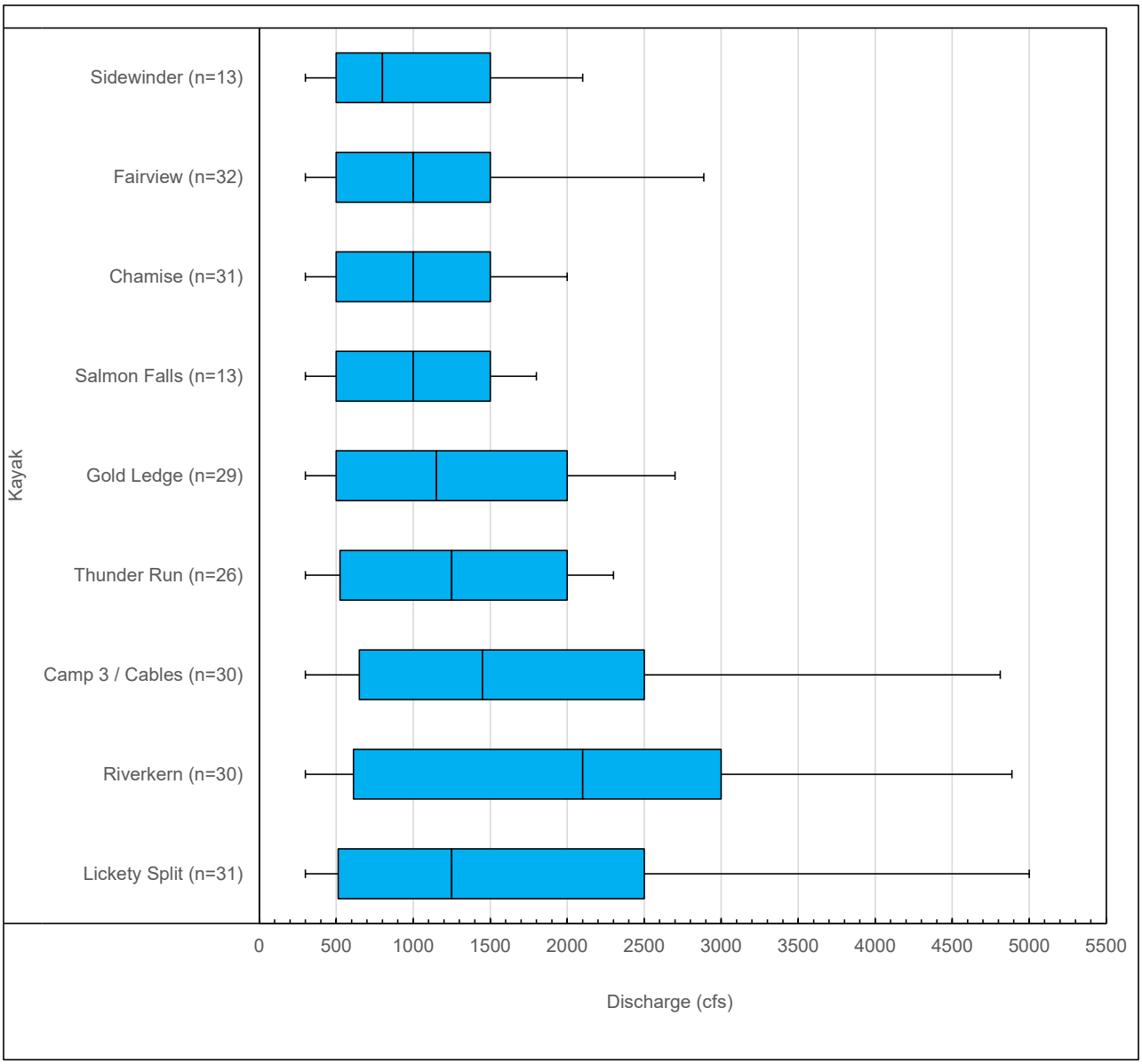

Figure 5.2-4. Whitewater Kayak Optimum Flow Preference (Flow Comparison Survey).

Table 5.2-2. Whitewater Kayak Optimum Flow Statistics (Flow Comparison Survey)

Descriptive Statistic	Kayak								
	Sidewinder (n=13)	Fairview (n=32)	Chamise (n=31)	Salmon Falls (n=13)	Gold Ledge (n=29)	Thunder Run (n=26)	Camp 3 / Cables (n=30)	Riverkern (n=30)	Lickety Split (n=31)
Mean	1,577	1,333	1,184	1,212	1,418	1,371	1,860	2,172	1,807
Minimum	300	300	300	300	300	300	300	300	300

Descriptive Statistic	Kayak								
	Sidewinder (n=13)	Fairview (n=32)	Chamise (n=31)	Salmon Falls (n=13)	Gold Ledge (n=29)	Thunder Run (n=26)	Camp 3 / Cables (n=30)	Riverkern (n=30)	Lickety Split (n=31)
Q1	500	500	500	500	500	525	650	613	513
Median	800	1,000	1,000	1,000	1,150	1,250	1,450	2,100	1,250
Q3	1,500	1,500	1,500	1,500	2,000	2,000	2,500	3,000	2,500
Maximum	5,000	6,000	3,500	3,000	4,500	3,500	5,000	5,000	5,000

Q1 = 25 percent; Q3 = 75 percent

5.2.1.2. Inflatable Kayaks

Minimum Acceptable Flow

Four flow comparison survey responses were completed for inflatable kayaks (IK), evaluating a mix of the nine river segments in the Fairview Dam Bypass Reach. Flow preference curves were developed for the river segments using the average value where three or more IK responses were completed (Figure 5.2-5). The actual acceptability rating for each flow was plotted in the flow preference curve for river segments with only a single IK response. The IK flow preference curve crosses the marginal line between 100 and 200 cfs for eight of the nine river segments, indicating the minimum acceptable flow is in this flow range. The Sidewinder / Bomb's Away river segment is the exception where an IK response was completed scoring flows between 300 cfs and 500 cfs as totally acceptable (5) in the survey but leaving all other flows blank.

The median minimum acceptable flow was calculated where three or more IKs specified the minimum acceptable flow for individual river segments in an open-ended question. The median minimum acceptable flow for Fairview, Chamise Gorge, Goldledge / Ant Canyon, Camp 3 / Cable Run, Riverkern, and Lickety Split river segments was 200 cfs. The single IK respondent for Sidewinder / Bomb's Away and Salmon Falls river segments specified a minimum acceptable flow of 250 and 200 cfs, respectively.

Optimum Flow

IK optimum flows start at 200 cfs for all river segments, virtually the same as the minimum acceptable flow. The upper end of the IK optimum flow varies by river segment. For river segments equal to or greater than Class IV whitewater difficulty, the upper end of the IK optimum flow range is lower than river segments that are Class II to III whitewater difficulty.

In the 250 cfs enhanced flow opportunity focus group, participants noted that the 250 cfs flow was suitable for IKs. No IK boater participated in the 250 cfs enhanced flow opportunity and no enhanced flow opportunity evaluation forms were submitted for IKs for the 250 cfs flow.

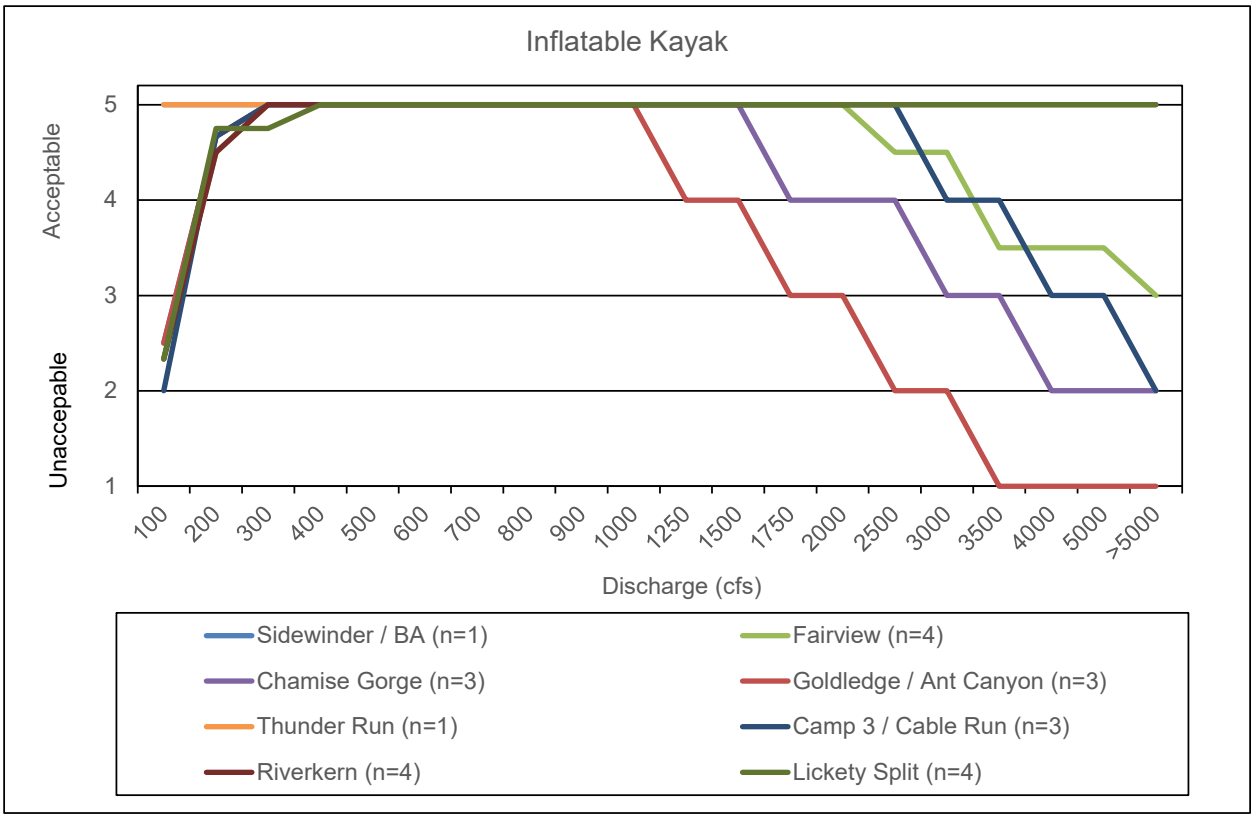

Figure 5.2-5. IK Flow Preference Curve for Eight River Segments on the North Fork Kern River (Flow Comparison Survey).

5.2.1.3. Closed Deck Canoe

One flow comparison survey was submitted for a closed deck canoe, evaluating the Fairview, Chamise Gorge, Camp 3 / Cable Run, Riverkern, and Lickety Split river segments. The respondent rated all flows from 200 to 400 cfs as totally acceptable (5). One enhanced flow opportunity evaluation form was submitted for closed deck canoe for the 250 cfs flow on July 13. The individual rated the 250 cfs enhanced flow opportunity as marginal in the Fairview river segment. No other river segments were evaluated by the individual.

5.2.1.4. Paddle Raft

Two flow comparison surveys were submitted for paddle rafts. Flow preference curves were plotted for each paddle raft respondent (Boater 1 and Boater 2) for the individual river segments (Figure 5.2-6). The flow preference curve shows substantial differences in flow preferences between the two paddle rafters for the respective river segments. Boater 1 evaluated a narrower range of flows rating them all totally acceptable (5). Consequently, a minimum acceptable flow cannot be ascertained from the Boater 1 flow evaluation. Boater 2 evaluated the full range of flows in the flow comparison for respective river segments. Boater 2 minimum acceptable flow preferences for a paddle raft were specific to each respective river segment: Sidewinder / Bomb's Away segment (1,000 cfs), Fairview segment (1,000 cfs), Chamise Gorge Segment (900 cfs), Goldledge

/ Ant Canyon segment (900 cfs), Thunder Run segment (900 cfs), Cables/ Camp 3 segment (900 cfs), Riverkern segment (400 cfs), and Lickety Split segment (400 cfs).

Enhanced flow evaluation forms were submitted for paddle rafts for the 250 cfs, 450 cfs and 550 cfs enhanced flow opportunities. Flow preference curves were developed for three river segments evaluated in the enhanced flow evaluation forms; Camp 3 / Cables Run, Riverkern and Lickety Split (Figure 5.2-7). The 250 cfs, 450 cfs and 550 cfs enhanced flow opportunities in the three river segments were rated unacceptable based on the average of the paddle respondents with the exception of Lickety Split at 450 cfs which was rated marginal. In the 250 cfs enhanced flow opportunity focus group, participants noted that the 250 cfs was not suitable for larger inflatable boats. In the 450 cfs enhanced flow opportunity focus group, participants noted that the 450 cfs was suitable for 12-foot or smaller inflatable boats but also noted that 14-foot inflatable boats could make it down the Camp 3 / Cables Run.

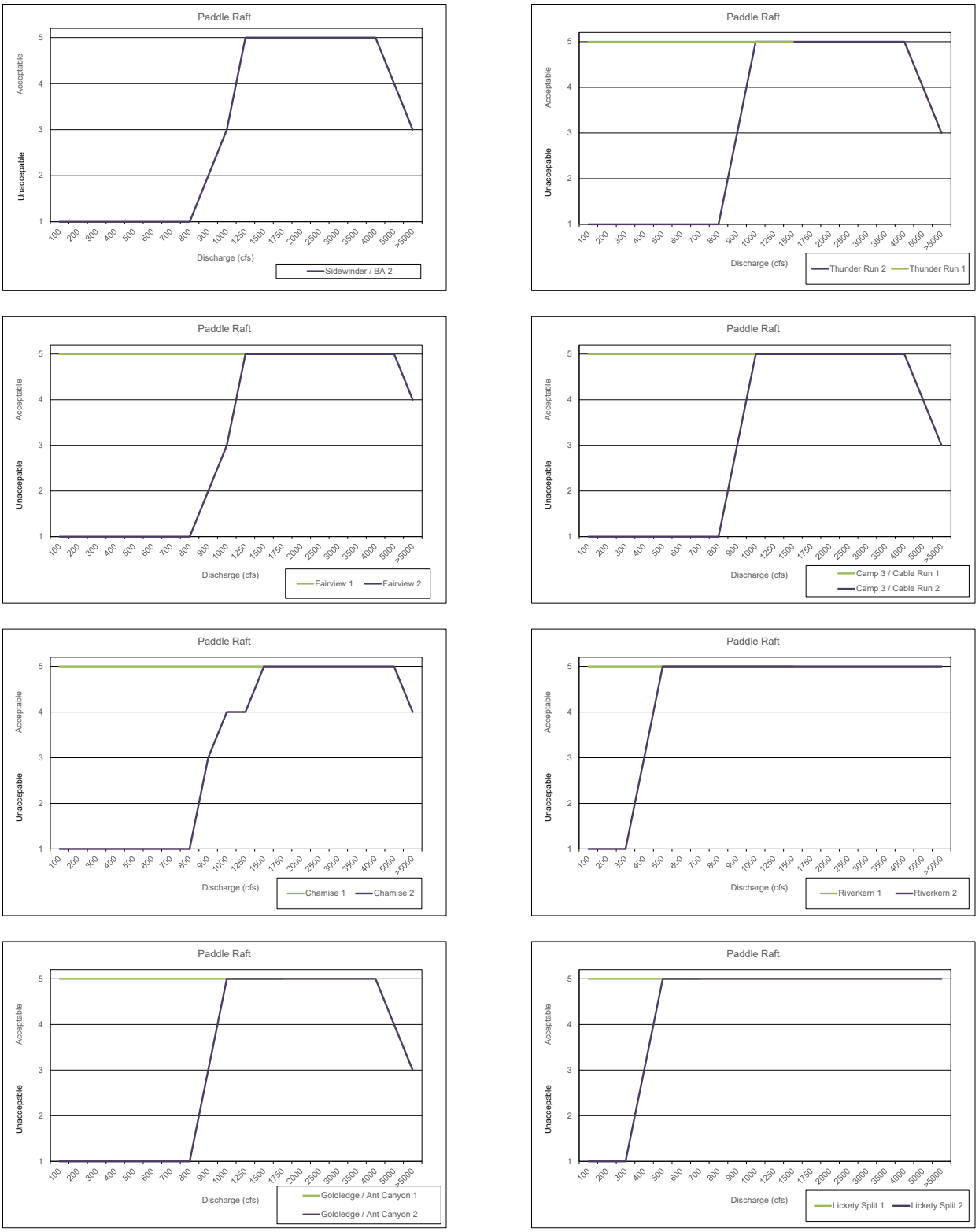

Figure 5.2-6. Paddle Raft Flow Preference Curve for Eight River Segments on the North Fork Kern River (Flow Comparison Survey).

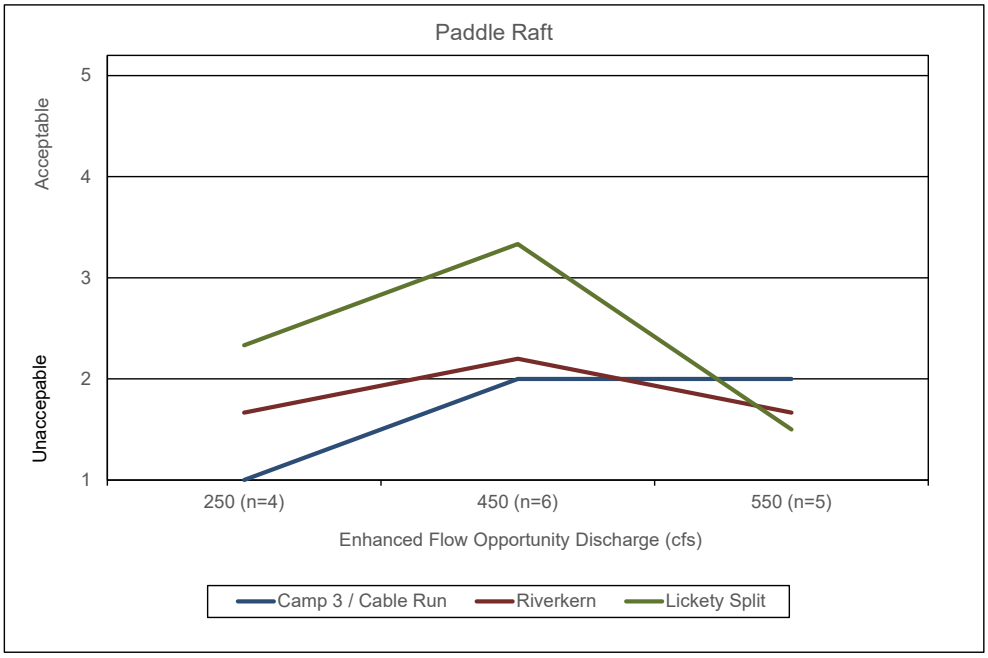

Figure 5.2-7. Paddle Raft Flow Preference Curve for Three River Segments on the North Fork Kern River (Enhanced Flow Opportunities).

5.2.1.5. Oar Raft

Two flow comparison surveys were submitted for oar rafts. Flow preference curves were plotted for each oar raft respondent (Boater 1 and Boater 2) for the individual river segments (Figure 5.2-8). The flow preference curve shows substantial differences in flow preferences between the two individuals using oar rafts for the respective river segments. Boater 1 evaluated a narrower range of flows (200 to 500 cfs) rating them all totally acceptable (5). Consequently, a minimum acceptable flow cannot be ascertained from the Boater 1 flow evaluation. Boater 2 evaluated the full range of flows in the flow comparison for respective river segments. Boater 2 minimum acceptable flow preferences for oar rafts were specific to each river segment: Fairview segment (800 cfs), Chamise Gorge Segment (800 cfs), Goldledge / Ant Canyon segment (900 cfs), Thunder Run segment (900 cfs), Cables/ Camp 3 segment (800 cfs), Riverkern segment (800 cfs), and Lickety Split segment (500 cfs).

Two enhanced flow evaluation forms were submitted for an oar raft for the 550 cfs flow on July 12. The average rating for the 550 cfs was unacceptable for Sidewinder Bomb's / Away, Fairview, Thunder Run, and Riverkern river segments. Lickety Split river segment was rated marginal. Salmon Falls and Goldledge / Ant Canyon river segments were not evaluated.

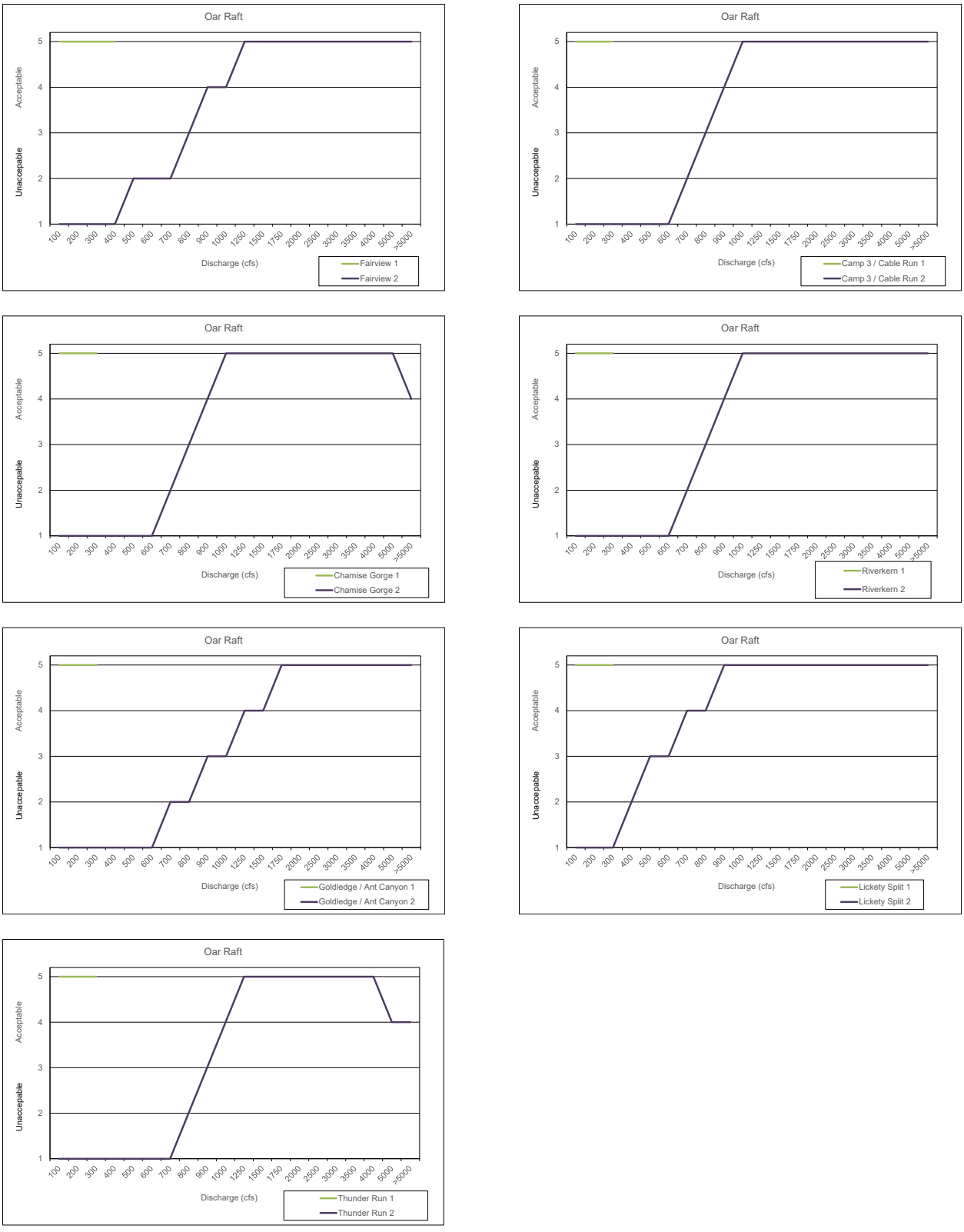

Figure 5.2-8. Oar Raft Flow Preference Curve for Seven River Segments on the North Fork Kern River (Flow Comparison Survey).

5.2.1.6. Cataraft

Minimum Acceptable Flow

Two flow comparison surveys were submitted for catarafts. Flow preference curves were plotted for each cataraft respondent (Boater 1 and Boater 2) for the individual river segments (Figure 5.2-9). The flow preference curves for the two cataraft respondents were similar for the respective river segments with only slight differences in the minimum acceptable flow delineated by the marginal flow line. Cataraft minimum acceptable flows ranged from 500 cfs to 700 cfs across seven river segments in the Fairview Dam Bypass Reach. Neither catarafter evaluated flows in the Sidewinder / Bomb's Away and Salmon Falls river segments.

Optimum Flow

Two enhanced flow evaluation forms were submitted for catarafts for the 450 cfs, 770 cfs, and the 874 cfs enhanced flow opportunities. One enhanced flow evaluation form was submitted for a cataraft for the 835 cfs enhanced flow opportunity. The 450 cfs enhanced flow was considered totally acceptable (5) for the Fairview, Chamise Gorge, and Riverkern river segments but considered marginal for the Goldledge / Ant Canyon and Camp 3 / Cable Run. The catarafters did not evaluate the Sidewinder Bomb's Away, Salmon Falls or Thunder Run at the 450 cfs enhanced flow opportunity. In the 450 cfs enhanced flow opportunity focus group, one of the catarafters commented that he chooses not to boat any of the river segments in the Fairview Dam Bypass Reach when flows are less than 400 cfs. Instead, he boats the Limestone run when flows below Fairview Dam are less than 400 cfs but he considers the Limestone run lesser quality compared to the river segments in the Fairview Dam Bypass Reach.

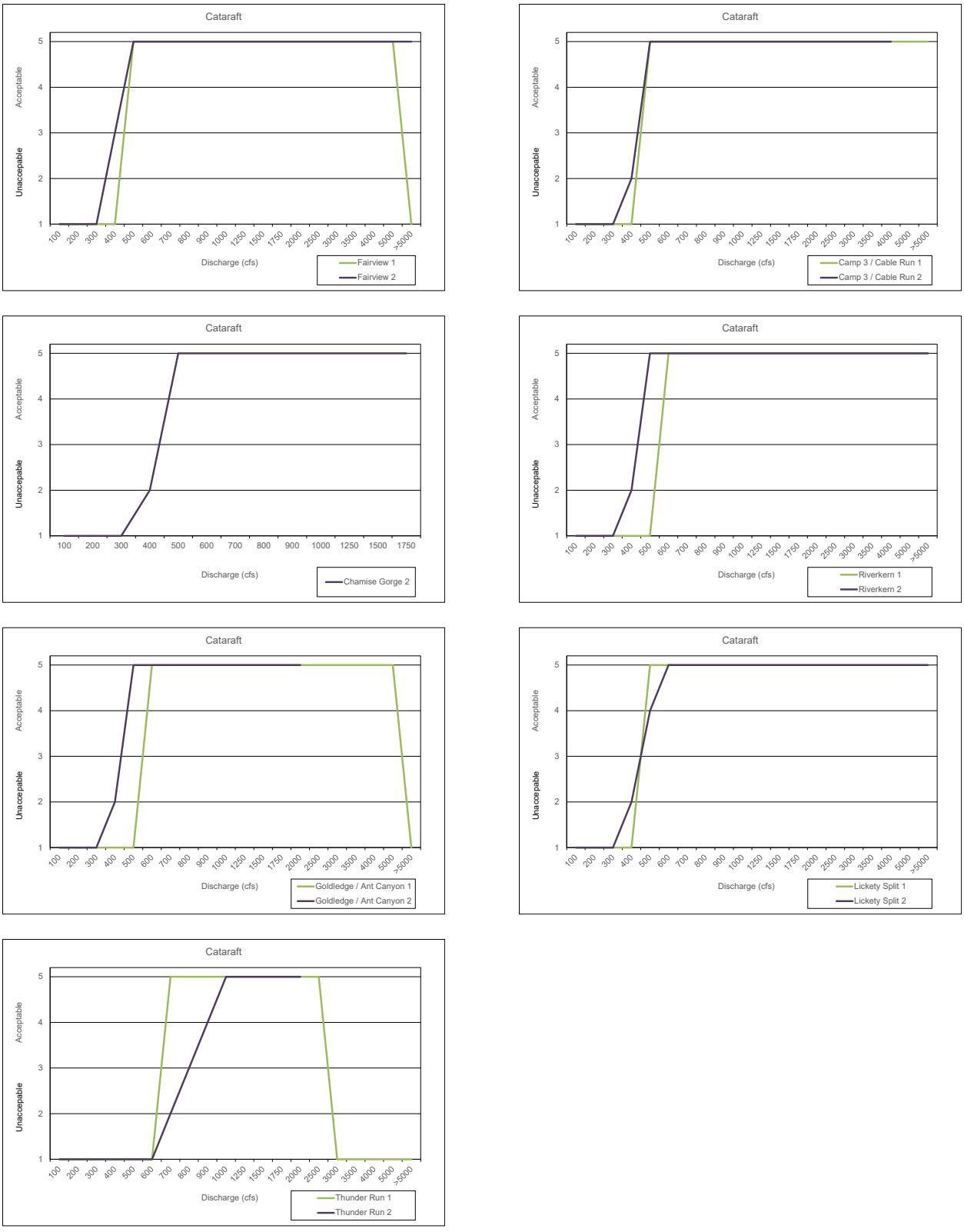

Figure 5.2-9. Cataraft Flow Preference Curve for Seven River Segments on the North Fork Kern River.

5.2.1.7. Shredder

Two flow comparison surveys were submitted for shredders. Flow preference curves were plotted for each shredder respondent (Boater 1 and Boater 2) for the individual river segments (Figure 5.2-10). The flow preference curve shows substantial differences in flow preferences between the two individuals using shredders for the respective river segments. Boater 1 evaluated a narrower range of flows (200 cfs to 500 cfs) rating them all totally acceptable (5). Consequently, a minimum acceptable flow cannot be ascertained from the Boater 1 flow evaluation. Boater 2 evaluated the full range of flows in the flow comparison for respective river segments. Boater 2 minimum acceptable flow preferences for a shredder were specific to each river segment: Sidewinder / Bomb's Away (500 cfs), Fairview segment (500 cfs), Chamise Gorge Segment (600 cfs), Goldledge / Ant Canyon segment (1,250 cfs), Thunder Run segment (900 cfs), Cables/ Camp 3 segment (900 cfs), Riverkern segment (900 cfs), and Lickety Split segment (800 cfs).

5.2.1.8. Packraft

A single flow comparison survey was submitted for a packraft for seven of the river segments in the Fairview Dam Bypass Reach. The packraft minimum acceptable flows in the flow preference curve were 200 cfs for six of the river segments and 300 cfs for the seventh river segment, Goldledge / Ant Canyon (Figure 5.2-11). One enhanced flow evaluation form was submitted for a packraft for the 450 cfs and 770 cfs enhanced flow opportunities. The individual rated each of these flows acceptable for Fairview, Chamise Gorge, Goldledge / Ant Canyon, Thunder Run, Camp 3 / Cable Run, and the Riverkern river segments. In the 450 cfs enhanced flow opportunity focus group, the packrafter noted that 450 cfs was a great flow in the Fairview river segment for boating with children.

5.2.1.9. Tule Boat

A single flow comparison survey was submitted for a traditional tule boat for nine of the river segments in the Fairview Dam Bypass Reach. The traditional tule boat minimum acceptable flows in the flow preference curve were substantially greater than any other watercraft type: Sidewinder / Bomb's Away (1,750 cfs), Fairview and Chamise Gorge Segments (2,000 cfs), Goldledge / Ant Canyon, Thunder Run, Cables/ Camp 3, and Riverkern and Lickety Split river segments (3,000 cfs) (Figure 5.2-12). No enhanced flow evaluation forms were submitted for a traditional tule boat.

5.2.1.10. Inner Tube

A single flow comparison survey was submitted for an inner tube for the Fairview, Chamise Gorge, Goldledge / Ant Canyon, Thunder Run, Camp 3 / Cable Run, Riverkern, and Lickety Split river segments. The respondent rated all flows from 200 to 1,000 cfs as totally acceptable (5). No enhanced flow evaluation forms were submitted for an inner tube.

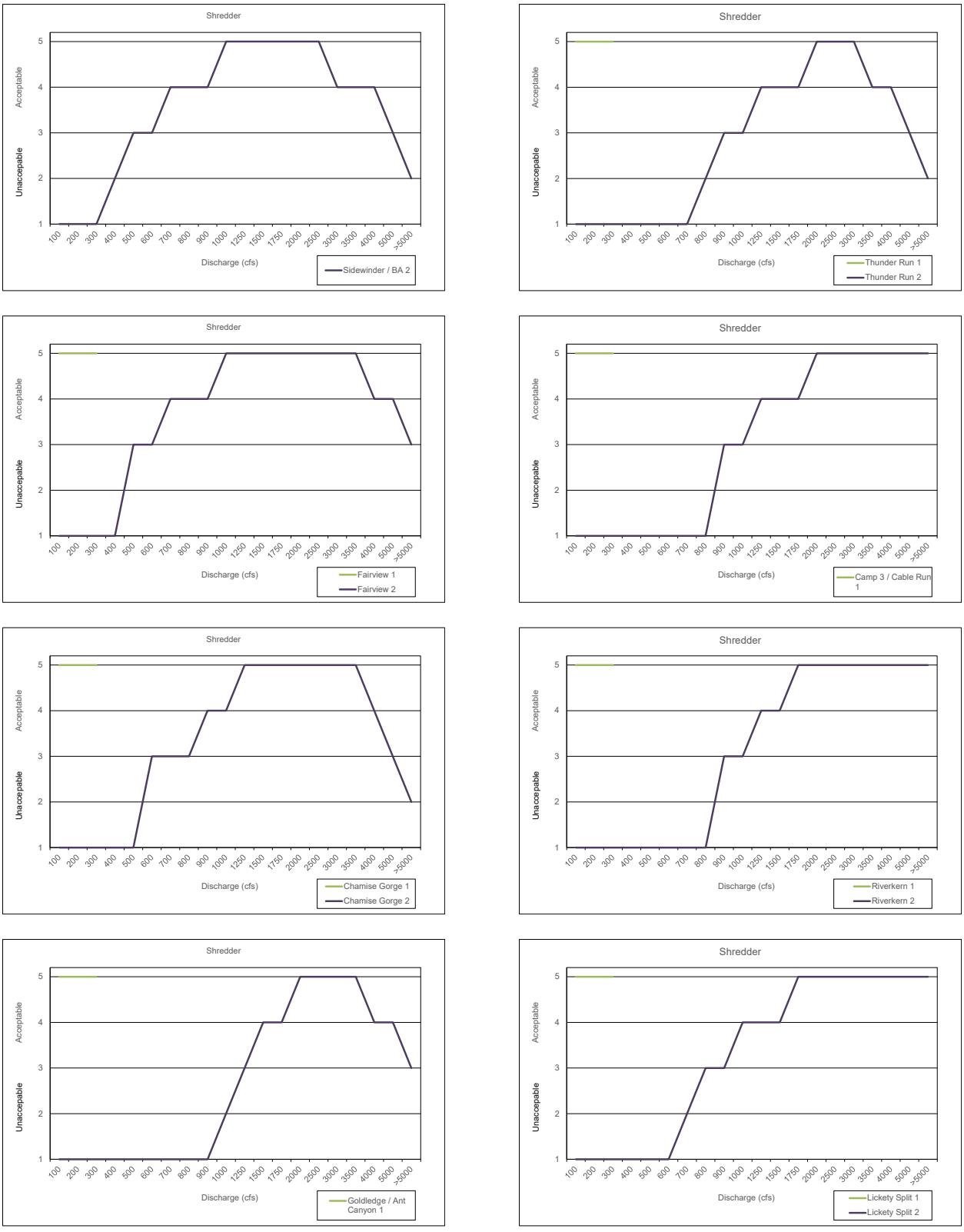

Figure 5.2-10. Shredder Flow Preference Curve for Eight River Segments on the North Fork Kern River (Flow Comparison Survey).

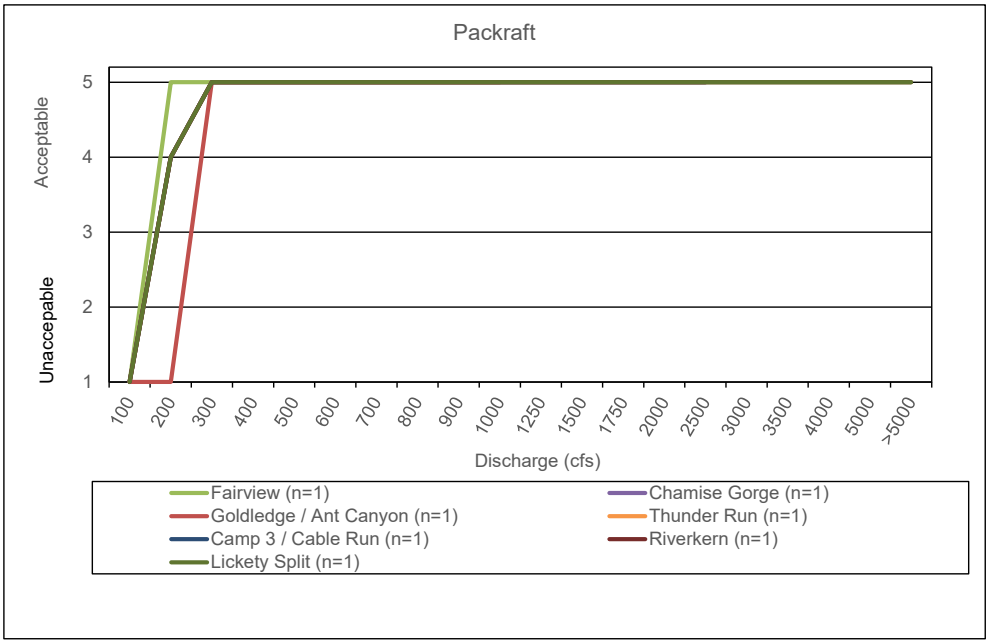

Figure 5.2-11. Packraft Flow Preference Curve for Seven River Segments on the North Fork Kern River (Flow Comparison Survey).

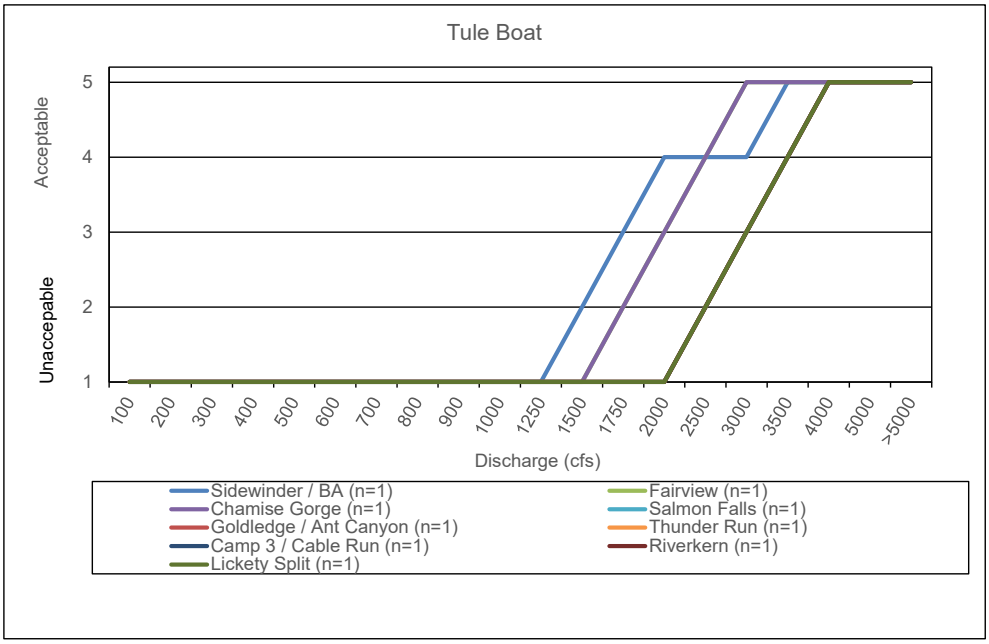

Figure 5.2-12. Traditional Tule Boat Flow Preference Curve for Nine River Segments on the North Fork Kern River (Flow Comparison Survey).

5.2.2. FLOW PREFERENCE SUMMARY

- Minimum acceptable flow preferences differ substantially between watercraft types and river segments in the Fairview Dam Bypass Reach:
  - Smaller watercraft (whitewater kayak, IK, and packraft): the minimum acceptable flow ranged from 200 to 300 cfs depending on watercraft type and river segment.
    - Boaters typically choose Chamise Gorge and Fairview river segments under minimum acceptable flow conditions.
  - Cataraft: the minimum acceptable flow was 400 cfs.
  - Larger inflatables (such as paddle and oar rafts): the minimum acceptable flow ranged between:
    - 800 and 900 cfs for the river segments rated Class IV to V in whitewater difficulty; or
    - Decreased to 500 cfs for the Riverkern and Lickety Split river segments.
- Optimum flow preferences overlapped for whitewater kayaks and large inflatables but started considerably lower for smaller inflatables.
  - The optimum flow range for large inflatables such as paddle and oar rafts ranged between:
    - 900 to 5,000 cfs for most of the river segments; or
    - 500 to greater than 5,000 cfs on the Riverkern and Lickety Split river segments.
  - Whitewater kayak optimum flows covered a broad range with slight differences between river segments in the low and high ends of the range.
    - Sidewinder / Bomb's Away river segment optimum flow range from 1,000 cfs to greater than 3,500 cfs.
    - Fairview river segment optimum flow range from 900 cfs to greater than 5,000 cfs.
    - Chamise Gorge river segment optimum flow range from 800 cfs to 3,000 cfs.
    - Goldledge / Ant Canyon river segment optimum flow range from 900 cfs to greater than 4,000 cfs.
    - Thunder Run river segment optimum flow range from 900 cfs to greater than 3,000 cfs.

- Cable / Camp 3 river segment optimum flow range from 900 cfs to greater than 5,000 cfs.
- Riverkern river segment optimum flow range from 900 cfs to greater than 5,000 cfs.
- Lickety Split river segment optimum flow range from 700 cfs to greater than 5,000 cfs.

– IK and packraft optimum flows started lower than other watercraft—200 cfs on the low end.

In each of the enhanced flow focus group sessions, participants emphasized their preference for whitewater opportunities based on the natural flow patterns in the NFKR noting their ability to take advantage of flow conditions by tracking the hydrograph in real-time through online river gages.

5.3. HYDROLOGY ANALYSIS

The annual number of whitewater boating days (10 a.m. to 5 p.m.) in the Fairview Dam Bypass Reach and inflow to Fairview Dam were quantified using minimum acceptable and optimum flow thresholds for different watercraft types between 2005 and 2023 (Appendix I). A series of flow increments were analyzed covering the range of flow preferences for the watercraft types on the NFKR in the nine river segments. The annual number of whitewater boating days were calculated for 200, 300, 400, 600, 700, 800, and 1,000 cfs. These flow increments correspond to minimum acceptable flow thresholds for different watercraft types and provide an estimate of the number of whitewater boating days in the lower optimum flow range.

The annual number of whitewater boating days for any given flow threshold was obviously greater for inflows to Fairview Dam compared to the Fairview Dam Bypass Reach downstream of the Fairview Dam diversion. The difference in the annual number of days becomes more pronounced for the lower flow thresholds (200, 300, and 400 cfs) particularly in drought years.

5.4. RECREATION USE CONFLICTS AND PUBLIC SAFETY

The Kern River Valley 2023 Visitor's Guide (Kern Valley Sun, 2024) lists more than 40 types of outdoor recreation opportunities. A substantial number of these outdoor recreation activities occur in the NFKR corridor. Mountain Highway 99—the primary travel route within the Project Area—is a two-lane winding road adjacent to the eastern side of the NFKR. Several unincorporated residential areas (including Fairview, Riverkern, and Camp Owens) are located at the northern and southern end of the Project. The Sequoia National Forest manages numerous developed and undeveloped camping areas adjacent to the NFKR. On summer weekends, these developed and undeveloped areas are typically at capacity with campers—many of whom recreate on the banks as well as in the NFKR.

No recreation use conflicts were reported between whitewater boaters and other outdoor recreationists in the Project Area in the REC-2 Technical Memorandum Structured Interview Questionnaire (SCE, 2024b). In late June 2024, SCE received a voice message from an angler asking why flows were increasing in the Fairview Dam Bypass Reach during the day and decreasing at night. License condition 422 requires SCE to provide daily whitewater flows in June between 10 a.m. and 5 p.m. when the previous day's running average inflow to the Project are between 1,000 and 1,300 cfs or greater than 1,700 cfs. License condition 422 was implemented each day in late June due to the previous day's running average inflow meeting the whitewater release requirement (Figure 5.4-1).

During the hot summer period, a substantial number of the non-boating public (including children and adults) recreate adjacent to and in the NFKR in part to cool off. Through on-site observations over the study period, the majority of the non-boating public do not wear personal flotation devices (PFD) in the NFKR. Diurnal flow fluctuations occur regularly on the NFKR during the snowmelt run-off period, which typically extends into the summer period. The flow fluctuations can result in substantial changes in wetted perimeter width, stage height, and velocity at any given location on the NFKR. Members of the non-boating public are vulnerable to these changing flow conditions. Signage warning about the dangers of the river and need to wear a PFD are posted at numerous locations in Kernville and the Kern River corridor.

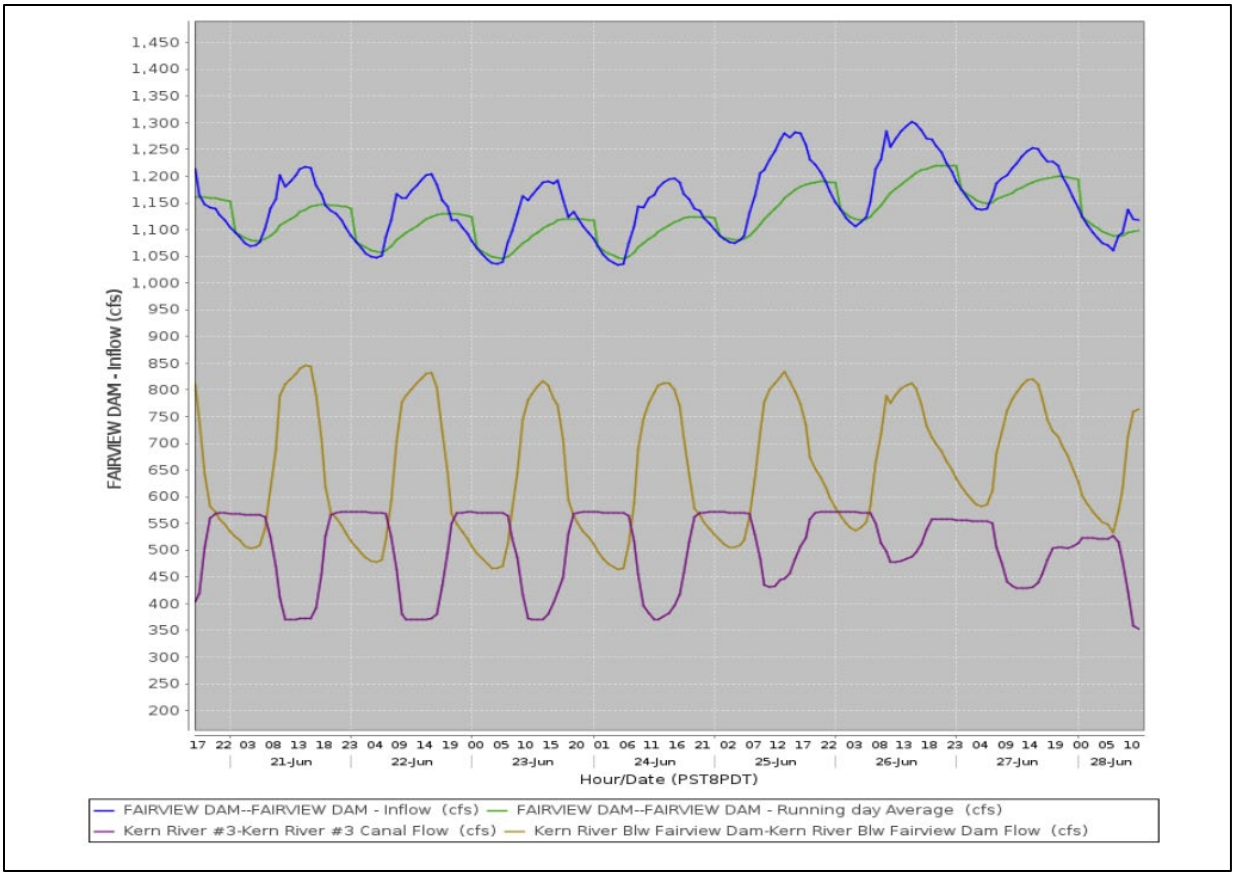

Figure 5.4-1. North Fork Kern River Flows June 21–28, 2024.

5.4.1. WHITEWATER BOATERS

On the NFKR, very few fatalities have involved whitewater boaters. American Whitewater maintains a national database listing whitewater boating accidents through July 28, 2020. On the NFKR from the Johnsondale Bridge to the KR3 Powerhouse, the accident database reports two whitewater boating fatalities between January 1, 2005, and July 28, 2020 (AW, 2024a). Both fatalities were categorized as drownings and both involved rafters. Lack of a PFD was noted as a causal factor in one of the fatalities. The second fatality was listed as a flush drowning—when a swimmer drowns moving downstream, often through rough water and by being repeatedly dunked and/or hit by waves. There was no official recordkeeping of the water level at the time of these fatalities; however, high water level was noted as a factor in the fatality without a PFD. Cold water was noted for both fatalities. With regard to river difficulty, the PFD fatality occurred on a Class III to V rapid and the flush drowning fatality on a Class IV rapid.

In June 2023, during abnormally high flow conditions, a kayaker drowned in Ant Canyon. Despite the unusually high flows in the 2023 water year, no other whitewater fatalities occurred. River difficulty is dynamic and can be affected by a variety of factors, including water level (AW, 2024b). Flows are an important variable to consider for the NFKR. The NFKR contains Class II to Class VI rapids. The more difficult river segments attract more advanced boaters that carry their own rescue equipment and typically have taken courses

in river rescue or developed rescue skills through years of boating. The low number of fatalities on the NFKR is a reflection of the whitewater boating community's judgment, skill, and attention to safety on the river.

6.0 STUDY SPECIFIC CONSULTATION

No additional consultation has occurred in support of the REC-1 Study Plan.

7.0 OUTSTANDING STUDY PLAN ELEMENTS

All REC-1 Study Plan elements have been completed as outlined in SCE's Revised Study Plan (SCE, 2022), FERC's Study Plan Determination (FERC, 2022), and FERC's *Determination on Requests for Study Modifications and New Studies* (FERC, 2024b), with the exception of the variance described above regarding the revised post flow evaluation form for the enhanced flow opportunities.

8.0 REFERENCES

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APPENDIX A
LEVEL 3 ENHANCED FLOW SELF-NOMINATION FORM

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Participant Self-Nomination Form for the Level 3 Enhanced Flow Opportunities

Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse. SCE is providing enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. You will be added to the participant list by completing this self-nomination form.

Boaters that signed up previously for the enhanced flow opportunities in April do not need to sign-up again, you are already on the notification list.

Individuals that did not sign-up in April should do so now to receive notifications for the upcoming enhanced flow opportunities planned for July 12-13, 2024.

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list.

SCE urges participants to evaluate as many of the enhanced flow opportunities as their personal schedule allows. The data collected will help provide important information on boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license. Due to the variability of snow melt and diurnal flow fluctuations associated with run-off, SCE will strive to provide 2-3 days advance notification of an enhanced flow opportunity to study participants. Enhanced flow opportunities may occur on weekdays and/or weekends.

Please encourage other boaters interested in participating to sign-up. In addition, please email jillian.roach@erm.com with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager at stephanie.fincher@sce.com.

Thank you for your support,

Stephanie Fincher (SCE KR3 Relicensing Project Manager)

Participant Self-Nomination Form for the Level 3 Enhanced Flow Opportunities

* 1. Please provide your contact information.

First and Last Name

Email Address

10-Digit 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. What type of watercraft will you boat on the whitewater segments in the bypass? (choose only 1 watercraft type)

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

* 7. Please select the whitewater segments you will commit to evaluate in your boat on the North Fork Kern. You can choose more than one whitewater segment to evaluate. For experimental design purposes, you will be expected to evaluate the same whitewater segments you select for each flow enhancement.

SCE will attempt to maintain a targeted flow enhancement for a full-day contingent on inflows to the Project allowing boaters to evaluate multiple segments. For logistical reasons, contiguous segments are recommended but not required.

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

* 8. What days are you available to evaluate enhanced flow opportunities? (select all that apply)

- ☐ Weekdays
- ☐ Weekends
- ☐ Holidays

9. Please provide your comments and recommendations for implementing the enhanced flow opportunities targeting knowledge gaps in boater experience in the bypass reach of the North Fork Kern River.

Participant Self-Nomination Form for the Level 3 Enhanced Flow Opportunities

Thank you for signing up to participate in the Level 3 enhanced flow opportunities. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help provide important information on boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license. Due to the variability of snow melt and diurnal flow fluctuations associated with run-off, SCE will strive to provide 2-3 days advance notification of an enhanced flow opportunity to study participants. Enhanced flow opportunities may occur on weekdays and/or weekends.

Please encourage other boaters to sign-up to participate in the Level 3 enhanced flow opportunities. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts boaters on the notification list and identifies if there is a need for further participant outreach.

If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at david.moore@sce.com.

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

APPENDIX B
LEVEL 3 ENHANCED FLOW OPPORTUNITY PARTICIPATION OUTREACH

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From: Jillian Roach
Cc: David Moore
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study
Date: Monday, March 11, 2024 8:47:39 AM
Attachments: image001.png

On behalf of Southern California Edison (SCE)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: Self Nomination Form: Level 3 Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on SCE's notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: Anthea Raymond
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date: Wednesday, March 13, 2024 3:33:00 PM
Attachments: image001.png

Anthea
Reaching out to see if you can post an announcement on the Los Angeles Kayak Club Facebook page for the **Participant sign-up for the Enhanced Flow Opportunities** planned this year for the KR3 REC-1 Whitewater Boating Study.
Posting to the facebook page will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from the boating community in the data collection effort.
Can you notify me with the website url when you post it.
Thanks for your assistance getting LA Kayak Club members informed and participating in the data collection effort.
Below is the original announcement for the **Participant sign-up for the Enhanced Flow Opportunities** Including the url address to the sign-up form.
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: Monday, March 11, 2024 8:47 AM
Cc: David Moore <David.Moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study

On behalf of Southern California Edison (SCE)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1

Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

ERM
Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: Jeff Venturino
Cc: Jillian Roach; david.moore@sce.com
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date: Wednesday, March 13, 2024 3:37:00 PM
Attachments: image001.png

Jeff
Reaching out to see if you can post an announcement on the AW website and monthly AW beta for the **Participant sign-up for the Enhanced Flow Opportunities** planned this year for the KR3 REC-1 Whitewater Boating Study. Can you also do this for Gold Country Paddlers facebook page?
Posting on the website and monthly beta will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from the boating community in the data collection effort.
Can you notify me with the website url when you post it.
Thanks for your assistance getting AW members informed and participating in the data collection effort.
Below is the original announcement for the **Participant sign-up for the Enhanced Flow Opportunities** Including the url address to the sign-up form.
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: Monday, March 11, 2024 8:47 AM
Cc: David Moore <David.Moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study

On behalf of Southern California Edison (SCE)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of

the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

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Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746
erm.com

From: John Gangemi
To: lizbrackbill@gmail.com; kernriverboaters@gmail.com
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date: Wednesday, March 13, 2024 3:57:00 PM
Attachments: image001.png

Brett and Liz
Reaching out to see if you can post an announcement on the Kern River Boaters Facebook page for the **Participant sign-up for the Enhanced Flow Opportunities** planned this year for the KR3 REC-1 Whitewater Boating Study.
Posting to the facebook page will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from your members in the data collection effort.
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.
Below is the original announcement for the **Participant sign-up for the Enhanced Flow Opportunities** Including the url address to the sign-up form.
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: Monday, March 11, 2024 8:47 AM
Cc: David Moore <David.Moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study

On behalf of Southern California Edison (SCE)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1

Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

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Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: Jeff Venturino
Cc: Jillian Roach; david.moore@sce.com
Subject: RE: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date: Wednesday, March 27, 2024 10:52:00 AM
Attachments: image001.png

Jeff

Checking in to see if you have a schedule for posting the Participant sign-up for the Enhanced Flow Opportunities on the AW website. Hoping to increase awareness of this opportunity to the broader California boating community.

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

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

From: John Gangemi
Sent: Wednesday, March 13, 2024 3:37 PM
To: Jeff Venturino <jeffventurino@americanwhitewater.org>
Cc: Jillian Roach <jillian.roach@erm.com>; david.moore@sce.com
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form

Jeff

Reaching out to see if you can post an announcement on the AW website and monthly AW beta for the **Participant sign-up for the Enhanced Flow Opportunities** planned this year for the KR3 REC-1 Whitewater Boating Study. Can you also do this for Gold Country Paddlers facebook page? Posting on the website and monthly beta will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from the boating community in the data collection effort.

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

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

Below is the original announcement for the **Participant sign-up for the Enhanced Flow Opportunities** Including the url address to the sign-up form.

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: Monday, March 11, 2024 8:47 AM
Cc: David Moore <David.Moore@sce.com>
Subject: SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study

On behalf of Southern California Edison (SCE)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3

Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

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Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From:	John Gangemi
Cc:	Jillian Roach; david.moore@sce.com
Bcc:	wade1larry@gmail.com; bubnlu@hotmail.com; arrmike@gmail.com; scottmtoland@gmail.com; scott_timmons@yahoo.com; peppermalo@gmail.com; riverlakere@gmail.com; lynn.siodmak@gmail.com; anatolm07@gmail.com; tlawson@lgcgeotechnical.com; ndex_mail@yahoo.com; jason559559559@gmail.com; tomlivingstone30@gmail.com; prahareal@gmail.com; carolirving@mac.com; joseluispino@gmail.com; geoffcj@gmail.com; amin.nikravan@gmail.com; dave.waner@gmail.com; nzmyewski@gmail.com; kernville@mac.com; lizbrackbill@gmail.com; lharrisx2@aol.com; erickroh@yahoo.com; ellenkenney@gmail.com; johnwarnshuis@att.net; nnikirk62@gmail.com; spencershepard45@gmail.com; CHRISTOPHER.STEWART@SCE.COM; cvmattox@gmail.com; mebaier00@yahoo.com; mffu@att.net; thesensingsamurai@gmail.com; c14tyler.finley@gmail.com; scottxdonachie@gmail.com; nadiaalmuti@yahoo.com; dsloppywater@yahoo.com; nicholasw5@hotmail.com; astrabic@hotmail.com; ryanguy@gmail.com; mhittle24@gmail.com; dkoutzoukis@gmail.com; diangeloandrew01@gmail.com; anthea.raymond@gmail.com; matt.mayry@gmail.com; mtndjd@gmail.com; ruby_gonzalez1996@hotmail.com; dunawayfields@yahoo.com; falconkeeper22@gmail.com; Chuck@ChuckRichards.com
Subject:	SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date:	Wednesday, March 27, 2024 12:08:00 PM

Kern River Boaters

Please read the announcement below from SCE regarding participation in enhanced flow opportunities planned for this spring. Your participation in the enhanced flow opportunities will improve our understanding of boating opportunities between 200 and 800 cfs on the North Fork Kern below Fairview Dam.

Please sign-up to participate using the link below. Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

Please forward this email to other boaters and post on facebook pages for your local boating groups.

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)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

From:	John Gangemi
To:	tom@sierrasouth.com; evan@sierrasouth.com
Subject:	SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date:	Wednesday, March 27, 2024 2:34:00 PM

Tom and Evan
I called the shop to chat with you about the upcoming enhanced flow opportunities on the North Fork Kern. See the announcement below from SCE.

We really need commercial outfitter participation in the enhanced flow opportunities to improve our understanding of boating opportunities between 200 and 800 cfs for your watercraft. Based on conversations with Evan last summer some of these flows may be below a navigable flow for some of your commercial watercraft types. The survey questions are designed in a fashion where you can elect not to boat and indicate why you chose not to get on the water. This is important information helping us determine the minimum acceptable and optimum flows for respective river segments for each type of watercraft.

Please sign-up to participate using the link below. Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

Please forward this email to other boaters including your guides and post on facebook pages for your local boating groups.

Feel free to give me a call to discuss. Hope all is well.

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)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

From:	John Gangemi
To:	fun@whitewatervoyages.com; chis@whitewatervoyages.com
Subject:	SCE Kern River No. 3 Hydroelectric Project: REC-1 Whitewater Boating Study Enhanced Flow Opportunities Participant Sign-up Form
Date:	Wednesday, March 27, 2024 3:03:00 PM

Luther and Chris
Forwarding SCE's announcement about the upcoming enhanced flow opportunities on the North Fork Kern.

We really need commercial outfitter participation in the enhanced flow opportunities to improve our understanding of boating opportunities between 200 and 800 cfs for your watercraft. Based on conversations with Evan last summer some of these flows may be below a navigable flow for some of your commercial watercraft types. The survey questions are designed in a fashion where you can elect not to boat and indicate why you chose not to get on the water. This is important information helping us determine the minimum acceptable and optimum flows for respective river segments for each type of watercraft.

Please sign-up to participate using the link below. Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If your planning to use paddle rafts or oar rafts with guides as passengers let me know. We don't need all of your guides to sign up but would be good to know how many boats you might have on the water.

Please forward this email to other boaters including your guides and post on facebook pages for your local boating groups.

Feel free to give me a call to discuss. Hope all is well.

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)

KR3 Boating Community:
Southern California Edison (SCE) is looking for boaters to participate and provide feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse.

To support the KR3 relicensing effort and the REC-1 Whitewater Boating Study, SCE is scheduling up to four enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows. The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study.

If you are interested in participating in the enhanced flow opportunities, please sign up **by April 1, 2024** using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach. SCE urges participants to evaluate all four of the flow enhancements. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern and may occur on weekdays and/or weekends. Due to the variability of snow melt and diurnal flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification of an enhanced flow opportunity to study participants.

Please share this email with anyone that may be interested in participating. If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at mailto:david.moore@sce.com.

Thank you for your support,
KR3 Relicensing Team

From: Jillian Roach
Cc: David Moore
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River
Date: Wednesday, April 3, 2024 5:36:33 PM
Attachments: image001.png

On behalf of Southern California Edison

Thank you for signing up to participate in the enhanced flow opportunities on the North Fork Kern River (NFKR). This email provides information on the proposed schedule for enhanced flows and participation.

SCE is providing enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows for the respective river segments in the NFKR bypass reach. Knowledge gaps for this flow range were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. Boater evaluations of these enhanced flow opportunities will support data collection for analyzing flow preferences in the respective river segments for various watercraft types.

Proposed Schedule

The enhanced flow opportunities are contingent on the run-off patterns on the NFKR and current FERC License whitewater boating flow requirements. As we approach the proposed dates listed below, SCE will provide regular updates to individuals on the enhanced flow participant list informing them of potential changes to the schedule due to changes in natural inflow above Fairview Dam.

Realistically, we have two time periods to collect information in this flow range on the ascending and descending limbs of the hydrograph. The following weekend (April 11th - 14th) appear to have favorable conditions on the ascending limb to provide enhanced flow opportunities ranging between 200 and 800 cfs. This is the first opportunity to provide enhanced flow opportunities and collect data. Additional opportunities on the descending limb will be scheduled if needed.

SCE is proposing the following dates in April to provide enhanced flow opportunities, with the first targeted opportunity starting Thursday, April 11th and continuing through Sunday, April 14th with a different flow each day. Note, only 1 enhanced flow will be provided per day and SCE will attempt to provide a consistent flow in the NFKR (as measured by SCE Gage 401 below Fairview Dam), however diurnal fluctuations and tributary accretion flows are possible and out of SCE's control.

Proposed Dates*	**Times**

Thursday, April 11, 2024	10am – 5 pm
Friday, April 12, 2024	10 am – 5 pm
Saturday, April 13, 2024	10 am – 5 pm
Sunday, April 14, 2024	10 am – 5 pm

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedules permit.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels,

particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Although not required, SCE will host a focus group at 5 PM each day in the Kernville Community Center. Study participants are encouraged to attend and provide input on the enhanced flows evaluated each day and informed of the forecasted flow for the following day.

We appreciate your participation in this data collection effort. The self nomination form remains open, please encourage other boaters interested in participating to sign-up. Self Nomination Form: Level 3 Enhanced Flow Opportunities

If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at david.moore@sce.com.

Thank you for your support,

Dave Moore (SCE KR3 Relicensing Project Manager)

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Jillian Roach

Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA **erm.com**

M. 916.201.7746

From: Jillian Roach
Cc: David Moore
Subject: RE: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-Update 1
Date: Tuesday, April 9, 2024 11:44:03 AM
Attachments: image001.png

On behalf of Southern California Edison

This email is being sent to boaters who are interested in participating in and providing feedback on the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project.

As a follow up to our previous email (below), SCE is planning to provide enhanced flow opportunities through control of flows into the water conveyance system, with the first targeted opportunity starting Thursday, April 11th and continuing through Sunday, April 14th with a different flow each day. Current forecasts are predicting warmer temperatures this week, which may increase flows higher than some of the original targets.

Thursday's flow in the NFKR bypass reach will be as low as operationally possible by diverting the maximum allowed into the water conveyance system. Based on the current inflow forecasts, flows in the bypass reach below Fairview Dam will likely range between 400 and 600 cfs. SCE will provide an update Thursday morning regarding the flows in the bypass for that day.

A few reminders to participants:

- Morning check in (9-10 AM):
    - Study participants are encouraged, but not required, to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form:
    - A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer.
- Evening focus group (5PM):
    - SCE will host a focus group at 5 PM each day in the Kernville Community Center. Although not required, study participants are encouraged to attend and provide input on the enhanced flows evaluated each day and will be updated on the forecasted

flow for the following day.

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

Thank you for your support.

Dave Moore (SCE KR3 Relicensing Project Manager)

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Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746
erm.com

From: Jillian Roach <Jillian.Roach@erm.com>
Sent: Wednesday, April 3, 2024 4:38 PM
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River

On behalf of Southern California Edison

Thank you for signing up to participate in the enhanced flow opportunities on the North Fork Kern River (NFKR). This email provides information on the proposed schedule for enhanced flows and participation.

SCE is providing enhanced flow opportunities (approximately between 200-800 cfs) to address knowledge gaps in boating flows for the respective river segments in the NFKR bypass reach. Knowledge gaps for this flow range were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. Boater evaluations of these enhanced flow opportunities will support data collection for analyzing flow preferences in the respective river segments for various watercraft types.

Proposed Schedule

The enhanced flow opportunities are contingent on the run-off patterns on the NFKR and current FERC License whitewater boating flow requirements. As we approach the proposed dates listed below, SCE will provide regular updates to individuals on the enhanced flow participant list informing them of potential changes to the schedule due to changes in natural inflow above Fairview Dam.

Realistically, we have two time periods to collect information in this flow range on the ascending and descending limbs of the hydrograph. The following weekend (April 11th - 14th) appear to have favorable conditions on the ascending limb to provide enhanced flow opportunities ranging between 200 and 800 cfs. This is the first opportunity to provide enhanced flow opportunities and collect data. Additional opportunities on the descending limb will be scheduled if needed.

SCE is proposing the following dates in April to provide enhanced flow opportunities, with the first targeted opportunity starting Thursday, April 11th and continuing through Sunday, April 14th with a different flow each day. Note, only 1 enhanced flow will be provided per day and SCE will attempt to provide a consistent flow in the NFKR (as measured by SCE Gage 401 below Fairview Dam), however diurnal fluctuations and tributary accretion flows are possible and out of SCE's control.

Proposed Dates*	**Times**
Thursday, April 11, 2024	10am – 5 pm
Friday, April 12, 2024	10 am – 5 pm
Saturday, April 13, 2024	10 am – 5 pm
Sunday, April 14, 2024	10 am – 5 pm

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedules permit.

<u>Check-in</u>

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Although not required, SCE will host a focus group at 5 PM each day in the Kernville Community Center. Study participants are encouraged to attend and provide input on the enhanced flows evaluated each day and informed of the forecasted flow for the following day.

We appreciate your participation in this data collection effort. The self nomination form remains open, please encourage other boaters interested in participating to sign-up. Self Nomination Form: Level 3 Enhanced Flow Opportunities

If you have any questions about this study or the KR3 relicensing effort, please contact Dave Moore, SCE KR3 Relicensing Project Manager at david.moore@sce.com.

Thank you for your support,

Dave Moore (SCE KR3 Relicensing Project Manager)

ERM

Sustainability is our business

Jillian Roach

Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA **erm.com**

M. 916.201.7746

From: Jillian Roach <Jillian.Roach@erm.com>
Sent on: Thursday, April 11, 2024 3:33:06 PM
To:
CC: David Moore <David.Moore@sce.com>
BCC: NNIKIRK62@GMAIL.COM; lacey2u@sbcglobal.net; bethjens@gmail.com; riverlakere@gmail.com; laceypayne89@gmail.com; tsherman91@gmail.com; ekroh@socalgas.com; johnwarnshuis@att.net; joshbull@icloud.com; johnryan009@yahoo.com; kirillmyagkov1@gmail.com; anthea.raymond@gmail.com; calmyoga@gmail.com; lizbrackbill@gmail.com; mtndjd@gmail.com; farrelmj@lacitycollege.edu; joseluispino@gmail.com; allisonstrabic@gmail.com; amin.nikravan@gmail.com; olly@gotel.net; wade1larry@gmail.com; lynn.siodmak@gmail.com; mhittle24@gmail.com; ellenkenney@gmail.com; evan@sierrasouth.com; scottwilson54321@live.com; nicholasw5@hotmail.com; brettduxbury@mac.com; dbernsten@gmail.com; dunawayfields@yahoo.com; calmyoga@gmail.com; ben@burde.org; friedbodfish@gmail.com; amin.nikravan@gmail.com; dave.waner@gmail.com; jmwucb@gmail.com; olly@gotel.net; david@davidmichael.org; johnarmstrong5@mac.com; ndex_mail@yahoo.com; joelrem@gmail.com; pauljreep@gmail.com; ravenhall_99@msn.com; anastassia2108@gmail.com; anatolm07@gmail.com; katharine4@gmail.com; samsparhawk@gmail.com; olivialemley16@gmail.com; alvarovilla95@gmail.com; christianabuckley@gmail.com; timothyjbrown1@gmail.com; rushing661@aol.com; prahareal@gmail.com; denrushing@gmail.com; mikecroak@sbcglobal.net; garycca@yahoo.com; dlemley68@gmail.com; kseeger1@gmail.com; jmigoni@yahoo.com; johnwarnshuis@att.net; jonathan.cizmar@gmail.com; scottwilson54321@live.com; jtgelder@yahoo.com; potatosachs@yahoo.com; dylan.warburg@gmail.com; geimanbill@hotmail.com; Alexandria Tucker <alexandria.tucker@erm.com>; Samantha Bennett <Samantha.Bennett@erm.com>; John Gangemi <johngangemi.rsi@outlook.com>; Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>; Jessica.Fefer@ferc.gov; Quinn.Emmering@ferc.gov; bengilliland@gmail.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-Update 2

On behalf of Southern California Edison

This email is an update for boaters participating in the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project.

SCE is providing the planned enhanced flow opportunities through control of flows into the water conveyance system, with the first targeted opportunity starting **today, Thursday April 11th** and continuing through Sunday, April 14th with a different flow each day. Current forecasts are predicting warmer temperatures this week, which may increase flows higher than some of the original targets.

Thursday's flow below Fairview Dam in the NFKR bypass reach at 7 AM was 455 cfs. SCE is diverting the maximum allowed into the water conveyance system for this enhanced flow in the bypass. The flow in the bypass may fluctuate with changes in inflow to Fairview Dam during the day.

A few reminders to participants:

- Morning check in (9-10 AM):
  - Study participants are encouraged, but not required, to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form: Please complete an evaluation form for each enhanced flow. Complete an evaluation form even If you inspect a river segment but decide not to boat.
  - www.surveymonkey.com/r/Enhanced_Flow_Form

- Evening focus group (5PM):
  - SCE will host a focus group at 5 PM each day in the Kernville Community Center. Although not required, study participants are encouraged to attend and provide input on the enhanced flows evaluated each day and will be updated on the forecasted flow for the following day.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent on: Friday, April 12, 2024 2:58:15 PM
To:
CC: David Moore <David.Moore@sce.com>
BCC: NNIKIRK62@GMAIL.COM; lacey2u@sbcglobal.net; bethjens@gmail.com; riverlakere@gmail.com; laceypayne89@gmail.com; tsherman91@gmail.com; ekroh@socalgas.com; johnwarnshuis@att.net; joshbull@icloud.com; johnryan009@yahoo.com; kirillmyagkov1@gmail.com; anthea.raymond@gmail.com; calmyoga@gmail.com; lizbrackbill@gmail.com; mtndjd@gmail.com; farrelmj@lacitycollege.edu; joseluispino@gmail.com; allisonstrabic@gmail.com; amin.nikravan@gmail.com; olly@gotel.net; wade1larry@gmail.com; lynn.siodmak@gmail.com; mhittle24@gmail.com; ellenkenney@gmail.com; evan@sierrasouth.com; scottwilson54321@live.com; nicholasw5@hotmail.com; brettduxbury@mac.com; dbernsten@gmail.com; dunawayfields@yahoo.com; calmyoga@gmail.com; ben@burde.org; friedbodfish@gmail.com; amin.nikravan@gmail.com; dave.waner@gmail.com; jmwucb@gmail.com; olly@gotel.net; david@davidmichael.org; johnarmstrong5@mac.com; ndex_mail@yahoo.com; joelrem@gmail.com; pauljreep@gmail.com; ravenhall_99@msn.com; anastassia2108@gmail.com; anatolm07@gmail.com; katharine4@gmail.com; samsparhawk@gmail.com; olivialemley16@gmail.com; alvarovilla95@gmail.com; christianabuckley@gmail.com; timothyjbrown1@gmail.com; rushing661@aol.com; prahareal@gmail.com; denrushing@gmail.com; mikecroak@sbcglobal.net; garycca@yahoo.com; dlemley68@gmail.com; kseeger1@gmail.com; jmigoni@yahoo.com; johnwarnshuis@att.net; jonathan.cizmar@gmail.com; scottwilson54321@live.com; jtgelder@yahoo.com; potatosachs@yahoo.com; dylan.warburg@gmail.com; geimanbill@hotmail.com; eric@kernriverbrewing.com; John Gangemi <johngangemi.rsi@outlook.com>; Stephanie Fincher <stephanie.fincher@sce.com>; Samantha Bennett <Samantha.Bennett@erm.com>; Alexandria Tucker <alexandria.tucker@erm.com>; Jessica.Fefer@ferc.gov; Quinn.Emmering@ferc.gov; Jillian Roach <Jillian.Roach@erm.com>; manderami18@gmail.com; class5paddle@gmail.com; rpoudrier9e@gmail.com; jakob.m.conzevoy@gmail.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-Update 3

On behalf of Southern California Edison

This email is an update for boaters participating in the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project.

Thank you to everyone who came out yesterday for the first enhanced flow opportunity. If you have not done so, please fill out the evaluation form for yesterday (link below).

The targeted opportunities are continuing through Sunday, April 14th with a different flow each day. Friday's flow below Fairview Dam in the NFKR bypass reach at 7 AM was 770 cfs, however the flow in the bypass may fluctuate with changes in inflow to Fairview Dam during the day.

A few reminders to participants:

- Morning check in (9-10 AM):
  - Study participants are encouraged, but not required, to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form: Please complete an evaluation form for each enhanced flow day. Complete an evaluation form even If you inspect a river segment but decide not to boat.
  - **www.surveymonkey.com/r/Enhanced_Flow_Form**

- Evening focus group (**FRIDAY 5-6 PM**):
  - SCE will host a focus group at 5 PM each day Kernville Chamber of Commerce (Community Building) located at 11447 Kernville Rd, Kernville, CA 93238. Although not required, study participants are encouraged to attend and provide input on the enhanced flows evaluated each day and will be updated on the forecasted flow for the following day.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent on: Saturday, April 13, 2024 2:48:52 PM
To:
CC: David Moore <David.Moore@sce.com>
BCC: NNIKIRK62@GMAIL.COM; lacey2u@sbcglobal.net; bethjens@gmail.com; riverlakere@gmail.com; laceypayne89@gmail.com; tsherman91@gmail.com; ekroh@socalgas.com; johnwarnshuis@att.net; joshbull@icloud.com; johnryan009@yahoo.com; kirillmyagkov1@gmail.com; anthea.raymond@gmail.com; calmyoga@gmail.com; lizbrackbill@gmail.com; mtndjd@gmail.com; farrelmj@lacitycollege.edu; joseluispino@gmail.com; allisonstrabic@gmail.com; amin.nikravan@gmail.com; olly@gotel.net; wade1larry@gmail.com; lynn.siodmak@gmail.com; mhittle24@gmail.com; ellenkenney@gmail.com; evan@sierrasouth.com; scottwilson54321@live.com; nicholasw5@hotmail.com; brettduxbury@mac.com; dbernsten@gmail.com; dunawayfields@yahoo.com; calmyoga@gmail.com; ben@burde.org; friedbodfish@gmail.com; amin.nikravan@gmail.com; dave.waner@gmail.com; jmwucb@gmail.com; olly@gotel.net; david@davidmichael.org; johnarmstrong5@mac.com; ndex_mail@yahoo.com; joelrem@gmail.com; pauljreep@gmail.com; ravenhall_99@msn.com; anastassia2108@gmail.com; anatolm07@gmail.com; katharine4@gmail.com; samsparhawk@gmail.com; olivialemley16@gmail.com; alvarovilla95@gmail.com; christianabuckley@gmail.com; timothyjbrown1@gmail.com; rushing661@aol.com; prahareal@gmail.com; krdkrdkrd@gmail.com; karacampbell4@yahoo.com; denrushing@gmail.com; mikecroak@sbcglobal.net; garycca@yahoo.com; dlemley68@gmail.com; kseeger1@gmail.com; jmigoni@yahoo.com; johnwarnshuis@att.net; jonathan.cizmar@gmail.com; scottwilson54321@live.com; jtgelder@yahoo.com; potatosachs@yahoo.com; dylan.warburg@gmail.com; geimanbill@hotmail.com; eric@kernriverbrewing.com; John Gangemi <johngangemi.rsi@outlook.com>; Stephanie Fincher <stephanie.fincher@sce.com>; Samantha Bennett <Samantha.Bennett@erm.com>; Alexandria Tucker <alexandria.tucker@erm.com>; Jessica.Fefer@ferc.gov; Quinn.Emmering@ferc.gov; Jillian Roach <Jillian.Roach@erm.com>; manderami18@gmail.com; class5paddle@gmail.com; jakob.m.conzevoy@gmail.com; Martin Ostendorf <martin.ostendorf@sce.com>; allison@extremeline.com; rpoudrier90@gmail.com; dlharrisx2@aol.com; TJCormack@gmail.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-Update 3

On behalf of Southern California Edison

This email is an update for boaters participating in the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project.

Thank you to everyone who came out the last 2 days for the enhanced flow opportunity. If you have not done so, please fill out the evaluation form (link below).

The targeted flow opportunities are continuing through Sunday, April 14th with a different flow each day. Saturday's flow below Fairview Dam in the NFKR bypass reach at 7 AM was 874 cfs, however the flow in the bypass may fluctuate with changes in inflow to Fairview Dam during the day.

A few reminders to participants:

- Morning check in (9-10 AM):
  - Study participants are encouraged, but not required, to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form: Please complete an evaluation form for each enhanced flow day. Complete an evaluation form even If you inspect a river segment but decide not to boat.
  - www.surveymonkey.com/r/Enhanced_Flow_Form

- Evening focus group (**5 PM**):
  - SCE will host a focus group at 5 PM each day Kernville Chamber of Commerce (Community Building) located at 11447 Kernville Rd, Kernville, CA 93238. Although not required, study participants are encouraged to attend and provide input on the enhanced flows evaluated that day and will be updated on the forecasted flow for the following day.

From: Jillian Roach <Jillian.Roach@erm.com>
Sent on: Sunday, April 14, 2024 3:12:49 PM
To:
CC: David Moore <David.Moore@sce.com>
BCC: NNIKIRK62@GMAIL.COM; lacey2u@sbcglobal.net; bethjens@gmail.com; riverlakere@gmail.com; laceypayne89@gmail.com; tsherman91@gmail.com; ekroh@socalgas.com; johnwarnshuis@att.net; joshbull@icloud.com; johnryan009@yahoo.com; kirillmyagkov1@gmail.com; anthea.raymond@gmail.com; calmyoga@gmail.com; lizbrackbill@gmail.com; mtndjd@gmail.com; farrelmj@lacitycollege.edu; joseluispino@gmail.com; allisonstrabic@gmail.com; amin.nikravan@gmail.com; olly@gotel.net; wade1larry@gmail.com; lynn.siodmak@gmail.com; mhittle24@gmail.com; ellenkenney@gmail.com; evan@sierrasouth.com; scottwilson54321@live.com; nicholasw5@hotmail.com; brettduxbury@mac.com; dbernsten@gmail.com; dunawayfields@yahoo.com; calmyoga@gmail.com; ben@burde.org; friedbodfish@gmail.com; amin.nikravan@gmail.com; dave.waner@gmail.com; jmwucb@gmail.com; olly@gotel.net; david@davidmichael.org; johnarmstrong5@mac.com; ndex_mail@yahoo.com; joelrem@gmail.com; pauljreep@gmail.com; ravenhall_99@msn.com; anastassia2108@gmail.com; anatolm07@gmail.com; katharine4@gmail.com; samsparhawk@gmail.com; olivialemley16@gmail.com; alvarovilla95@gmail.com; christianabuckley@gmail.com; timothyjbrown1@gmail.com; rushing661@aol.com; prahareal@gmail.com; denrushing@gmail.com; mikecroak@sbcglobal.net; garycca@yahoo.com; dlemley68@gmail.com; kseeger1@gmail.com; jmigoni@yahoo.com; johnwarnshuis@att.net; jonathan.cizmar@gmail.com; scottwilson54321@live.com; jtgelder@yahoo.com; potatosachs@yahoo.com; dylan.warburg@gmail.com; geimanbill@hotmail.com; eric@kernriverbrewing.com; John Gangemi <johngangemi.rsi@outlook.com>; Stephanie Fincher <stephanie.fincher@sce.com>; Samantha Bennett <Samantha.Bennett@erm.com>; Alexandria Tucker <alexandria.tucker@erm.com>; Jessica.Fefer@ferc.gov; Quinn.Emmering@ferc.gov; Jillian Roach <Jillian.Roach@erm.com>; manderami18@gmail.com; class5paddle@gmail.com; rpoudrier9e@gmail.com; jakob.m.conzevoy@gmail.com; krolcrd@gmail.com; birdlew@yahoo.com; kayakgeorge@icloud.com; anthonyeanthony@box.com; TJCormack@gmail.com; ethanb503@gmail.com; kseeger1@gmail.com; mmcgill1022@gmail.com; jawachter318@gmail.com; chrisdonell@gmail.com; c14tyler.finley@gmail.com; pmartin5@pacbell.net; pastersellsfaster@gmail.com; david.shahan@gmail.com; tshawayder@antioch.edu; rob.br.mckentie@gmail.com; gilbert01@cox.net; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-Update 4

On behalf of Southern California Edison

This email is an update for boaters participating in the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project. Thank you to everyone who came out the last few days to participate in the enhanced flow opportunity and provided feedback at the end of each day. If you have not done so, please fill out the evaluation form (link below).

- SCE is unable to provide a different flow today in the targeted range for the enhanced flow opportunities due to the inflow at Fairview Dam. Flows in the bypass are 835 cfs at 7 AM. Boaters are welcome to boat todays flow and complete an enhanced flow evaluation form.
- SCE will try to re-schedule enhanced flow boating opportunities at a later date most likely the descending limb of the hydrograph. SCE will send out updates to notify boaters on future enhanced flow opportunities. We appreciate everyone's participation in this phase of the study.
- If you are interested in learning more about the KR3 Project or the relicensing process, please visit the Projects' relicensing website (www.sce.com/KR3); an overview video of the Project is provided under the "Project Information Documents" section. To receive periodic emails from SCE regarding the KR3 relicensing regulatory proceeding, please sign up at: Kern River No. 3 Hydroelectric Project (wufoo.com).

A few reminders to participants:

- Morning check in (9-10 AM):
  - Study participants are encouraged, but not required, to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form: Please complete an evaluation form for each enhanced flow day soon as possible. Complete an evaluation form even If you inspect a river segment but decide not to boat.
  - **www.surveymonkey.com/r/Enhanced_Flow_Form**
- Reminder, SCE will not be hosting a focus group meeting on Sunday evening since this flow has been discussed by the group

From: Jillian Roach
Cc: Stephanie Fincher; Martin Ostendorf
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Monday, July 1, 2024 5:25:15 PM
Attachments: image001.png

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [location forthcoming]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

ERM
Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
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From: John Gangemi
To: Jeff Venturino
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 8:27:00 AM
Attachments: image001.png

EXTERNAL MESSAGE

Jeff
Reaching out to see if you can post an announcement on the AW website for the **for the second set of Enhanced Flow Opportunities** planned July 12-13 for the KR3 REC-1 Whitewater Boating Study. Can you also do this for Gold Country Paddlers facebook page? Posting on the website will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from the boating community in the data collection effort.
Can you notify me with the website url when you post it.
Thanks for your assistance getting AW members informed and participating in the data collection effort.
Below is the most recent announcement for the **Enhanced Flow Opportunities** Including the url address to the participant sign-up form.
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: Monday, July 1, 2024 6:25 PM
Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from

participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others

at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [location forthcoming]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding

the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: Anthea Raymond
Bcc: Alexandria Tucker
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 9:29:00 AM
Attachments: image001.png

Anthea
Reaching out to see if you can post an announcement on the LA Kayak Club Facebook Page for the **for the second set of Enhanced Flow Opportunities** planned July 12-13 for the KR3 REC-1 Whitewater Boating Study. Can you also do this for ACA facebook page?
Posting on the website will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from the boating community in the data collection effort.
Can you notify me with the website url when you post it.
Thanks for your assistance getting LA Kayak Club and ACA members informed and participating in the data collection effort.
Below is the most recent announcement for the **Enhanced Flow Opportunities** Including the url address to the participant sign-up form.
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: Monday, July 1, 2024 6:25 PM
Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being

provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated

to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [location forthcoming]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved

and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

ERM

Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: lizbrackbill@gmail.com; kernriverboaters@gmail.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 8:39:34 AM
Attachments: image001.png

EXTERNAL MESSAGE

Brett and Liz
Reaching out to see if you can post an announcement on the Kern River Boaters Facebook page for the **for the second set of Enhanced Flow Opportunities** planned July 12-13 for the KR3 REC-1 Whitewater Boating Study.
Posting on the facebook page will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure broad representation from the boating community in the data collection effort.
Can you notify me with the url when you post it.
Thanks for your assistance getting KRB members informed and participating in the data collection effort.
Below is the most recent announcement for the **Enhanced Flow Opportunities** Including the url address to the participant sign-up form.
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: Monday, July 1, 2024 6:25 PM
Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from

participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others

at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [location forthcoming]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding

the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: tom@sierrasouth.com; evan@sierrasouth.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 9:57:14 AM
Attachments: image001.png

EXTERNAL MESSAGE

Tom and Evan
We are doing two more enhanced flow opportunities on the North Fork Kern on July 12-13. See the announcement below from SCE.

We really need commercial outfitter participation in the enhanced flow opportunities to improve our understanding of boating opportunities at these lower flows between 200 and 800 cfs for your watercraft. Based on conversations with Evan last summer some of these flows may be below a navigable flow for some of your commercial watercraft types. The survey questions are designed in a fashion where you can elect not to boat and indicate why you chose not to get on the water. This is important information helping us determine the minimum acceptable and optimum flows for respective river segments for each type of watercraft.

Please encourage a group of your guides to evaluate these lower flows using watercraft for commercial passengers. Your guides can sign-up to participate using the link in SCE's email below.

Feel free to give me a call to discuss. Hope all is well.

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: Monday, July 1, 2024 6:25 PM
Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater

boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river

segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [location forthcoming]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

ERM
Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: fun@whitewatervoyages.com; chris@whitewatervoyages.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 10:02:57 AM
Attachments: image001.png

EXTERNAL MESSAGE

Luther and Chris
We are doing two more enhanced flow opportunities on the North Fork Kern on July 12-13. See the announcement below from SCE.

We really need commercial outfitter participation in the enhanced flow opportunities to improve our understanding of boating opportunities at these lower flows between 200 and 800 cfs for all types of watercraft including commercial watercraft. The survey questions are designed in a fashion where you can elect not to boat and indicate why you chose not to get on the water. This is important information helping us determine the minimum acceptable and optimum flows for respective river segments for each type of watercraft.

Please encourage a group of your guides to evaluate these lower flows using watercraft for commercial passengers. Your guides can sign-up to participate using the link in SCE's email below.

Feel free to give me a call to discuss. Hope all is well.

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: Monday, July 1, 2024 6:25 PM
Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3

relicensing effort.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

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Watercraft

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River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition

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Enhanced Flow Evaluation Form

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Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [location forthcoming]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

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Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

ERM

Sustainability is our business

Jillian Roach

Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA

M. 916.201.7746

erm.com

From: John Gangemi
To: info@momentumriverexpeditions.com
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 10:17:24 AM
Attachments: image001.png

EXTERNAL MESSAGE

Momentum Raft Guides
Welcome to the Kern. I am the study lead for the Whitewater Boating Study associated with the Kern River No. 3 Hydroelectric Project owned and operated by Southern California Edison (SCE). The KR3 hydroelectric project is undergoing relicensing with the Federal Energy Regulatory Commission. We are in our second year of studies in the relicensing process. I communicated with the previous owners of your special use permit about participating in the Whitewater Boating Study. Please review the email below from SCE regarding upcoming opportunities to participate in the Whitewater Boating Study July 12-13.

We really need commercial outfitter participation in the enhanced flow opportunities to improve our understanding of boating opportunities at these lower flows between 200 and 800 cfs for all types of watercraft including commercial watercraft. The survey questions are designed in a fashion where you can elect not to boat and indicate why you chose not to get on the water. This is important information helping us determine the minimum acceptable and optimum flows for respective river segments for each type of watercraft.

Please encourage a group of your guides to evaluate these lower flows using the types of watercraft you would use for commercial passengers. Your guides can sign-up to participate using the link in SCE's email below.

Feel free to give me a call to discuss or learn more about this study. You can contact Jillian Roach to be added to the relicensing stakeholder list jillian.roach@erm.com.

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: Monday, July 1, 2024 6:25 PM
Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

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Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

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If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

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Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: John Gangemi
To: info@packraft.org
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 2, 2024 12:28:23 PM
Attachments: image001.png

EXTERNAL MESSAGE

Packraft.org
Jef Venturino at American Whitewater recommended I reach out to your organization to update you about the whitewater boating study on the North Fork Kern River and upcoming study component for packrafters to participate in on July 12-13, 2024.

I am the study lead for the Whitewater Boating Study associated with the Kern River No. 3 Hydroelectric Project owned and operated by Southern California Edison (SCE). The KR3 hydroelectric project is undergoing relicensing with the Federal Energy Regulatory Commission. We are in our second year of studies in the relicensing process. Please review the email below from SCE regarding upcoming opportunities to participate in the Whitewater Boating Study July 12-13.

One of the objectives of the Whitewater Boating Study is to develop flow preference curves for each type of watercraft on the North Fork Kern River. Packrafts have been identified as a watercraft suited to the NFKR. We are hoping that some packrafters will be able to participate in the upcoming enhanced flow opportunities July 12-13.
Can you post an announcement on the Packraft.org website encouraging your members to sign-up **for the Enhanced Flow Opportunities** planned July 12-13 for the KR3 REC-1 Whitewater Boating Study. Posting on the website will help inform your members they can sign-up to participate in these enhanced flow opportunities and help ensure packrafts are represented in the data collection effort.
Can you notify me with the website url when you post it.
Thanks for your assistance getting Packraft members informed and participating in the data collection effort.
Feel free to email me to learn more about this study. You can contact Jillian Roach to be added to the relicensing stakeholder list jillian.roach@erm.com.

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: Monday, July 1, 2024 6:25 PM

Cc: Stephanie Fincher <stephanie.fincher@sce.com>; Martin Ostendorf <martin.ostendorf@sce.com>
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13

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If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

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Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From:	Jillian Roach
Cc:	Stephanie Fincher
Subject:	SCE KR3: Draft License Application Filing and Whitewater Boating-Enhanced Boating Flow Update
Date:	Wednesday, July 3, 2024 11:06:03 AM
Attachments:	image001.png SCE Kern River No. 3 Enhanced Flow Opportunities on the North Fork Kern River-July 12-13.msg

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On behalf of Southern California Edison (SCE)

Dear Relicensing Participant:

Southern California Edison (SCE) filed the Draft License Application (DLA) associated with the Kern River No. 3 (KR3) Hydroelectric Project (FERC Project No. 2290) in accordance with Section 5.16(c) of the Federal Energy Regulatory Commission (FERC) regulations on July 1, 2024. Pursuant to FERC's ILP regulations and the Process Plan and Schedule established by FERC, all comments on the DLA must be filed within 90 days (i.e., by October 1, 2024). The public portions of the DLA are available to any relicensing participant interested in the Project via FERC's eLibrary at eLibrary | File List (ferc.gov). The public volumes of the DLA will be available for download on SCE's public relicensing website at www.sce.com/kr3 in the coming days. In addition, the DLA can be viewed electronically at the Kern River Valley Branch Library located at 7054 Lake Isabella Boulevard, Lake Isabella, California 93240.

SCE will also make available the QA-QC'd data associated with the following relicensing studies, available under the **Study Plan Documents** section on SCE's relicensing website in the coming days.

- WR-2 Hydrology Study: Hourly flow data for Water Year 2024
- REC-1 Whitewater Boating Study: Level 1 Structured Interview Data
- REC-2 Recreation Facilities Use Assessment Study: 2023-2024 Visitor Intercept Survey Data; 2023-2024 Spot Count Data; and 2023-2024 Calibration Count Data

Note, the excel files include large datasets and are intended for electronic viewing only, they are not set up to print.

REC-1 Whitewater Boating Study: Enhanced Flow Release

- SCE is looking for boaters to participate and provide feedback on whitewater boating flows along the North Fork Kern River (NFKR)-all boat types and skill levels are encouraged to sign up to participate. If you are interested in participating and providing feedback for the enhanced flow opportunities, please sign up using this link: Self Nomination Form: Level 3 Enhanced Flow Opportunities . Boaters that participated in the April enhanced flows are encouraged to paddle these July flows as well and do not need to sign-up again.
- The second set of enhanced flow opportunities is scheduled for **July 12 and 13** to obtain feedback for whitewater boating flows along the NFKR between Fairview Dam and the KR3 Powerhouse (interested participant email attached). The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). Additional emails will be distributed to those who have signed up and expressed interest in participating.

If you have any questions regarding this filing or the KR3 Relicensing process, please reach out to Stephanie Fincher-DeMillo, SCE Project Manager, via email at stephanie.fincher@sce.com.

Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746

erm.com

From: Jillian Roach
Cc: Stephanie Fincher
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Tuesday, July 9, 2024 3:39:16 PM
Attachments: image001.png

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Note, Cal-ISO has issued a Tier 2 Restricted Maintenance Operations through Thursday, July 11 due to the excessive heat and power demands. We are waiting for CAL-ISO to see if it extends the Tier 2 Restriction through Friday and Saturday. If they extend the restrictions, then SCE will not be able to divert flows over Fairview Dam. We will provide updates on this enhanced boating flow opportunity scheduled for July 12th and 13th based on updated Cal-ISO notifications.

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Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [Kernville Elementary School, 13350 Sierra Way, Kernville, CA 93238]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

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Thank you for your support,

Stephanie Fincher

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Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA

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From: Jillian Roach
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13
Date: Wednesday, July 10, 2024 9:46:08 AM
Attachments: image001.png

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

Note, Cal-ISO has issued a Tier 2 Restricted Maintenance Operations through Thursday, July 11 due to the excessive heat and power demands. We are waiting for CAL-ISO to see if it extends the Tier 2 Restriction through Friday and Saturday. If they extend the restrictions, then SCE will not be able to divert flows over Fairview Dam. We will provide updates on this enhanced boating flow opportunity scheduled for July 12th and 13th based on updated Cal-ISO notifications.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Enhanced Flow Focus Group
Friday, July 12, 2024	10 am – 5 pm	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	5 – 6 PM

**Dates may be rescheduled due to changes in the inflow.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each

enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type. SCE will also capture video footage of the enhanced flow opportunity in the various river segments. Video footage will be made available to the public upon the completion of the study.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [Kernville Elementary School, 13350 Sierra Way, Kernville, CA 93238]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river

segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

ERM
Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA

erm.com

From: Jillian Roach
Cc: Stephanie Fincher
Subject: SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13 (Updated)
Date: Thursday, July 11, 2024 7:30:11 AM
Attachments: image001.png

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

Note, Cal-ISO has issued a Tier 2 Restricted Maintenance Operations through Thursday, July 11 due to the excessive heat and power demands. At this time, there are no CAL-ISO restrictions on Friday and Saturday, therefore SCE is proceeding with the enhanced flow opportunity. However, if Cal-ISO extends the restrictions, we will provide an update to the boating community.

SCE is targeting two additional enhanced flow opportunities not previously provided in April. Boater feedback on these flow ranges will complement the information collected from participants in the mid-April enhanced flow opportunities when boaters evaluated approximately 450 cfs, 770 cfs and 860 cfs. The enhanced flow opportunities are being provided by SCE to address knowledge gaps in boating flows (approximately between 200-800 cfs). The knowledge gaps were reported by members of the boating community as part of the Level 1 and Level 2 study effort for the REC-1 Whitewater Boating Study. The data collected will help identify boater flow preferences in this lower range of flows and inform whitewater boating flow conditions incorporated as new measures in the FERC operating license.

Proposed Schedule

Proposed Dates*	Enhanced Flow Opportunity in NFKR Bypass	Est. Target Flow	Enhanced Flow Focus Group (Kernville Elementary School)
Friday, July 12, 2024	10 am – 5 pm	Approx. 550 cfs	5 – 6 PM
Saturday, July 13, 2024	10 am – 5 pm	Approx. 250 cfs	5 – 6 PM

**Dates/flow estimates are subject to available inflows.*

We understand that some individuals are able to participate on weekends only, others are available only on weekdays or holidays while other participants are available for all three; weekdays, weekends and holidays. Therefore, these enhanced flows are intentionally scheduled for the end of the week leading into the weekend to accommodate participant constraints. Please participate in the enhanced flow opportunities as much as your personal schedule permits.

Check-in

Although not required, study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. SCE will communicate the enhanced flow, as measured below Fairview Dam and study participants can confirm the watercraft and river segment(s) they plan to evaluate. This can also be a good opportunity for study participants to coordinate transportation between river segments.

Watercraft

Study participants are encouraged to evaluate all of the flow enhancements using the same type of watercraft across the range of flows. Consistent use of the same watercraft type is necessary for data analysis purposes which includes analysis of participant flow preferences by watercraft type for respective river segments. For participants that use more than one watercraft type, consider completing more than one trip if time allows for a given enhanced flow opportunity and complete a second enhanced flow evaluation form for that additional watercraft type(s).

River Segments

For each enhanced flow opportunity, please visit and inspect each of the river segments you identified at the time you signed up to participate. Contiguous river segments may be more practical particularly at the lower flows considering slower travel times. As time allows, feel free to visit and inspect other segments in addition to those you identified when you signed up.

The decision to boat a river segment after you inspect each enhanced flow opportunity rests exclusively on the study participant. Do not put yourself or others at risk in order to complete an enhanced flow opportunity. Do not attempt river segments that are above your skill level or normal practices. You are not obligated to boat all enhanced flow opportunity levels, particularly if you have concerns that certain flows are unsafe for you or your equipment.

Enhanced Flow Evaluation Form

Please provide feedback on each enhanced flow opportunity by completing an enhanced flow evaluation form, even if you choose not to boat for safety or equipment reasons. The form allows participants to evaluate the enhanced flow for each river segment they boated for their watercraft type. A link to the form will be distributed to study participants via an email link or QR code. The evaluation form can be completed on your phone or computer. Complete one enhanced flow evaluation form for each enhanced flow opportunity you evaluate for your selected watercraft type. SCE will also capture video footage of the enhanced flow opportunity in the various river segments. Video footage will be made available to the public upon the completion of the study.

Focus Groups

Following each enhanced flow opportunity, SCE will host a focus group from 5 - 6 PM [Kernville Elementary School, 13350 Sierra Way, Kernville, CA 93238]. Boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

Sign-up for the Enhanced Flow Opportunities

Boaters (all boat types and skill levels) are encouraged to sign up to participate. Ideally, the list of participants will be representative of the broader boating community including watercraft, geographic locations, skill levels, genders and river segments. Signing up puts you on the notification list and identifies if there is a need for further participant outreach.

If you are interested in participating in the enhanced flow opportunities, please sign up by using this link: https://www.surveymonkey.com/r/L3_Enhanced_Flow_Sign-up. SCE will use the participant sign-up list to send updates on the enhanced flow schedule and flows.

Boaters already signed up for the April enhanced flow opportunities **DO NOT need to sign-up again, you are already on the notification list.**

Please share this email with other boaters that may be interested in participating in the enhanced flow opportunities and focus groups. In addition, please respond to this email with information about other boating groups or clubs that may want to participate as well as advice you can share about strategies to reach users from across California.

Potential Schedule Changes

Note that the enhanced flow opportunities are contingent on the run-off patterns on the North Fork Kern. Due to the flow fluctuations associated with runoff, SCE will strive to provide at least 2-3 days advance notification to study participants if there are necessary changes in the schedule.

Risk

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

If you have any questions about this study or the KR3 relicensing effort, please contact Stephanie Fincher, SCE KR3 Relicensing Project Manager stephanie.fincher@sce.com

Thank you for your support,

Stephanie Fincher

From:	Jillian Roach
Cc:	Stephanie Fincher
Subject:	SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13 (Friday Update)
Date:	Friday, July 12, 2024 8:28:18 AM
Attachments:	image002.png image001.png

On behalf of Southern California Edison

This email is an update for boaters participating in the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project.

Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities today, Friday July 12th and Saturday July 13th to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

Friday's flow below Fairview Dam in the NFKR bypass reach with a target flow of approximately 550 cfs. Note flows may fluctuate throughout the day due to changes in inflows.

A few reminders to participants:

- Morning check in (9-10 AM):
    - Study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form: Please complete an evaluation form for each enhanced flow. Complete an evaluation form even If you inspect a river segment but decide not to boat.
    - **www.surveymonkey.com/r/Enhanced_Flow_Form**

- Evening focus group (5PM):
    - SCE will host a focus group from 5 - 6 PM [Kernville Elementary School, 13350 Sierra Way, Kernville, CA 93238]. Although not required, boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

As always in whitewater boating, be aware that this activity is a potentially dangerous activity that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

Thank you for your support.

Stephanie Fincher-DeMillo

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Sustainability is our business

Jillian Roach
Principal Consultant, Project Manager

980 9th St, Ste 750 Sacramento, CA
M. 916.201.7746
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From:	Jillian Roach
Cc:	Stephanie Fincher
Subject:	SCE Kern River No. 3: Enhanced Flow Opportunities on the North Fork Kern River-July 12-13 (Saturday Update)
Date:	Saturday, July 13, 2024 8:43:49 AM
Attachments:	image001.png image002.png

On behalf of Southern California Edison

This email is an update for boaters participating in the whitewater boating enhanced flow opportunities on the North Fork Kern River (NFKR) as part of the relicensing process for the Kern River No. 3 Hydropower Project.

Southern California Edison (SCE) is scheduling the second set of enhanced flow opportunities today, Saturday July 13th, to obtain feedback for whitewater boating flows along the North Fork Kern River (NFKR) between Fairview Dam and the Kern River No. 3 (KR3) Powerhouse as part of the REC-1 Whitewater Boating Study for the KR3 relicensing effort.

Saturday's flow below Fairview Dam in the NFKR bypass reach has a target flow of approximately 250 cfs. Note flows may fluctuate throughout the day due to changes in inflows.

A few reminders to participants:

- Morning check in (9-10 AM):
  - Study participants are encouraged to check-in for each enhanced flow opportunity at Riverside Park between 9 and 10 AM. Participants can confirm the watercraft and river segment(s) they plan to evaluate that day.
- Evaluation Form: Please complete an evaluation form for each enhanced flow. Complete an evaluation form even If you inspect a river segment but decide not to boat.
  - **www.surveymonkey.com/r/Enhanced_Flow_Form**

- Evening focus group (5PM):
  - SCE will host a focus group from 5 - 6 PM [Kernville Elementary School, 13350 Sierra Way, Kernville, CA 93238]. Although not required, boaters are encouraged to attend and provide input on the enhanced flow opportunities each day.

As always in whitewater boating, be aware that this activity is a potentially dangerous activity

that involves the risk of injury, pain, suffering, temporary or permanent disability, death, property damage, and/or financial loss. Notwithstanding the risk, by participating you acknowledge that you are knowingly and voluntarily participating in this activity with an express understanding of the danger involved and agree to accept and assume any and all risks of injury, disability, death, and/or property damage arising from your participation.

Thank you for your support.

Stephanie Fincher-DeMillo

Jillian Roach
Principal Consultant, Project Manager

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APPENDIX C
LEVEL 3 ENHANCED FLOW OPPORTUNITY EVALUATION FORM

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Welcome to the enhanced flow evaluation form 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 enhanced flow evaluation form is one part of the REC-1 Whitewater Boating Study being conducted to support the relicensing process.

Please complete the enhanced flow evaluation form for each enhanced flow opportunity you boat on the North Fork Kern River between Fairview Dam and Riverside Park in Kernville. The evaluation form will ask you to rate the quality of the whitewater boating for each river segment you boated during an enhanced flow opportunity. For your convenience, a map delineating the whitewater segments is provided at the start of the survey. Please select all the whitewater segments you boated for the evaluation regardless if you used all or part of the segment.

Please try to participate in all the enhanced flow opportunities planned for this year. Participants are also asked to use the same watercraft across all the enhanced flow opportunities. Your participation in all of the enhanced flows using the same watercraft type improves analysis of boater flow preferences across a range of flow conditions by watercraft type. Complete the enhanced flow evaluation form even if you choose not to boat and indicate why you elected not to boat.

Thank you for participating in the enhanced flow opportunity and completing an evaluation form. Your feedback is important, please encourage your boating friends to participate in the study.

Whitewater segments for the enhanced flow opportunities evaluation on the North Fork Kern River.

* 1. Please provide your full name, email address and mobile phone number (used for enhanced flow notification).

First and Last Name

Five-digit Zip Code

Email Address

Phone Number

* 2. What is your age?

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

* 3. What is your gender?

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

* 4. 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)

* 5. Please select one type of watercraft you intend to use for the enhanced flow opportunities. Participants are asked to use the same type of watercraft across each of the enhanced flow opportunities for consistent comparison purposes. Your responses to the questions in this evaluation form should be based on the watercraft you selected.

- ◯ 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)

* 6. Date and time you launched on the river for this enhanced flow:

Date / Time

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

* 7. Is this the first time you have completed the **enhanced flow evaluation form** for the KR3 project?

- ◯ Yes, I have evaluated other enhanced flow opportunities in 2024
- ◯ No, I have not evaluated any enhanced flow opportunities in 2024

* 8. How many total enhanced flow opportunities have you evaluated in 2024 including this enhanced flow opportunity as part of this study?

- ◯ 2 enhanced flow opportunities
- ◯ 3 enhanced flow opportunities
- ◯ 4 enhanced flow opportunities
- ◯ None of the above: I have not participated in any enhanced flow opportunities in 2024

* 9. For this enhanced flow opportunity, did you choose to boat or complete the evaluation form without boating?

- ◯ I **BOATED** this enhanced flow opportunity
- ◯ I chose **NOT TO BOAT** this enhanced flow opportunity

* 10. Why did you choose **NOT TO BOAT** this enhanced flow opportunity? (select all that apply)

- ☐ Flow too low for my watercraft to navigate the segment
- ☐ Flow too high for my watercraft
- ☐ Flow too high for my whitewater skills
- ☐ Weather conditions / water temperatures not suitable for my equipment
- ☐ I am not willing to travel to the North Fork Kern bypass for flows at this level
- ☐ I chose to boat elsewhere during the scheduled enhanced flow opportunity
- ☐ I am unable to participate in this enhanced flow due to other obligations
- ☐ Other reason? (please specify)

[ ]

* 11. For this enhanced flow opportunity, did you boat a whitewater segment between Fairview Dam and the KR3 powerhouse (also known as the "bypass")? (Select **YES** if you boated a segment in the bypass for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 12. Which whitewater segments in the bypass between Fairview Dam and KR3 powerhouse are you reviewing for this enhanced flow evaluation? (select only those segments you boated for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

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

* 13. In general, how would you rate the overall whitewater difficulty for the segment(s) at this flow? (respond for each each river segment you are evaluating)

	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	◯	◯	◯	◯	◯	◯	◯
Cable / Camp 3	◯	◯	◯	◯	◯	◯	◯
Riverkern Beach	◯	◯	◯	◯	◯	◯	◯

* 14. Did you experience any unintentional rock hits, stops, boat drags or portages on the river segment(s) for this enhanced flow? (respond for each each river segment you are evaluating)

	Not applicable, I chose **NOT** to boat this flow	No, I did not experience these things	Hit rocks unintentionally	Stopped after hitting rocks but did not have to get out of my boat to continue downstream	Had to drag my boat off rocks to continue downstream	Had to portage around sections that were not navigable in my watercraft at this flow
Sidewinder / Bomb's Away	☐	☐	☐	☐	☐	☐
Fairview	☐	☐	☐	☐	☐	☐
Chamise Gorge	☐	☐	☐	☐	☐	☐
Salmon Falls	☐	☐	☐	☐	☐	☐
Gold Ledge (aka Ant Canyon)	☐	☐	☐	☐	☐	☐
Thunder Run	☐	☐	☐	☐	☐	☐
Cable / Camp 3	☐	☐	☐	☐	☐	☐
Riverkern Beach	☐	☐	☐	☐	☐	☐

* 15. Are you likely to return to boat the river segment(s) at the enhanced flow you are currently evaluating? (respond for each each river segment you are evaluating)

	Yes	No
Sidewinder / Bomb's Away	◯	◯
Fairview	◯	◯
Chamise Gorge	◯	◯
Salmon Falls	◯	◯
Gold Ledge (aka Ant Canyon)	◯	◯
Thunder Run	◯	◯
Cable / Camp 3	◯	◯
Riverkern Beach	◯	◯

* 16. For the river segment(s) you are evaluating, would you prefer a flow that was lower, higher or about the same as this enhanced flow? (respond for each each river segment you are evaluating)

	Lower	Higher	About the same
Sidewinder / Bomb's Away	◯	◯	◯
Fairview	◯	◯	◯
Chamise Gorge	◯	◯	◯
Salmon Falls	◯	◯	◯
Gold Ledge (aka Ant Canyon)	◯	◯	◯
Thunder Run	◯	◯	◯
Cable / Camp 3	◯	◯	◯
Riverkern Beach	◯	◯	◯

* 17. For this enhanced flow opportunity, did you boat the Sidewinder / Bomb's Away segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 18. Please rate this enhanced flow on the Sidewinder / Bomb's Away 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

19. If you prefer a lower or higher flow in the Sidewinder / Bomb's Away segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 20. For this enhanced flow opportunity, did you boat the Fairview segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 21. Please rate this enhanced flow on the Fairview 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

22. If you prefer a lower or higher flow in the Fairview segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 23. For this enhanced flow opportunity, did you boat the Chamise Gorge segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 24. Please rate this enhanced flow on the Chamise Gorge 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

25. If you prefer a lower or higher flow in the Chamise Gorge segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 26. For this enhanced flow opportunity, did you boat the Salmon Falls segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 27. Please rate this enhanced flow on the Salmon Falls 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

28. If you prefer a lower or higher flow in the Salmon Falls segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 29. For this enhanced flow opportunity, did you boat the Goldledge (aka Ant Canyon) segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 30. Please rate this enhanced flow on the Gold Ledge (aka Ant Canyon) 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

31. If you prefer a lower or higher flow in the Gold Ledge (aka Ant Canyon) segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 32. For this enhanced flow opportunity, did you boat the Thunder Run segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 33. Please rate this enhanced flow on the Thunder Run 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

34. If you prefer a lower or higher flow in the Thunder Run segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 35. For this enhanced flow opportunity, did you boat the Cable / Camp 3 segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 36. Please rate this enhanced flow on the Cable / Camp 3 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

37. If you prefer a lower or higher flow in the Cable / Camp 3 segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 38. For this enhanced flow opportunity, did you boat the Riverkern segment? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 39. Please rate this enhanced flow on the Riverkern 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

40. If you prefer a lower or higher flow in the Riverkern segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

* 41. For this enhanced flow opportunity, did you boat the Lickety Split run downstream of the KR3 powerhouse? (Select **YES** if you boated this segment for this enhanced flow or intended to boat but chose not to boat due to unsuitable flow conditions for your watercraft or skill level)

- ◯ Yes
- ◯ No

* 42. In general, how would you rate the overall whitewater difficulty for the segment(s) at this enhanced flow?

	Class I	Class II	Class III	Class IV	Class V	Class VI	Not Sure
Lickety Split	◯	◯	◯	◯	◯	◯	◯

* 43. Did you experience any unintentional rock hits, stops, boat drags or portages on the Powerhouse / Lickety Split segment you boated for this enhanced flow? (check all that apply)

	Not applicable, I chose **NOT** to boat this flow	No, I did not experience these things	I hit rocks unintentionally	I was stopped after hitting rocks but did not have to get out of my boat to continue downstream	I had to drag my boat off rocks to continue downstream	I had to portage around sections that were not navigable in my watercraft at this flow
Lickety Split	☐	☐	☐	☐	☐	☐

* 44. Please rate this enhanced flow on the 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	◯	◯	◯	◯	◯	◯
Safety	◯	◯	◯	◯	◯	◯
Length of run	◯	◯	◯	◯	◯	◯
Number of portages	◯	◯	◯	◯	◯	◯
Overall whitewater quality	◯	◯	◯	◯	◯	◯

* 45. Are you likely to return to boat the Lickety Split segment at the flow you just evaluated?

	Yes	No
Lickety Split	◯	◯

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

	Lower	Higher	About the same
Lickety Split	◯	◯	◯

47. If you prefer a lower or higher flow in the Lickety Split segment, please indicate the flow volume in cfs that you would like to boat. (whole numbers only)

[ ]

Thank you for participating in the enhanced flow evaluation form. Please try to participate in all the enhanced flow opportunities planned for this year using the same type of watercraft for all the enhanced flows. Your participation in all of the enhanced flows improves analysis of boater flow preferences across a range of flow conditions for each type of watercraft. Encourage other boaters to participate as well.

The enhanced flow evaluation form 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).

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

APPENDIX D
LEVEL 3 ENHANCED FLOW OPPORTUNITY: SELECT DRONE PHOTGRAPHS

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RIVER SEGMENT: FAIRVIEW--OT1 RAPID

April 12, 2024: 770 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: FAIRVIEW—OT2 RAPID

April 12, 2024: 770 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: FAIRVIEW—OT3 RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs Flow

RIVER SEGMENT: CHAMISE--HELICOPTER ROCK RAPID

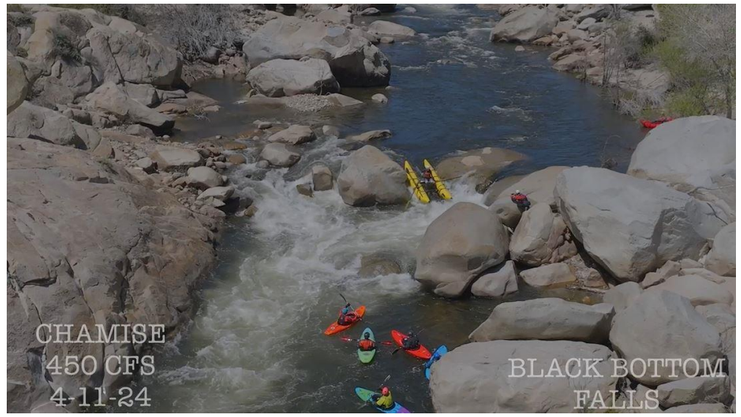
April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

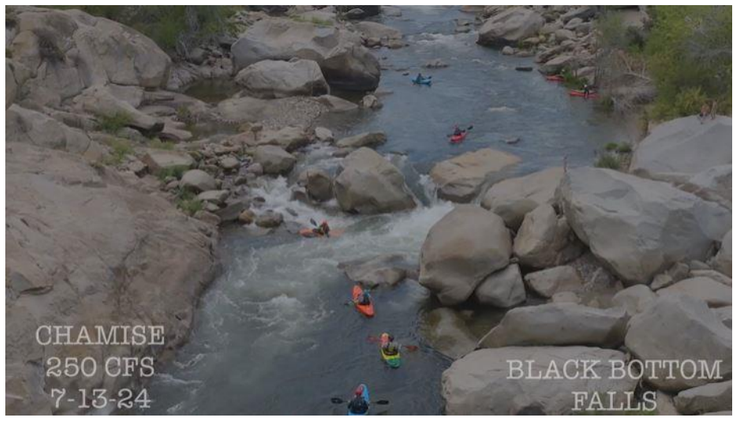
RIVER SEGMENT: CHAMISE--BLACK BOTTOM FALLS RAPID



April 11, 2024: 450 cfs

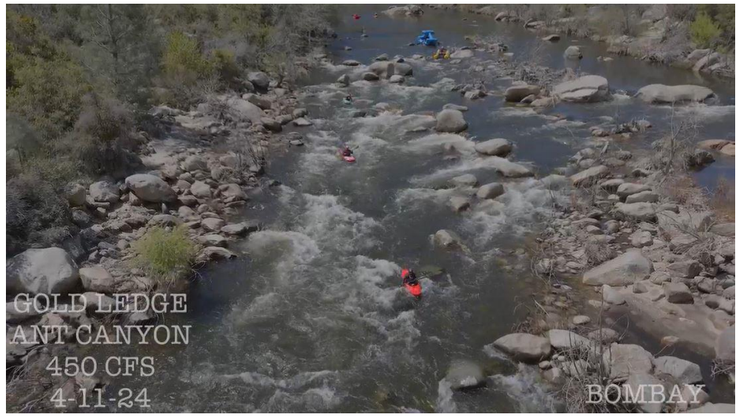
April 12, 2024: 770 cfs

July 12, 2024: 550 cfs



July 13, 2024: 250 cfs

RIVER SEGMENT: GOLDLEDGE/ANT CANYON--BOMBAY RAPID



April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: GOLDLEDGE/ANT CANYON--RAPID BELOW BOMBAY

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: GOLDLEDGE/ANT CANYON--SCREAMING RIGHT TURN RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: THUNDER RUN--ENTRANCE RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

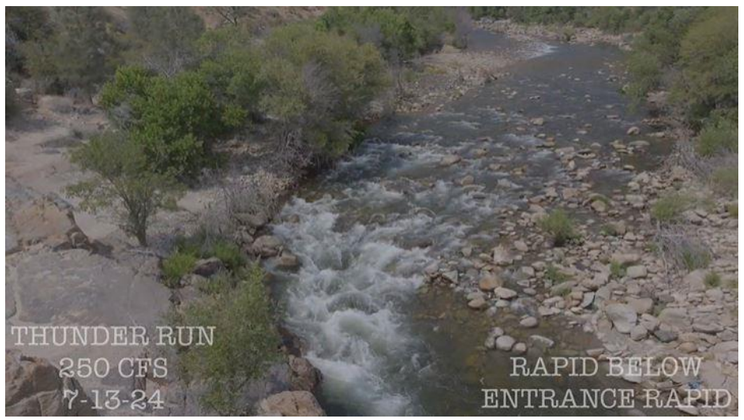
RIVER SEGMENT: THUNDER RUN--RAPID BELOW ENTRANCE RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs



July 13, 2024: 250 cfs

RIVER SEGMENT: THUNDER RUN--SQUASHED PADDLER RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: THUNDER RUN-- SOCK-EM DOG RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: THUNDER RUN--FENDER BENDER RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: CABLE/CAMP 3--WALL RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

RIVER SEGMENT: CABLE/CAMP 3—TEQUILA RAPID

April 11, 2024: 450 cfs

April 12, 2024: 770 cfs

April 13, 2024: 874 cfs

July 12, 2024: 550 cfs

July 13, 2024: 250 cfs

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APPENDIX E
LEVEL 3 ENHANCED FLOW OPPORTUNITY FOCUS GROUP DISCUSSION NOTES

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LOCATION	Kernville Chamber of Commerce
DATE	Thursday, 11 April 2024
ENHANCED FLOW	Enhanced Flow Opportunity (450 cfs)

11 Participants

Summary

1. WW difficulty at this flow
    - Fairview: Group evenly split: II^{+} for half of group; II^{+}-III^{-} for other half of group
    - Chamise: III, III^{+} and one person III-IV
    - Salmon Falls: IV^{+}-V^{-} (in a creature craft)
    - Ant Canyon: III
    - Thunder Run: IV
    - Cables/Camp 3: III^{-}
    - Riverkern: II^{+}
    - Lickety Split: II

2. What type of watercraft are suitable at this flow?
    - Kayaks
    - Packrafts
    - Catarafts
    - Creature craft
    - IKS
    - 12’ or smaller raft
        - Bigger rafts could do Fairview
        - Chamise might be tight
        - Ant Canyon would be fine
        - Cables with 14’ raft

    Good flows for rafting with kids good teaching flow on Fairview with kids and novice kayakers.

3. Advantages of this flow?
    - Great flow for teaching kids and novice boaters in Fairview
    - Great flow to bump boaters up to more difficult segments (stepping stone flow)
    - Opportunity for boaters to get on water that don’t want to be stressed
    - Kern is pool and drop at these flows
    - Low consequence/ recovery zones
    - Attracts more people for flows in this range
    - Creates a positive social vibe amongst friends

- Southern Cal boating demographic has limited opportunities to push skills so popularity of boating opportunities in the bypass increases with the lower flows
- Lower flows open up more river miles for greater number of people

4. Disadvantages of this flow?
    - Almost never available because of the Project
    - No real disadvantage at this flow
    - A disadvantage is that this flow is not available in the shoulder seasons
    - That retards the growth of the SoCal boating community
    - This is not an optimal flow for most boaters
    - Calling this flow satisfactory is misleading because it does not reflect the variability in the natural hydrograph which the boating community is very comfortable reading and reacting to.
5. Special Attributes
    - This is the flow I target for boating with my kids
    - This was a really good flow to use my packraft
    - Recovery pools
    - People go to the places they want to boat for the given flow available and make do for a complete boating day
6. Lower flow?
    - Can do chamise at 200 and 300 cfs?
    - At 300 cfs might do a limestone run then do 200 cfs at Chamise
    - Others skip Limestone at 300 cfs choosing instead to do Chamise
    - Catarafter will only do Limestone if flows in bypass are <400 cfs indicating this is his last choice for boating. Prefers boating in bypass
    - Bypass is boatable at lower flows

7. Higher flow?
    - More water is better to a point
    - Chamise is wonderful at 1200 cfs (comment by one person)
    - Small increases make it fluffier and fun
    - When flows get up to 2,000-3,000 cfs the diversion doesn't matter
    - There is no specific higher flow increment – there are so many rapids/drops in the bypass each of which have different whitewater features that have their own perfect flow

8. Focus Group Question framework
    - Assumes flows are dialed from storage
    - North Fork Kern River has variable hydrograph which the Project diverts out of bypass (forever)
    - Since we have an impaired hydrograph we never have release levels
    - We adapt/maximize the hydrograph in the bypass based on our craft and skill level

WW Difficulty @ this flow

Fairview II+ ~~III~~ → 1/2

~~II+ <-> 1/2~~

II+ - III- - 1/2

Chamise III+ and 1 person III - IV
III

Salmon Falls - IV+ - V- in a creature craft

Ant Canyon - III

Thunder Run - IV

Cables/Camp 3 - III-

Riverstern - II+

Lichty Split - II

ge @ this

What type of watercraft ② are suitable @ this flow?

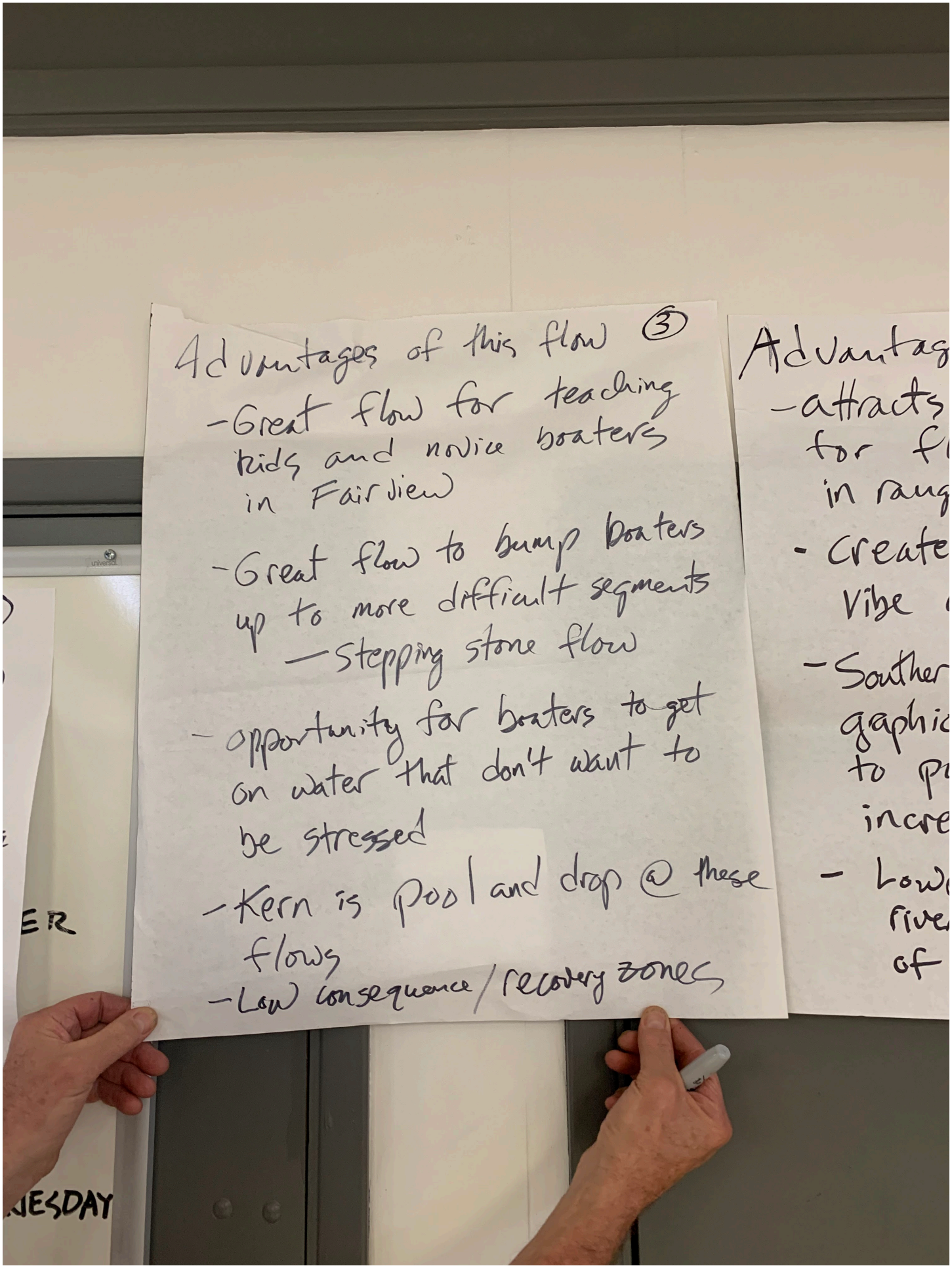
Kayaks, packrafts, cataracts creature crafts, 12' or smaller raft

IKs

Bigger rafts could do Fairview
- Chamise might be tight
- Ant would be fine
- Cables w/ 14' raft

Good flows for rafting w/ kids

Good teaching flow on Fairview with kids and novice kayakers


Advantages of this flow ③
-Great flow for teaching kids and novice boaters in Fairview
-Great flow to bump boaters up to more difficult segments — stepping stone flow
- opportunity for boaters to get on water that don't want to be stressed
-Kern is pool and drop @ these flows
-Low consequence / recovery zones
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Advantages of Flow (cont.) (4)

- attracts more people for flows in this in range
- creates a positive social vibe among friends
- Southern CA boating demographic has limited opportunities to push skills so popularity increases with the lower flows
- Lower flows open up more river miles for greater number of people

Disadvantages of this flow? (5)

- Almost never available because of the project
- No real disadvantage @ this flow
- A disadvantage is that this flow is not available in the shoulder seasons.
  → that retards the growth of the So Cal boating community

Special Attributes

(6)

- this is the flow I target for boating with my kids
- this was a really good flow to use my packraft
- Recovery pools
- People go to the places they want to boat for the given flow available and make do for a complete boating day

Disadvantages (cont.) (7)

- this is not an optimal flow for most boaters
- calling this flow ^ satisfactory is misleading because it does not reflect the variability in the natural hydrograph which the boating community is very comfortable reading and reacting to

Lower Flow?

(8)

Can do chamise @ 200 & 300

@ 300 cfs might do a limestone then do 2 chamise

Others ship Limestone @ 300 choosing instead to do chamise

- Catacrafter will only do ~~does~~ Limestone if flows in bypass are < 400

Higher Flow

(9)

More water more better
to a point

Chamise is wonderful @ 1200
(1 person)

small increases make it fluffier
and fun

- When Flows get up to 2k-3k
the diversion doesn't matter

- there is no specific increment
  - so many drops with different features that have their own perfect flow

Question Framework

10

- Assumes flow dialed from storage
- NFKern has variable hydrograph which project diverts out of bypass
- forever

→ Since we have an impaired hydrograph we never have release levels

→ We ~~see~~ adapt/maximize the hydrograph in the bypass based on our craft and skill level

LOCATION	Kernville Chamber of Commerce
DATE	Friday, 12 April 2024
ENHANCED FLOW	Enhanced Flow Opportunity (770 cfs)

13 PARTICIPANTS

Summary

1. WW difficulty at this flow
    - Fairview: II^{+}
    - Chamise: III^{+}-IV^{-}
    - Salmon Falls: V
    - Ant Canyon: III
    - Thunder Run: IV (IV^{+}) for Sockem dog/Fender Bender
    - Cables/Camp 3: III^{-}
    - Riverkern: II

2. What type of watercraft is suitable for this flow?
    - Cataraft
    - Paddle raft
    - Commercials with 18’ rafts
    - Kayaks
    - Pack raft
    - IK
    - Inner tube
    - Creature craft
    - SUPs
    - Riverboards

3. Advantages of this flow?
    - Surf sports for light catarafts
    - Beautiful low-stress way of relaxing
    - Lots of recoveries – pool drop character
    - Good flow to take new person in the segments
    - Optimal flow range for all the segments
    - Not optimal for cataraft -it’s doable but not optimal

4. Disadvantages of this flow?
    - Too many rocks for a cataraft
    - Flow wasn’t available a month ago because of the Project

- Flow would not have been available in 2/3rds of the water years

5. Special Attributes
    - More time to pick your way down the river
    - Improve/ build people's skills to be better boaters and maintain skills
    - Huge holes at higher flows are rocks at this flow that are more forgiving
    - Each flow has unique / special attributes—asking about special attributes for one flow requires participants to compare with other flows

6. Would I prefer natural flows?
    - Yes (100%)
    - Some boaters were not able to participate in the Thursday flow event due to other obligations. Those individuals would have traveled to boat 450 cfs
    - Low flow seasons you take what you can get
    - Willing to travel for limited opportunities
    - Boaters like to get certain number of days annually
    - No other alternative boating opportunity located in SoCal

Flow @ 770 cfs (P1)

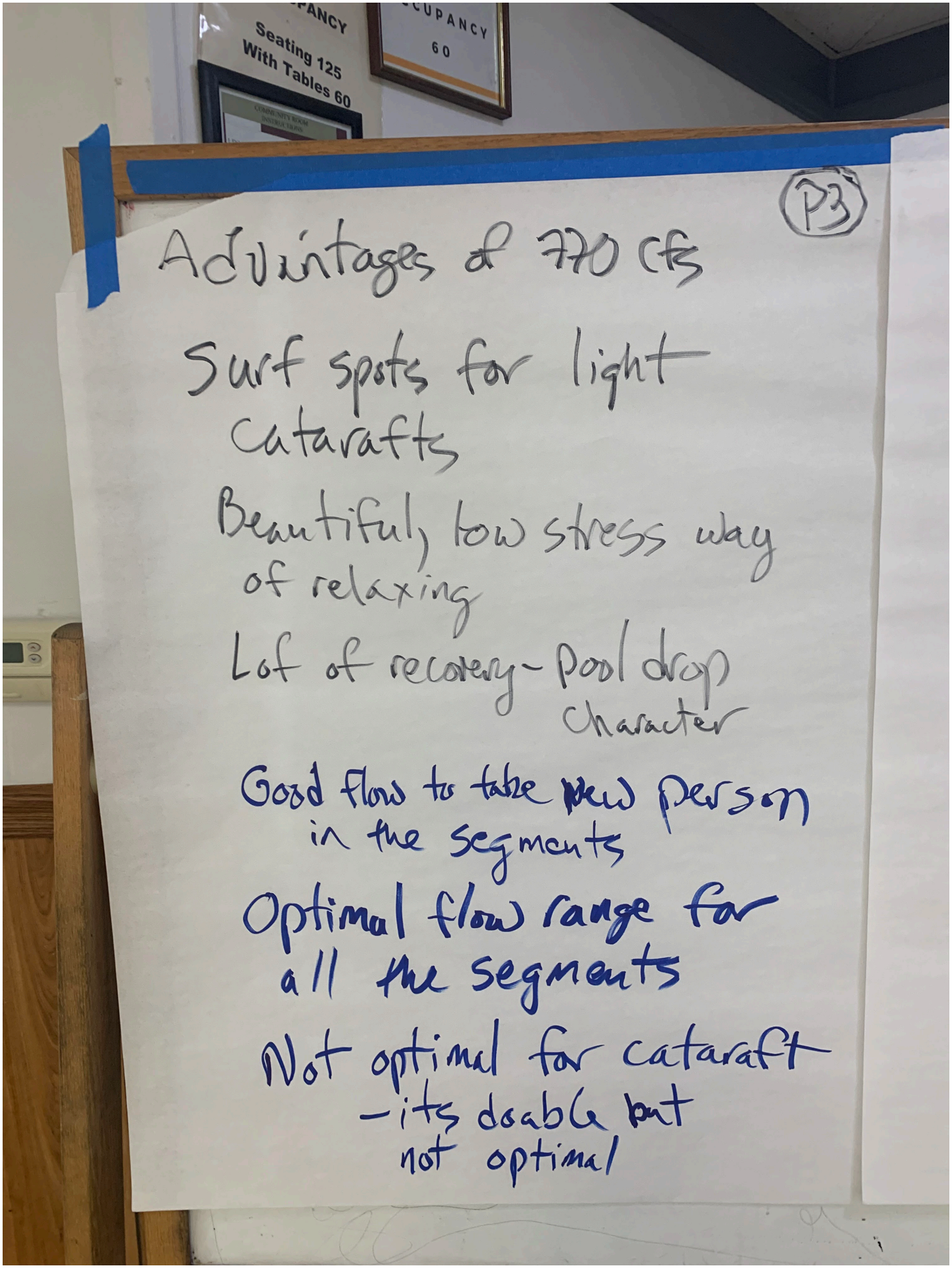
WW Difficulty @ 770 cfs

Fairview	II+
Chamise	III+-IV-
Salmon Falls	V
Ant Canyon	III
Thunder Run	IV (IV+) Sacken Dog Fender Bender
Cables	III-
Riverkern	II

Type of Watercraft for this 770 cfs flow

(P2)

- Cataraft
- Paddle raft
- Commercials w/ 18' rafts
- Kayaks
- Pack raft
- IK
- Inner tube
- creature craft
- SUPs
- River boards


ANCY
Seating 125
With Tables 60
CUPANCY
60
P3
Advantages of 770 cfs
Surf spots for light cataraft
Beautiful, low stress way of relaxing
Lof of recovery - pool drop character
Good flow to take new person in the segments
Optimal flow range for all the segments
Not optimal for cataraft - its doable but not optimal

Disadvantages @ 770 cfs (P5)

too many rocks for a cataraft

Flow wasn't available a month ago because of the project

Flow would not have been available in 2/3rds of the water years

Special Attributes @ 770 (p6)

More time to pick your way down the river

- Improve/build people's skills to be better boaters and maintain them
- Huge holes @ higher flows are rocks that are more forgiving
- Special attributes across a range of flows

P8

Would I prefer natural flows?

100% yes

Some boaters were not able to participate in the Thursday flow due to other obligations

Those individuals would have traveled to Boat 450

cables

(P9)

Low flow seasons you take what you can get

Willing to travel for Limited opportunities

Boaters like to get certain number of days annually

No other alternative in So. Cal

SUP

LOCATION	Kernville Chamber of Commerce
DATE	Saturday, 13 April 2024
ENHANCED FLOW	Enhanced Flow Opportunity (860-900 cfs)

19 PARTICIPANTS

Summary

1. WW difficulty at this flow
    - Fairview: III
    - Chamise: IV^- (for those familiar) and IV (for those learning lines)
    - Salmon Falls: no participants boated at this flow
    - Ant Canyon: Similar to Flow 2 (770 cfs). Class III may be easier than yesterday with more flow.
    - Thunder Run: Similar to Flow 2 (770 cfs). Class IV (IV^+) for Sockem dog/Fender Bender. Difficulty typically similar for couple hundred cfs.
    - Cables/Camp 3: III-III^+ (for cat boaters familiar with run) and IV (for those not familiar with the segment)
    - Riverkern: II^+-III (can be III^+ if you run harder lines)

2. What type of watercraft is suitable for this flow?
    - IK
    - Kayak
    - Cataraft
    - Creature craft
    - Raft – oar frame 16’ could do it
    - Pack raft
    - SUP
    - River board
    - Inner tube
    - C1 and C2
    - OCI
    - Paddle raft
    - Shredder (can be used at flows down to 450 cfs or lower)

3. Advantages of this flow?
    - Comfortable
    - Not too pushy
    - More time to make decisions
    - Not too bony
    - Lots of surf for cats
    - More flow is better
    - For intermediate (and beginners) more flow increases options for boating

- Buzzards rapid more water improves routes through rapid
- Safer (can be specific to boat size)
- If flows were like this I would be on it all the time
- Most accessible at this level
- Nicest way to get back on to this segment
- Good for learning
- More water to roll in
- Good flow for progression from easier to more difficult segments

4. Disadvantages of this flow?
    - Too high to feel comfortable taking kids out on Fairview. 450-500 cfs is a good flow with kids. Higher flows can be traumatizing for kids just learning.
    - Too high for packrafter to feel comfortable on Thunder Run
    - If it wasn't dewatered this flow would have been in bypass 1 month ago
    - On Cables segment-flow was too low for Tequila rapid

5. Special attributes of this flow?
    - Good flow for skill progression to advance to more difficult segments
    - Low stress to bring out novice paddlers for teaching/ gain experience
    - This flow is converging toward a sweet spot to make it accessible for a wider range of skill levels
    - Eddies were large enough to manage bigger groups of boaters
    - Flow variability is a special attribute

6. Would I return to boat 860-900 cfs
    - Is it boatable at this flow?
        - Yes (100%)
    - Would I return to boat?
        - Yes (100%)
    - If I had to travel from outside the area, would I return to boat?
        - Yes (100%)

7. Open-ended comments
    - Flow variability helps keep vegetation on sides of river in check making it safer for boaters
    - Consistently low flows make boating more dangerous because of riparian encroachment
        - Phenomena does not exist on upstream segments
    - Higher flow scour debris out of channel

WW Difficulty @ this flow (P1)

860 cfs - 900 cfs

Fairview III

Chamise IV⁻ for those familiar
IV for those learning lines

Salmon Falls

Ant Canyon - similar to Flow 2
- maybe easier than yesterday with more flow

Thunder Run - similar to Flow 2.
Difficulty typically similar for couple hundred cfs

Cables - III - III⁺ for cat boaters
familiar w/ run
~~Ridge Run~~ II⁺ for folks not familiar w/ segment

Riverkern II⁺ - III
Can be III⁺ if you run harder lines

Type of watercraft suitable for this flow

P2

860-900

IK

Kayak

Catarafft

Creature craft

Shredder

↓

can be used @ flows down to 450 or lower

Raft - oar frame
16' could do it

Pack raft

SUP

river board

inner tube

C1 & C2

OC1

Paddle raft

(P3)

Advantages of 860-900 cfs flow

- Comfortable
- not too pushy
- more time to make decisions
- not too bony
- lots of surf for cats
- More flow is better
- for intermediate (and beginners) more flow increases options for boating
- Buzzards rapid more water improves routes through rapid
- Safer - can be specific to boat size

Disadvantages of this flow 860-900 (P4)

- Too high to feel comfortable taking kids out
- too high for pack rafter to feel comfortable on Thunder run
  - On Fairview 450-500 is good flow with kids
    Higher flows can be traumatizing for kids just learning
- If it wasn't dewatered this flow would have been in bypass 1 month ago
- On Cables-Tequila rapid the flow was too low

(P5)

Special Attributes of this flow

860-900

- good flow for skill progression to advance to more difficult segments
- low stress to bring out novice paddlers for teaching/gain experience
- this flow is converging toward a sweet spot to make it accessible for a wider range of skill levels
- Eddies were large enough to manage bigger groups of boaters
- Flow variability is a special Attribute

Is it boatable @ this flow? ©

Yes- 100% agreement

Would I return to boat?

Yes-100% agreement

If I had to travel from outside the area

Yes- 100% agreement

Advantages (cont.)

- if flows were like this I would be on it all the time
- Most accessible @ this level
- Nicest way to get back on to this segment
- good for learning
- more water to roll in
- good flow for progression from easier to more difficult segments

Open-ended comment

(8)

Flow variability helps keep vegetation on sides of river in check making it safer for boaters

Consistently low flows makes boating more dangerous because of riparian encroachment

Phenomena does not exist on upstream segments

Higher flow scour debris out of channel

but size

LOCATION	Kernville Elementary School
DATE	Friday, 12 July 2024
ENHANCED FLOW	Enhanced Flow Opportunity (550 cfs)

7 Participants

Summary

1. WW Difficulty at this flow:

- Sidewinder/ Bomb's Away:
- Fairview: II- III & II-II+
- Chamise: IV & III+
- Salmon Falls:
- Goldledge/ Ant canyon: III-III, III+
- Thunder Run: IV+ (Sockem Dog/ Fender Bender) lots of boogey water
- Cables/ Camp 3: III
- River Kern: II+, III-
- Lickety Split

2. Watercraft Suitability for River Segment:

- Sidewinder/ Bomb's Away: Kayak's, IK's, Packrafts
- Fairview: Kayak's, IK's, Packrafts, Smaller rafts (10-14'), R2, smaller cats, shredder, SUP, tube (uncertainty on safety for tubes), OC1&2
- Chamise: Kayak's, IK's, Packrafts, Shredder, smaller rafts, IK, catarafts, OC1&2
- Salmon Falls:
- Goldledge/ Ant canyon: Kayak's, IK's, Packrafts, smaller rafts, cats, shredders, R2, OC1&2
- Thunder Run: Kayak's, IK's, Packrafts, Shredder, smaller rafts, IK, catarafts, OC1&2
- Cables/ Camp 3: Kayak's, IK's, Packrafts, Shredder, smaller rafts, IK, catarafts, OC1&2, SUP (not sure at this flow), Inner Tubes?
- River Kern: Kayak's, IK's, Packrafts, Shredder, smaller rafts, IK, catarafts, OC1&2, SUP, Inner Tube
- Lickety Split: Kayak's, IK's, Packrafts, Shredder, smaller rafts, IK, catarafts, OC1&2, SUP, Inner tube

3. Advantages at this flow?
    - Travel time
    - Higher probability this flow will be present
    - Eddies defined and enjoyable to practice catching
    - Less experienced paddlers can run this river
    - Velocity is slower so you have time to plan moves
    - Better safety set up
    - All segments are boatable

4. Disadvantages at this flow?
    - Rocks popping up, but can also be an advantage.
5. Special Attributes of this flow?
    - More technical at this flow
    - More rocks creates eddies to navigate through rapids

6. Thoughts on a higher flow
    - Not discussed in focus group
7. Thoughts on a Lower flow?
    - Would paddle Chamise even lower and same for Ant Canyon and Fairview
    - This 550 cfs flow was boatable and fun
8. Would you return to boat this flow?
    - Yes, for all boater present
9. Would you travel from outside area for this flow?
    - I would travel from Tahoe to boat Chamise at this flow. Same for boater from Orange County. Two boaters traveled from San Francisco for this flow.
10. Additional Comments
    - Boaters think they got ahead of the bubble near the bottom of Chamise at hairy fairy
    - Seemed like more water and less rocks when they boated 450 cfs in April
    - Every flow is unique like a snowflake
    - Release bubble- boaters would adapt behavior to timing of the bubble to follow it down
    - Boaters like a range of flow like a natural hydrograph
    - Each flow has its unique attributes

Enhanced Flow Focus Group (17)

July 12 2024

Flow 550 cfs

WW Difficulty @ this Flow

Sidewinder / Bomb's Away

Fairview II-III & II-II+

Chamise IV & III+

Salmon Falls

Goldledge / Ant Canyon III- - III III+ & III

Thunder Run IV+ - Sochen Dog / Fender Bender Lots of boogey water

Cables / Camp 3 III

River Bern II+ III-

Lickety Split

P1

July 12 2024 550 cfs

Watercraft suitable for River Segments

P2

Sidewinder/BA – Kayaks, IK's, Packrafts

Fair View smaller rafts (10'-14') R2'ing, smaller cats shredder, SUP, tube (safety?), ~~IK~~ OC1&2

Chamise shredder, smaller rafts, IK, cataraft OC1&2

Salmon Falls

Goldledge/Ant small rafts, cats, shredders, R2 OC1&2

Thunder

Cables/Camp 3

River Kern

Lichety Split

all boats from Chamise

SUP not sure @ this flow inner tubes

SUP Inner tube

SUP, inner tube

P2

afts

maller cats

araft

rs, R2

Chamise

e this Flow

tube

July 12 2024 550 cfs P3

Advantages of this flow?

- Travel time
- higher probability this flow will be present
- Eddies defined & enjoyable to practice catching
- Less experienced paddlers can run the river
- Velocity is slower so you have time to plan moves
- Better safety set up
- All segments are boatable

July 12 2024 550 cfs P4

Disadvantages of this flow?

Rocks popping up - but this can be an advantage

July

W

Wo

flo

P4

July 12 2024 550 cfs

P5

Special Attributes of this flow?

- More technical @ this flow
- More rocks create eddies to navigate thru rapids

July 12 2024 550 cfs P6

Thoughts on a higher flow?

Thoughts on a Lower flow?

Would paddle chamise even lower

Ditto for Ant & Fairview

This flow (550) was boatable and fun.

Would you return to boat this flow?

Yes for all boater present

Would you travel from outside area for this flow?

I would travel from Tahoe to boat chamise @ this 550 flow

Ditto for Orange Cty.

2 Boaters traveled from S.F.

Additional Comments

Boaters think they got ahead of the bubble - Bottom of Chamise @ Hairy Fairy

- Seemed like more water/less rocks when they boated 450 cfs in April
- Every Flow is unique-like a snowflake
- Release Bubble- Boaters would adapt behavior to timing of the bubble to follow it down.
- Boaters like a range of flow like a natural hydrograph
- each flow has its unique attributes

LOCATION	Kernville Elementary School
DATE	Saturday, 13 July 2024
ENHANCED FLOW	Enhanced Flow Opportunity (250 cfs)

11 Participants

Summary

1. WW Difficulty at this flow:

- Sidewinder/ Bomb's Away:
- Fairview: II
- Chamise: III+-IV (mostly class III)
- Salmon Falls:
- Goldledge/ Ant canyon: III (technical)
- Thunder Run: IV+ (V-Sockem Dog / Fender Bender) IV+ for some
- Cables/ Camp 3: III (technical)
- River Kern: III
- Lickety Split

2. Watercraft Suitability for River Segment (Participant responses are for watercraft **NOT SUITABLE** at this flow):

- Sidewinder/ Bomb's Away: Rafts >12', catarafts
- Fairview: Rafts >12', catarafts
- Chamise: Rafts >12', catarafts
- Salmon Falls:
- Goldledge/ Ant canyon: Rafts >12', catarafts
- Thunder Run: Rafts >12', catarafts
- Cables/ Camp 3: Rafts >12', catarafts
- River Kern: Rafts >12', catarafts
- Lickety Split: Rafts >12', catarafts

  **All sections suitable for these boats (kayaks, IK, packrafts, shredder, OC 1 &2, SUP (some segments, maybe skip some rapids)

3. Advantages of this flow?
    - Flow is slower.
    - Good practice for catching eddies and for ferrying.

- Lots of play, splats, more technical.
- Easier making it available to beginners particularly Fairview.
- New Lines to boat at this level.
- Actually boatable versus taking all the flow.
- See rocks that form features helping understand rapid better

4. Disadvantages of this flow?
    - Ropes put across the river at this lower flow.
    - More pinning risk versus higher flows
    - Not the full natural flow
    - Might hit rocks if you flip over.
    - Less fun in some sections.
    - More boring for intermediate (Fairview and Cables)
    - No boater would call this optimal flow
    - It is boatable but not optimal
    - If more water was available at Fairview boaters would want higher flow
    - Not an ideal flow
    - Gives non-boating public false sense of security but this happens across broad range of flows
5. Special Attributes at this flow?
    - Boaters demonstrate proper safety equipment and behavior on NFKR to non-boating public
    - Boaters have performed multiple rescues, not specific to this flow
    - More opportunity to explore new lines
    - Technical nature allows for working on navigation skills
    - Flow was available today providing great time for boaters, but will go away for the next 9 months
    - In drought periods the 250 cfs flow may not be available for as much as 21 months or more
6. Thoughts on a lower flow?
    - Lower flows can be run, but prefer more if its available
7. Thoughts on a higher flow?
    - Even if just for a few hours per day we will take more water
    - We will ride the higher flow bubble
8. Would you return to boat this flow
    - Yes, if flow was higher definitely yes
9. Would you travel from outside the area for this flow?
    - Orange Cty
    - San Francisco
    - Tahoe

- L.A.
- If the flow was higher I would definitely travel

10. Questions for Survey?
    - What is the amount of time you would like to boat in the bypass? (Assuming natural flow is provided over the dam)

July 13 Enhanced Flow !!

250 cfs

WW difficulty of this flow

Sidewinder/Bomb's Away

Fairview II

Chamise III+-IV (most class III)

Salmon Falls

Goldledge/Ant III (technical)

Thunder IV (V-Sochea Dog Fender Bender IV+ for some)

Cables/Camp 3 III (technical)

Rivertern III

Lickety

P1

w

Fender Bender

July 13 Enhanced Flow P2

Watercraft (not suitable @ this flow)

Sidewinder/BA

Fairview

Chamise

Art/Goldledge

Thunder

Cables/Camp 3

Riverbern

Rafts ≥ 12', Cataraft

Lichety

All sections suitable for these boats
Kayaks, CI, packraft, shredder,
OC 1 & 2, SUP (some segments, maybe skip some rapids)

Jul

Adva

Disadv

Rapids

flow

More

Not

Might

Less

July 13 Enhanced Flow 1.3

Advantages of this flow?

See rocks that form features helping understand rapid better

Flow is slower
Good practice for catching eddies
" " for ferry
Lots of Play, Splats
More technical
Easier making it available to beginners particularly Fairview
New lines to boat @ this level

Disadvantages of this flow?

Actually boatable vs. taking all the flow
Ropes put across the river @ this lower flow
More pinning risk vs. higher flows
Not the full natural flow
Might hit rocks if you flip over

DisAdvantages (cont.)

- No boater would call this an optimal flow
- It is boatability but not optimal
- If more water was available at Fairview boaters would want higher flow
- Not an ideal flow
- Gives non-boating public false sense of security but this happens across broad range of flows

July 13 Enhanced Flow P4

Special Attributes @ this flow?

- Boaters demonstrate proper safety equipment & behavior on NFKR to non-boating public
- Boater have performed multiple rescues
  - Not specific to this flow
  - More opportunity to explore new lines
  - Technical nature allows for working on navigation skills.
- Flow was available today providing great time for boaters but will go away for next 9 months

July 13 Enhanced Flow (P5)

Thoughts on a lower flow?

Lower flows can be run ~~in drought years~~ but prefer more if its available

Thoughts on a higher flow?

Even if just for a few hours/day we will take more water

- we will ride the higher flow bubble

July 13 Enhanced Flow (P6)

Would you return to boat this flow?

Yes

- If flow was higher definitely yes

Would you travel from outside the area for this flow?

Orange Cty

San Francisco

Tahoe

- If flow was higher I would definitely travel

-

July 13 (cont) Special Attributes

In drought periods the 250 cfs flow may not be available for as much as 21 months or more

---

Question for Survey

→ What is the amount of time you would like to boat in the bypass

(Assuming natural flow is provided over the dam)

APPENDIX F
LEVEL 3 FLOW COMPARISON SURVEY

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KR3 Flow Comparison Evaluation Form

Welcome to the flow comparison evaluation form 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. The flow comparison evaluation form focuses on the river segments on the North Fork Kern River (NFKR) between Fairview Dam and Riverside Park in Kernville

Your responses on this evaluation are important to the study's success. Please base responses on your direct experience from your trips on the NFKR rather than guidebooks, group opinions or historic flow preferences. Advances in whitewater boat design have expanded the range of flow preferences on many rivers including the NFKR. Accurate responses to this survey will help refine flow preferences for the NFKR.

Please complete the flow comparison evaluation answering all questions for a single type of watercraft you boat on the NFKR. Please complete a separate flow comparison evaluation for each type of watercraft you use on the NFKR. Participant responses are used to better understand flow preferences unique to each watercraft type.

The flow comparison survey will ask you to evaluate the quality of the whitewater boating for your watercraft type across a range of flows for each river segment you boat. For your convenience, a map delineating the whitewater segments is provided at the start of the survey. Please limit your evaluations to the river segments where you have direct experience boating all or part of the segment.

The flow comparison for the river segments between Fairview Dam and the KR3 powerhouse (Fairview Dam bypass reach) are based on flows measured just below Fairview Dam. For the Lickety Split river segment flow comparison, base your responses using flow measurements at the Army Corps of Engineers gage in Riverside Park.

Thank you for participating in the flow comparison evaluation form. Your feedback is important, please encourage your boating friends to participate in the study. The survey will be available online through August 16, 2024.

KR3 Flow Comparison Evaluation Form

* 1. Please provide your full name and five digit zip code.

First and Last Name

Five-digit Zip Code

* 2. What is your age?

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

* 3. What is your gender?

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

4. Is this your first time filling out the flow comparison evaluation form?

- ◯ Yes, if this is your first time filling out the flow comparison evaluation form
- ◯ No, if you have completed one or more flow comparison evaluation forms for other watercraft types

* 5. Please select a single type of watercraft that you will base all your responses in this flow comparison evaluation. You are encouraged to complete additional flow comparison evaluation forms for each type of watercraft you use on the NFKR.

- ◯ 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)

* 6. How would you rate your overall whitewater skill level using the watercraft type you selected above?

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

KR3 Flow Comparison Evaluation Form

The following questions ask you to evaluate the quality of the whitewater boating for your watercraft type across a range of flows for each river segment you boat between Fairview Dam and the KR3 Powerhouse as well as the Lickety Split river segment. The survey allows you to skip river segments where you do not have direct experience.

Please **base responses on your direct experience from your trips on the NFKR** rather than guidebooks, group opinions or historic flow preferences.

Please complete the flow comparison evaluation **answering all questions for a single type of watercraft you boat on the NFKR**. Please complete a separate flow comparison evaluation for each type of watercraft you use on the NFKR. Participant responses are used to better understand flow preferences unique to each watercraft type.

The flow comparison for the river segments between Fairview Dam and the KR3 powerhouse (Fairview Dam bypass reach) are based on flows measured just below Fairview Dam. For the Lickety Split river segment flow comparison, base your responses using flow measurements at the Army Corps of Engineers gage in Riverside Park.

* 7. Do you have direct experience with the watercraft you selected for this evaluation on one or more of the **river segments between Fairview Dam and KR3 Powerhouse** (Fairview Dam bypass reach)? (Select **YES** to evaluate flows in river segments between Fairview Dam and KR3 Powerhouse. Select **NO** to answer questions specific to the Lickety Split river segment only skipping river segments in the Fairview Dam bypass reach.)

- ◯ Yes, I have direct experience with my watercraft on one or more of the river segments between Fairview Dam and KR3 Powerhouse (Fairview Dam bypass reach)
- ◯ No, skip ahead to answer questions for the Lickety Split river segment only downstream of the KR3 Powerhouse

KR3 Flow Comparison Evaluation Form

* 8. Do you have direct experience boating the **Sidewinder / Bomb's Away** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on Sidewinder / Bomb's Away river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream.

KR3 Flow Comparison Evaluation Form

9. Please evaluate the quality of the following flows as measured below Fairview Dam on the **Sidewinder / Bomb's Away** river segment for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

10. Based on your previous boating trips on the **Sidewinder / Bomb's Away** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.).

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 11. Do you have direct experience boating the **Fairview** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on Fairview river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

12. Please evaluate the quality of the following flows as measured below Fairview Dam on the **Fairview** river segment for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

13. Based on your previous boating trips on the **Fairview** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 14. Do you have direct experience boating the **Chamise Gorge** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on Chamise Gorge river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

15. Please evaluate the quality of the following flows as measured below Fairview Dam on the **Chamise Gorge** river segment for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

16. Based on your previous boating trips on the **Chamise Gorge** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 17. Do you have direct experience boating the **Salmon Falls** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on Salmon Falls river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

18. Please evaluate the quality of the following flows as measured below Fairview Dam on the **Salmon Falls** river segment for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

19. Based on your previous boating trips on the **Salmon Falls** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 20. Do you have direct experience boating the **Goldledge / Ant Canyon** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on the Goldledge / Ant Canyon river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

21. Please evaluate the quality of the following flows on the **Goldledge / Ant Canyon** river segment as measured below Fairview Dam for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

22. Based on your previous boating trips on the **Goldledge / Ant Canyon** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 23. Do you have direct experience boating the **Thunder Run** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on the Thunder Run river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

24. Please evaluate the quality of the following flows on the **Thunder Run** river segment as measured below Fairview Dam for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

25. Based on your previous boating trips on the **Thunder Run** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 26. Do you have direct experience boating the **Cables / Camp 3** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on the Cables / Camp 3 river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

27. Please evaluate the quality of the following flows on the **Cables / Camp 3** river segment as measured below Fairview Dam for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

28. Based on your previous boating trips on the **Cables / Camp 3** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 29. Do you have direct experience boating the **Riverkern** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip to the next river segment downstream.)

- ◯ Yes, I have direct experience on the Riverkern river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next river segment downstream

KR3 Flow Comparison Evaluation Form

30. Please evaluate the quality of the following flows on the **Riverkern** river segment as measured below Fairview Dam for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

31. Based on your previous boating trips on the **Riverkern** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

* 32. Do you have direct experience boating the **Lickety Split** river segment to evaluate flows for the watercraft type you selected for this survey? (Select **YES** to evaluate flows for this river segment. Select **NO** to skip this river segment.)

- ◯ Yes, I have direct experience on the Lickety Split river segment using the watercraft type I selected for this evaluation
- ◯ No, skip to the next set of questions in the evaluation form

KR3 Flow Comparison Evaluation Form

33. Please evaluate the quality of the following flows on the **Lickety Split** river segment as measured at Riverside Park on the ACOE gage for the watercraft type you selected. In making your evaluations, consider the flow dependent characteristics that contribute to the quality of your trip (e.g., WW challenge, WW play, technical boating, safety, and aesthetics). If you do not feel comfortable evaluating a flow, leave that row blank.

	1. Totally Unacceptable	2. Moderately Unacceptable	3. Marginal	4. Moderately Acceptable	5. Totally Acceptable
100 cfs	○	○	○	○	○
200 cfs	○	○	○	○	○
300 cfs	○	○	○	○	○
400 cfs	○	○	○	○	○
500 cfs	○	○	○	○	○
600 cfs	○	○	○	○	○
700 cfs	○	○	○	○	○
800 cfs	○	○	○	○	○
900 cfs	○	○	○	○	○
1000 cfs	○	○	○	○	○
1250 cfs	○	○	○	○	○
1500 cfs	○	○	○	○	○
1750 cfs	○	○	○	○	○
2000 cfs	○	○	○	○	○
2500 cfs	○	○	○	○	○
3000 cfs	○	○	○	○	○
3500 cfs	○	○	○	○	○
4000 cfs	○	○	○	○	○
5000 cfs	○	○	○	○	○
>5000 cfs	○	○	○	○	○

34. Based on your previous boating trips on the **Lickety Split** river segment, please specify the flows (in cfs) that provide the following types of boating experiences for you. (Note, you can specify flows you have not boated but which you think would provide the type of experience in question. Use whole numbers only.)

What is the minimum acceptable flow for this river segment in the watercraft you selected for this evaluation? The minimum acceptable is the lowest flow you would return to boat which may be different from the minimum flow necessary to navigate. (Use whole numbers only.)

For you, what is the optimum flow for this river segment in the watercraft you selected for this evaluation? (Use whole numbers only.)

KR3 Flow Comparison Evaluation Form

35. If necessary, please provide comments to further explain your flow preferences for the river segments between Fairview Dam and Riverside Park.

KR3 Flow Comparison Evaluation Form

36. How many trips per year do you typically make to the NFKR between Fairview Dam and Riverside Park in Kernville in the watercraft you selected for this evaluation?

- ◯ 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 than 100 times annually

37. When do you typically boat on the NFKR between Fairview Dam and Riverside Park in Kernville in the watercraft you selected for this evaluation? (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)

38. How long is a **TYPICAL** boating trip for you on the NFKR between Fairview Dam and Riverside Park in Kernville in the watercraft you selected for this evaluation?

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

39. In the future, how much time do you need to complete a **TYPICAL** single trip in the Fairview Dam bypass reach assuming natural flow is provided over Fairview Dam?

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

40. Do you have a preferred time of year for boating flows in the Fairview Dam bypass reach? (check all that apply)

- ☐ Spring (April, May, June)
- ☐ Summer (July, August, September)
- ☐ Fall (October, November, December)
- ☐ Winter (January, February, March)

KR3 Flow Comparison Evaluation Form

41. How does the whitewater boating on the NFKR between Fairview Dam and Riverside Park in Kernville compare to whitewater boating in the watercraft you selected for this evaluation.... (choose one response per row)

	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	◯	◯	◯	◯

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

KR3 Flow Comparison Evaluation Form

Thank you for participating in the flow comparison evaluation form. Please complete additional flow comparison evaluations for each watercraft type that you have direct experience boating on the NFKR. Encourage other boaters to participate as well.

The flow comparison evaluation results will be included as part of the REC-1 Whitewater Boating Study Technical Memorandum filed with the Federal Energy Regulatory Commission (FERC). This is one of several opportunities for the whitewater community to participate in the REC-1 Whitewater Boating Study. For additional information about the KR3 relicensing process refer to Southern California Edison's website (www.SCE.com/kr3).

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

APPENDIX G
LEVEL 3 FLOW COMPARISON SURVEY EMAIL NOTIFICATIONS

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Flow Comparison Email Notification

On behalf of Southern California Edison

KR3 Boating Community:
Southern California Edison (SCE) is launching the **flow comparison evaluation form** as part of the REC-1 Whitewater Boating Study for the Kern River No. 3 (KR3) Hydroelectric Project. 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. The flow comparison evaluation form focuses on the river segments on the North Fork Kern River (NFKR) between Fairview Dam and Riverside Park in Kernville.

Your responses on this evaluation are important to the study's success. Please **base responses on your direct experience** from your trips on the NFKR rather than guidebooks, group opinions or historic flow preferences. Advances in whitewater boat design have expanded the range of flow preferences on many rivers including the NFKR. Accurate responses to this survey will help refine flow preferences for the NFKR.

Please **complete the flow comparison evaluation answering all questions for a single type of watercraft you boat on the NFKR.** Additional flow comparison evaluations can be completed for other types of watercraft you use on the NFKR. Participant responses are used to better understand flow preferences unique to each watercraft type.

Flow Comparison Evaluation Form: Use the link below to access the flow comparison evaluation form.
https://www.surveymonkey.com/r/KR3_Flow_Comparison_Eval

Thank you for participating in the flow comparison evaluation form. Your feedback is important, please encourage other boaters to participate in the study. The survey will be available online through August 16, 2024.

Thank you for your support.

Stephanie Fincher-DeMillo

APPENDIX H
LEVEL 3 FLOW PREFERENCE AVERAGE ACCEPTABILITY RATINGS

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River Segment	Watercraft Count	Whitewater Kayak Average Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA	13	1.1	2.1	2.8	3.2	3.4	3.6	3.8	4.1	4.3	4.5	4.6	4.8	4.8	4.7	4.8	4.6	4.5	4.4	4.3	4.3
Fairview	32	1.4	2.4	3.7	3.9	4.0	4.1	4.3	4.4	4.6	4.7	4.8	4.9	4.9	4.9	5.0	4.9	4.8	4.8	4.7	4.6
Chamise Gorge	31	1.5	2.7	3.6	4.0	4.2	4.3	4.4	4.6	4.8	4.9	4.8	4.9	4.8	4.8	4.7	4.5	4.2	3.9	3.9	3.7
Salmon Falls	13	1.4	2.6	3.7	3.7	3.7	3.6	3.8	4.0	4.2	4.4	4.6	4.8	4.8	4.6	4.9	4.8	4.8	4.5	4.4	4.0
Goldledge / Ant Canyon	29	1.5	2.1	3.1	3.6	3.9	4.0	4.2	4.4	4.6	4.7	4.9	4.9	4.9	5.0	4.9	4.7	4.6	4.5	4.3	4.1
Thunder Run	26	1.2	1.9	3.1	3.6	3.7	3.8	4.0	4.2	4.5	4.7	4.8	4.9	4.9	4.9	4.7	4.5	4.3	4.0	3.8	3.7
Camp 3 / Cable Run	30	1.3	1.9	3.1	3.6	3.8	3.9	4.2	4.4	4.6	4.7	4.8	4.8	4.9	4.9	4.9	5.0	5.0	5.0	4.8	4.7
Riverkern	30	1.3	2.1	3.2	3.7	3.9	4.0	4.2	4.4	4.6	4.7	4.9	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0	5.0
Lickety Split	31	1.5	2.0	3.4	3.9	4.2	4.3	4.5	4.7	4.8	4.8	4.8	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Closed-deck canoe (C1 or C2) Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA																					
Fairview	1		5.0	5.0	5.0																
Chamise Gorge	1		5.0	5.0	5.0																
Salmon Falls																					
Goldledge / Ant Canyon																					
Thunder Run																					
Camp 3 / Cable Run	1		5.0	5.0	5.0																
Riverkern	1		5.0	5.0	5.0																
Lickety Split	1		5.0	5.0	5.0																

River Segment	Watercraft Count	Inflatable Kayak (IK) Average Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA	1			5.0	5.0	5.0															
Fairview	4	2.3	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	4.5	3.5	3.5	3.5	3.0
Chamise Gorge	3	2.5	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.0	3.0	2.0	2.0	2.0
Salmon Falls	1		5.0	5.0	5.0																
Goldledge / Ant Canyon	3	2.5	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0
Thunder Run	1		5.0	5.0	5.0																
Camp 3 / Cable Run	3	2.0	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0
Riverkern	4	2.3	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lickety Split	4	2.3	4.8	4.8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Paddle raft Average Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	3.0
Fairview	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0						
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0
Chamise	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0						
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0
Salmon Falls																					
Goldledge / Ant Canyon	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0					
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	3.0
Thunder Run	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0						
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	3.0
Camp 3 / Cable Run	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0						
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	3.0
Riverkern	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0						
	2	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lickety Split	1			5.0	5.0	5.0	5.0	5.0	5.0	5.0											
	2	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Oar Raft Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA																					
Fairview	1		5.0	5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Chamise	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0
Salmon Falls	1		5.0	5.0	5.0																
Goldledge / Ant Canyon	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Thunder Run	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0
Camp 3 / Cable Run	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Riverkern	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lickety Split	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Cataraft Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA																					
Fairview	1	1.0	1.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0
	2	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Chamise Gorge	2	1.0	1.0	1.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0							
Salmon Falls																					
Goldledge / Ant Canyon	1	1.0	1.0	1.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0
	2	1.0	1.0	1.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0						
Thunder Run	1	1.0	1.0	1.0	1.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	1.0	1.0	1.0	1.0
	2	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0						
Camp 3 / Cable Run	1	1.0	1.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	2	1.0	1.0	1.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0
Riverkern	1	1.0	1.0	1.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	2	1.0	1.0	1.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lickety Split	1	1.0	1.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	2	1.0	1.0	1.0	2.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Shredder Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA	2	1.0	1.0	1.0	2.0	3.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.0	2.0
Fairview	1			5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	3.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0
Chamise	1		5.0	5.0	5.0																
	2	1.0	1.0	1.0	1.0	1.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	3.0	2.0
Salmon Falls	1		5.0	5.0	5.0																
Goldledge / Ant Canyon	1			5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0
Thunder Run	1			5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	4.0	3.0	2.0
Camp 3 / Cable Run	1			5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Riverkern	1			5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lickety Split	1			5.0	5.0	5.0															
	2	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Inner tube Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA																					
Fairview	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Chamise Gorge	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Salmon Falls																					
Goldledge / Ant Canyon	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Thunder Run	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Camp 3 / Cable Run	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Riverkern	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Lickety Split	1		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										

River Segment	Individual Boater	Packraft Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA																					
Fairview	1	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Chamise Gorge	1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Salmon Falls																					
Goldledge / Ant Canyon	1	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0					
Thunder Run	1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0										
Camp 3 / Cable Run	1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0					
Riverkern	1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lickety Split	1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

River Segment	Individual Boater	Traditional Tule Boat Acceptability Rating (1-5) For Each Flow																			
		100	200	300	400	500	600	700	800	900	1000	1250	1500	1750	2000	2500	3000	3500	4000	5000	>5000
Sidewinder / BA	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0
Fairview	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0
Chamise Gorge	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0
Salmon Falls	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0
Goldledge / Ant Canyon	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0
Thunder Run	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0
Camp 3 / Cable Run	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0
Riverkern	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0
Lickety Split	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	5.0	5.0

APPENDIX I
ANNUAL FREQUENCY OF POTENTIAL WHITEWATER OPPORTUNITIES

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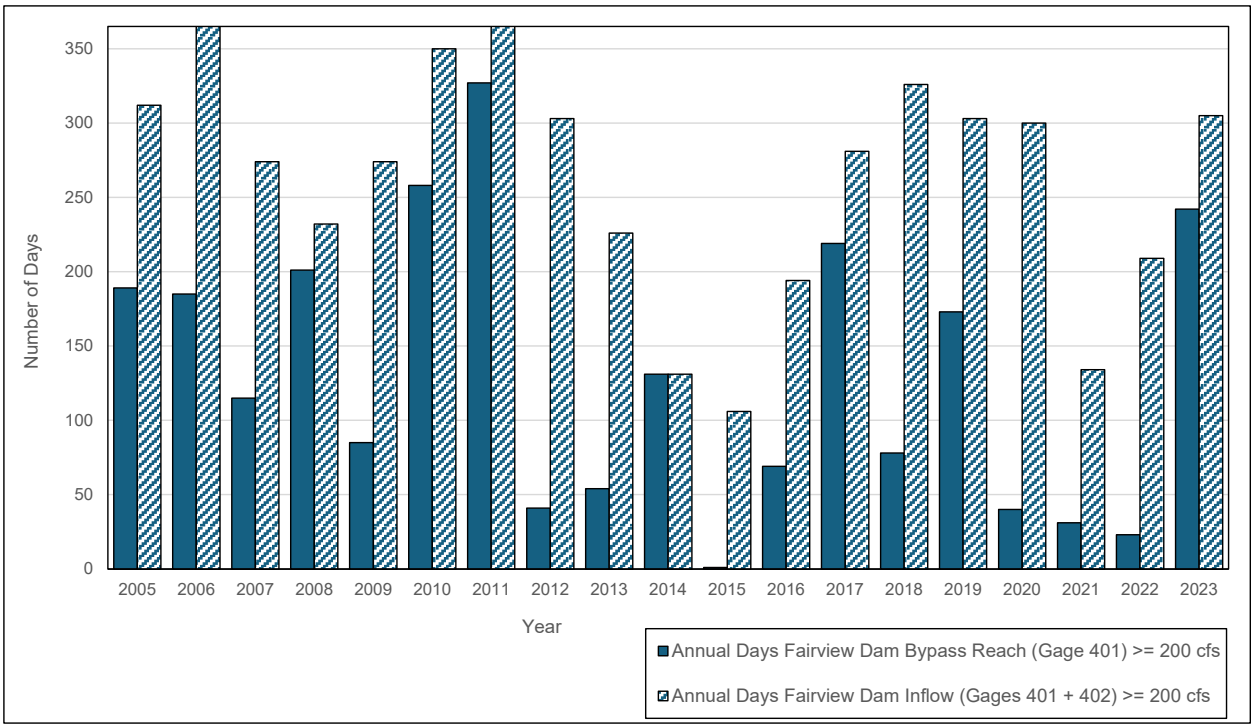

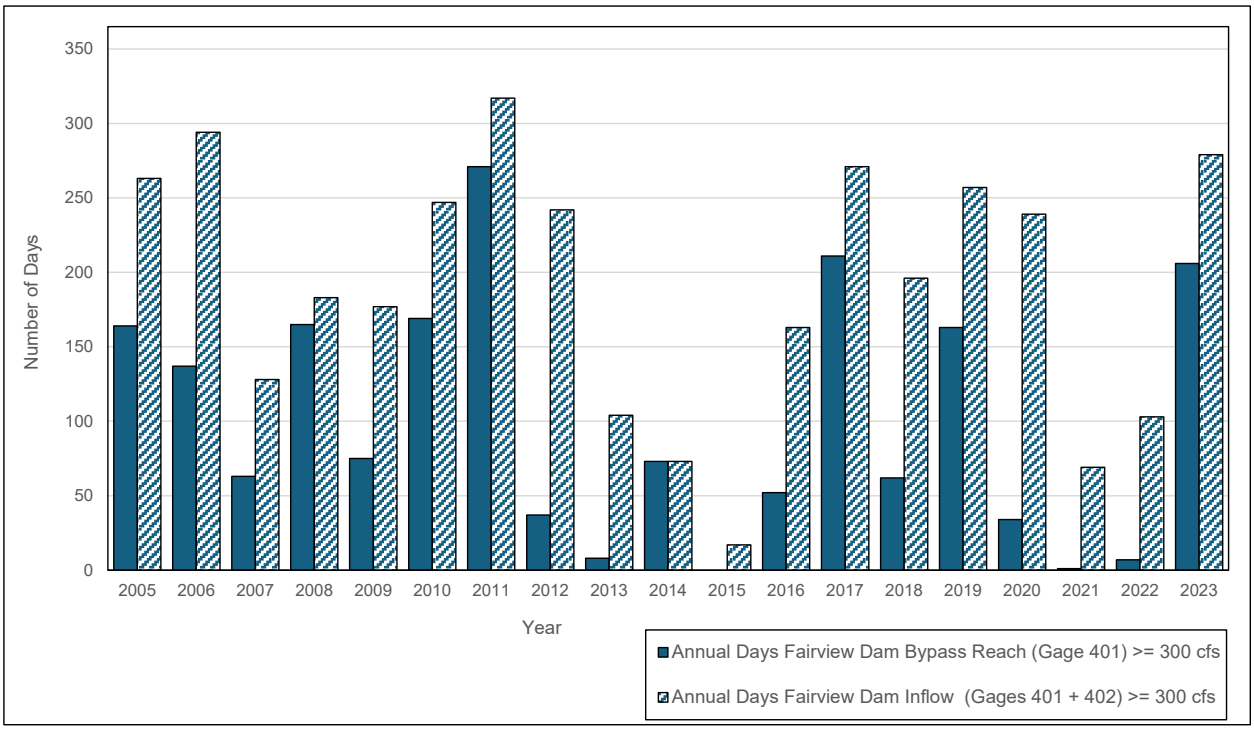

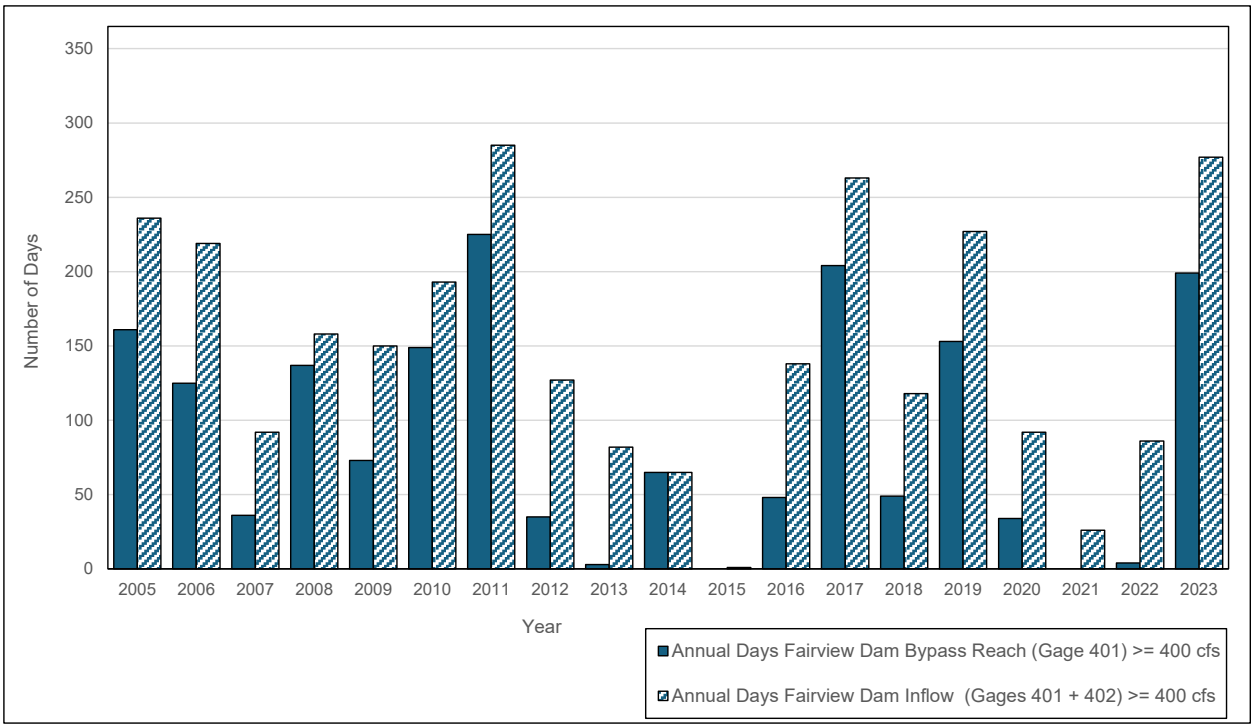

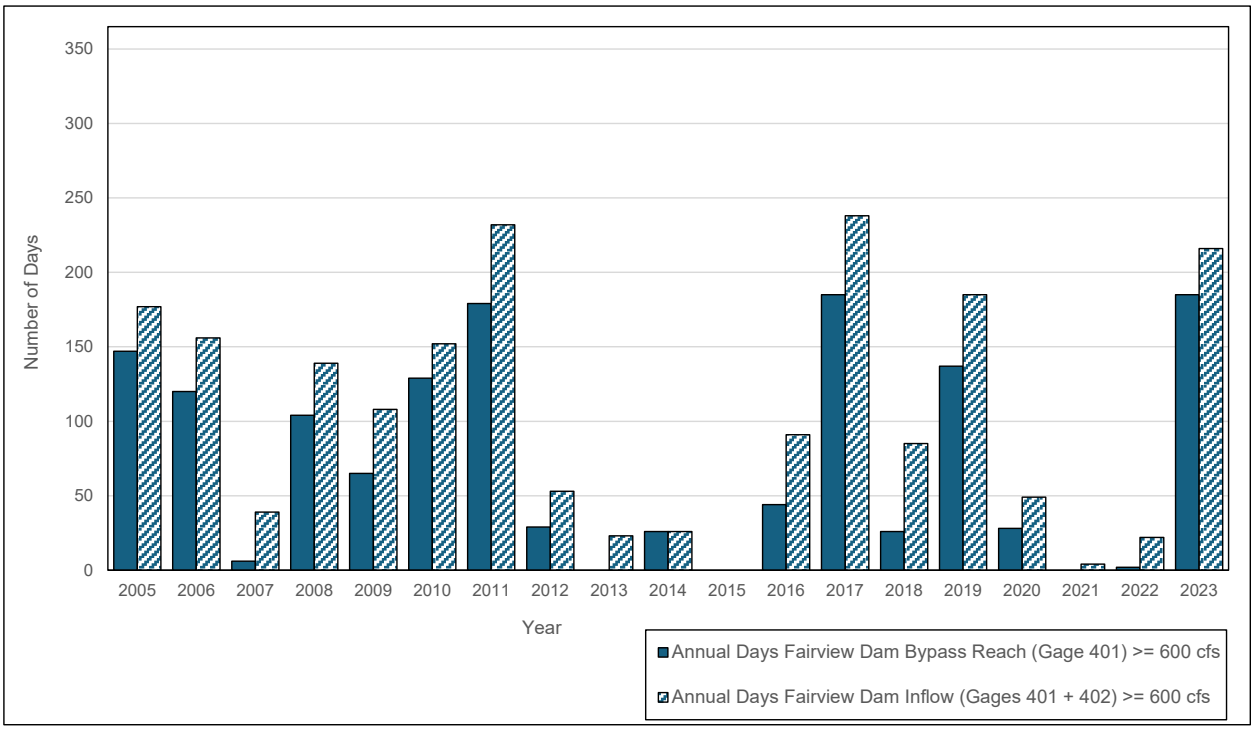

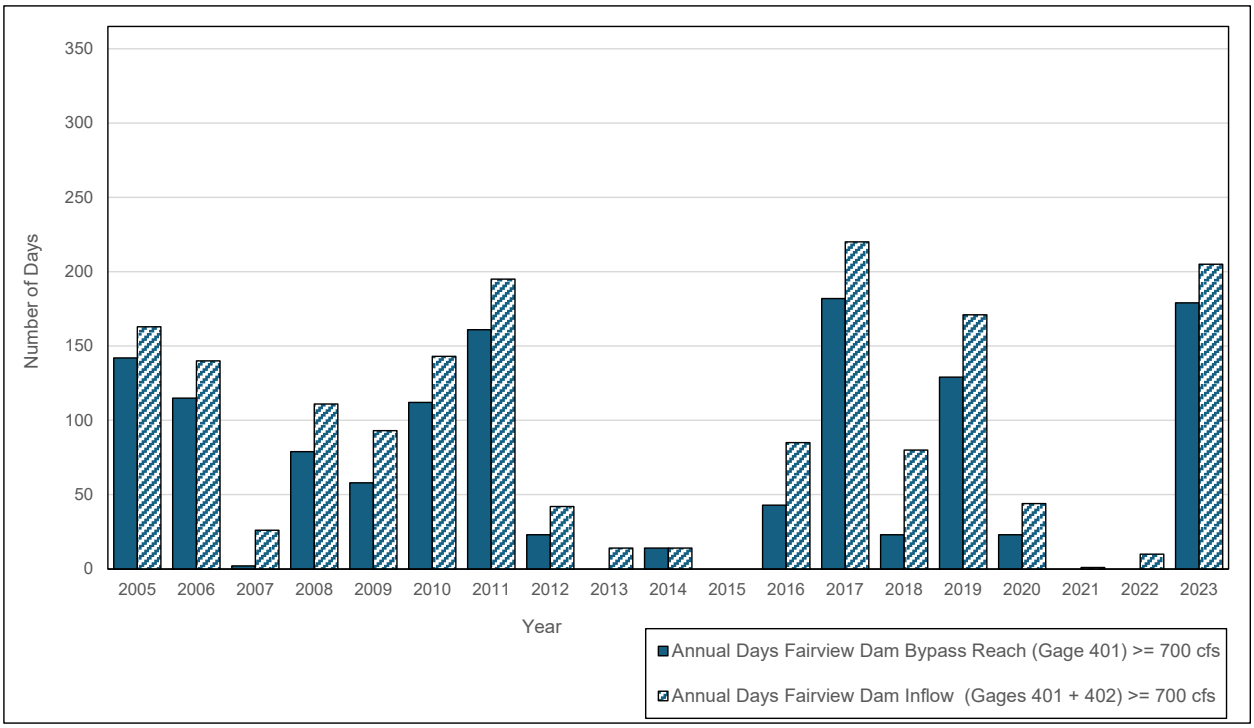

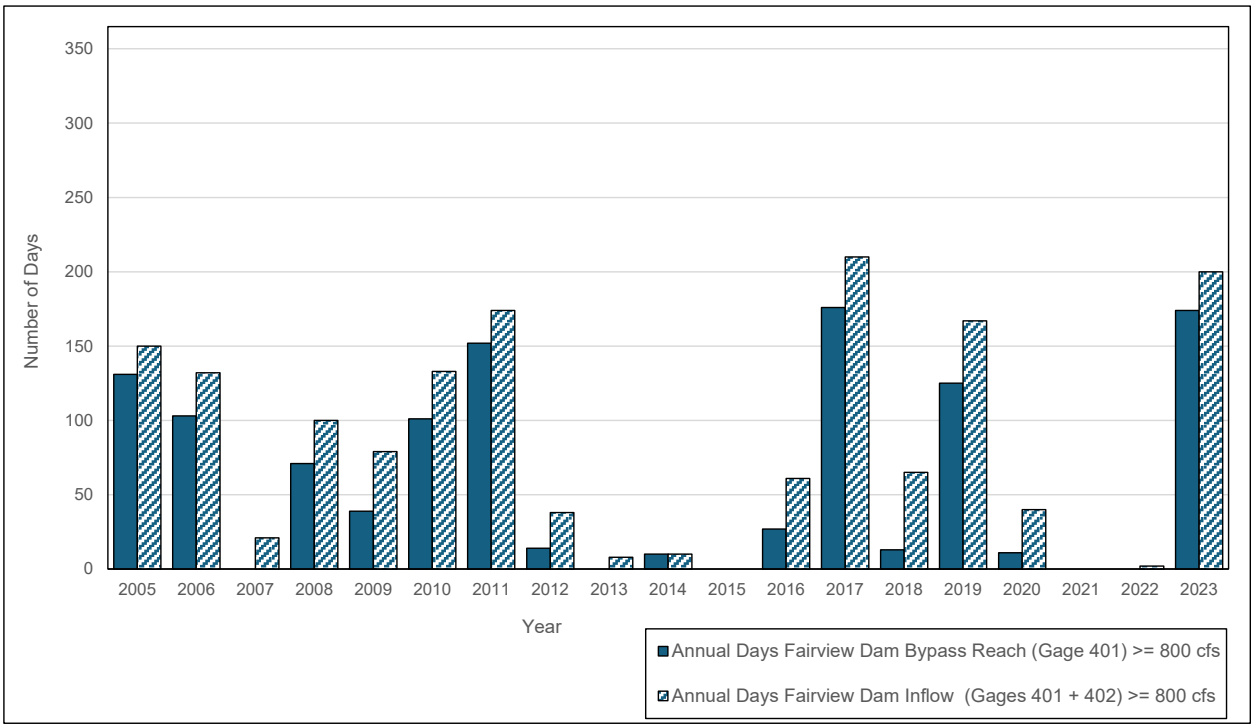

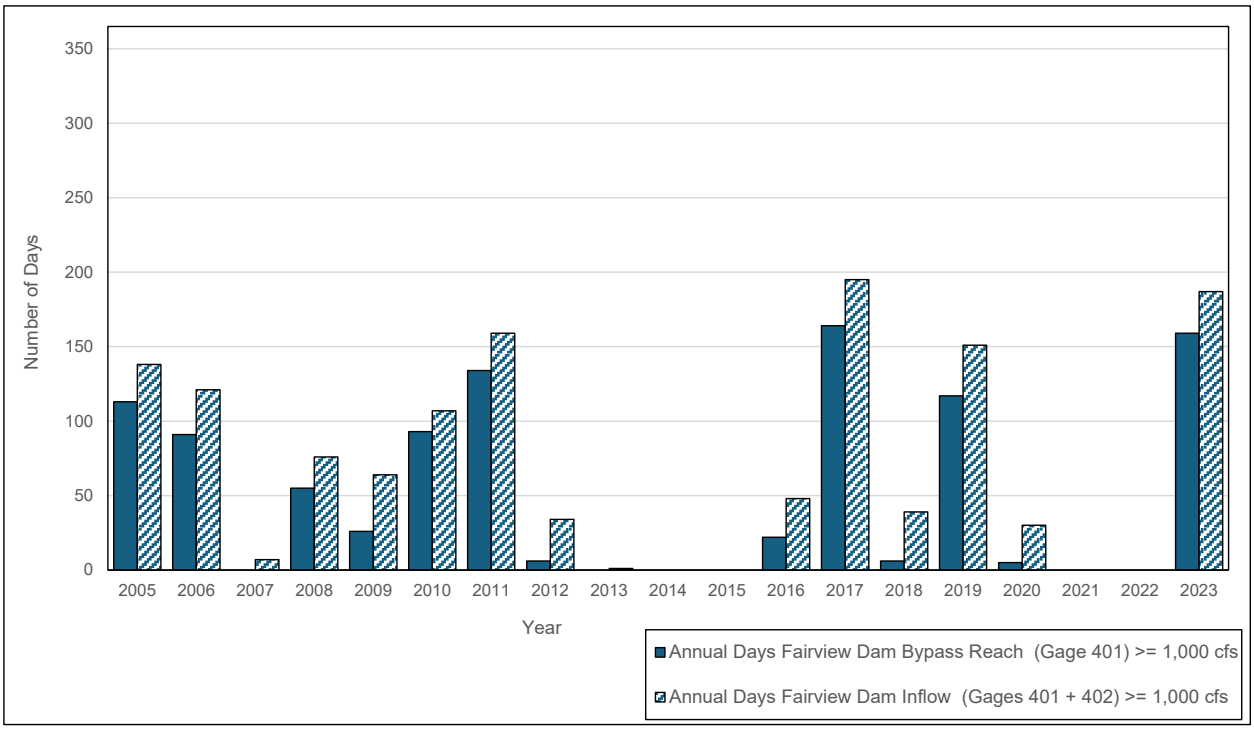

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 200cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 200 cfs**
2005	13	0	27	30	31	30	31	6	0	11	10	0	**189**
2006	9	1	6	30	31	30	31	2	0	17	27	1	**185**
2007	10	28	31	12	21	2	0	0	0	11	0	0	**115**
2008	26	29	31	30	31	30	20	0	0	0	0	4	**201**
2009	3	0	0	16	31	30	5	0	0	0	0	0	**85**
2010	20	5	27	30	31	30	31	7	0	18	30	29	**258**
2011	31	28	31	30	31	30	31	18	6	30	30	31	**327**
2012	1	0	0	12	25	1	0	2	0	0	0	0	**41**
2013	0	4	7	2	7	0	1	0	0	0	12	21	**54**
2014	0	2	28	30	31	28	0	12	0	0	0	0	**131**
2015	0	0	0	0	0	0	0	0	0	0	0	1	**1**
2016	0	0	1	15	27	26	0	0	0	0	0	0	**69**
2017	21	26	31	30	31	30	31	16	1	0	0	2	**219**
2018	0	0	5	24	31	10	7	0	0	0	1	0	**78**
2019	2	4	30	30	31	30	31	11	3	0	1	0	**173**
2020	0	0	0	7	31	2	0	0	0	0	0	0	**40**
2021	0	5	26	0	0	0	0	0	0	0	0	0	**31**
2022	0	0	0	3	5	0	0	13	0	1	0	1	**23**
2023	30	15	22	30	31	30	31	31	16	0	2	4	**242**
Total	**166**	**147**	**303**	**361**	**457**	**339**	**250**	**118**	**26**	**88**	**113**	**94**	**2,462**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 200cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 200 cfs**
2005	30	28	31	30	31	30	31	31	30	11	15	14	**312**
2006	31	28	31	30	31	30	31	31	30	31	30	31	**365**
2007	28	28	31	30	31	30	4	0	0	31	30	31	**274**
2008	26	29	31	30	31	30	31	20	0	0	0	4	**232**
2009	31	28	31	30	31	30	31	20	0	0	28	14	**274**
2010	31	28	31	30	31	30	31	31	30	18	30	29	**350**
2011	31	28	31	30	31	30	31	31	30	31	30	31	**365**
2012	31	29	31	30	31	30	22	7	0	31	30	31	**303**
2013*	27	28	31	30	31	30	9	1	0	0	12	27	**226**
2014	0	2	28	30	31	28	0	12	0	0	0	0	**131**
2015	0	19	8	14	31	19	14	0	0	0	0	1	**106**
2016	12	29	31	30	31	30	28	0	0	0	0	3	**194**
2017	29	28	31	30	31	30	31	31	30	1	0	9	**281**
2018	31	28	31	30	31	30	31	22	0	31	30	31	**326**
2019	29	28	31	30	31	30	31	31	30	0	2	30	**303**
2020	31	29	31	30	31	30	26	0	0	31	30	31	**300**
2021	1	27	28	30	31	17	0	0	0	0	0	0	**134**
2022	31	28	31	30	31	30	4	13	0	1	0	10	**209**
2023	31	28	31	30	31	30	31	31	30	0	2	30	**305**
Total	**461**	**500**	**560**	**554**	**589**	**544**	**417**	**312**	**210**	**217**	**269**	**357**	**4,990**

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 300 cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 300 cfs**
2005	10	0	26	30	31	30	31	5	0	1	0	0	**164**
2006	6	1	4	30	31	30	31	0	0	3	0	1	**137**
2007	0	7	29	10	15	0	0	0	0	2	0	0	**63**
2008	4	24	30	30	31	30	15	0	0	0	0	1	**165**
2009	0	0	0	11	31	30	3	0	0	0	0	0	**75**
2010	1	3	17	30	31	30	31	3	0	18	0	5	**169**
2011	31	23	30	30	31	30	31	15	6	4	9	31	**271**
2012	1	0	0	12	24	0	0	0	0	0	0	0	**37**
2013	0	0	1	1	4	0	0	0	0	0	0	2	**8**
2014	0	0	0	22	31	16	0	4	0	0	0	0	**73**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	8	22	22	0	0	0	0	0	0	**52**
2017	18	25	31	30	31	30	31	12	1	0	0	2	**211**
2018	0	0	3	19	29	7	4	0	0	0	0	0	**62**
2019	1	3	27	30	31	30	31	9	1	0	0	0	**163**
2020	0	0	0	6	28	0	0	0	0	0	0	0	**34**
2021	0	0	1	0	0	0	0	0	0	0	0	0	**1**
2022	0	0	0	0	1	0	0	5	0	0	0	1	**7**
2023	18	1	22	30	31	30	31	31	10	0	0	2	**206**
Total	**90**	**87**	**221**	**329**	**433**	**315**	**239**	**84**	**18**	**28**	**9**	**45**	**1,898**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 300 cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 300 cfs**
2005	25	28	31	30	31	30	31	31	25	1	0	0	**263**
2006	31	28	31	30	31	30	31	31	16	14	0	21	**294**
2007	1	7	30	30	31	23	0	0	0	4	1	1	**128**
2008	4	24	31	30	31	30	31	1	0	0	0	1	**183**
2009	7	14	31	30	31	30	31	1	0	0	2	0	**177**
2010	12	28	31	30	31	30	31	31	0	18	0	5	**247**
2011	31	28	31	30	31	30	31	31	30	4	9	31	**317**
2012	11	29	31	30	31	27	0	0	0	31	30	22	**242**
2013	5	0	19	30	31	15	1	0	0	0	0	3	**104**
2014	0	0	0	22	31	16	0	4	0	0	0	0	**73**
2015	0	2	0	0	9	3	3	0	0	0	0	0	**17**
2016	2	23	31	30	31	30	15	0	0	0	0	1	**163**
2017	27	28	31	30	31	30	31	31	30	0	0	2	**271**
2018	9	0	21	30	31	30	30	6	0	21	14	4	**196**
2019	15	28	31	30	31	30	31	31	30	0	0	0	**257**
2020	29	28	31	30	31	30	5	0	0	22	2	31	**239**
2021	0	0	1	29	31	8	0	0	0	0	0	0	**69**
2022	0	1	11	30	31	22	0	6	0	0	0	2	**103**
2023	31	28	31	30	31	30	31	31	30	0	0	6	**279**
Total	**240**	**324**	**454**	**531**	**567**	**474**	**333**	**235**	**161**	**115**	**58**	**130**	**3,622**

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 400cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 400 cfs**
2005	10	0	26	30	31	30	31	2	0	1	0	0	**161**
2006	3	1	0	29	31	30	30	0	0	0	0	1	**125**
2007	0	1	18	7	10	0	0	0	0	0	0	0	**36**
2008	2	10	24	30	31	30	9	0	0	0	0	1	**137**
2009	0	0	0	11	31	30	1	0	0	0	0	0	**73**
2010	0	1	15	30	31	30	31	0	0	10	0	1	**149**
2011	31	9	29	30	31	30	31	11	5	1	0	17	**225**
2012	1	0	0	11	23	0	0	0	0	0	0	0	**35**
2013*	0	0	0	1	1	0	0	0	0	0	0	1	**3**
2014	0	0	0	19	31	13	0	2	0	0	0	0	**65**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	5	22	21	0	0	0	0	0	0	**48**
2017	14	25	31	30	31	30	31	10	1	0	0	1	**204**
2018	0	0	3	17	24	4	1	0	0	0	0	0	**49**
2019	1	3	23	30	31	30	31	4	0	0	0	0	**153**
2020	0	0	0	6	28	0	0	0	0	0	0	0	**34**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	0	0	0	0	3	0	0	0	1	**4**
2023	16	0	22	30	31	30	31	31	6	0	0	2	**199**
Total	**78**	**50**	**191**	**316**	**418**	**308**	**227**	**63**	**12**	**12**	**0**	**25**	**1,700**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 400cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 400 cfs**
2005	24	27	31	30	31	30	31	28	3	1	0	0	**236**
2006	20	19	31	30	31	30	31	23	0	0	0	4	**219**
2007	0	1	19	28	31	13	0	0	0	0	0	0	**92**
2008	2	10	31	30	31	30	23	0	0	0	0	1	**158**
2009	3	6	26	30	31	30	23	0	0	0	1	0	**150**
2010	0	15	31	30	31	30	31	14	0	10	0	1	**193**
2011	31	28	31	30	31	30	31	31	24	1	0	17	**285**
2012	5	0	16	30	31	19	0	0	0	20	6	0	**127**
2013*	1	0	8	30	31	11	0	0	0	0	0	1	**82**
2014	0	0	0	19	31	13	0	2	0	0	0	0	**65**
2015	0	0	0	0	0	0	1	0	0	0	0	0	**1**
2016	1	5	31	30	31	30	10	0	0	0	0	0	**138**
2017	27	28	31	30	31	30	31	31	23	0	0	1	**263**
2018	1	0	12	30	31	29	11	3	0	0	1	0	**118**
2019	5	25	31	30	31	30	31	31	13	0	0	0	**227**
2020	0	0	0	25	31	29	0	0	0	0	0	7	**92**
2021	0	0	0	7	19	0	0	0	0	0	0	0	**26**
2022	0	0	8	30	31	13	0	3	0	0	0	1	**86**
2023	31	28	31	30	31	30	31	31	30	0	0	4	**277**
Total	**151**	**192**	**368**	**499**	**546**	**427**	**285**	**197**	**93**	**32**	**8**	**37**	**2,835**

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 600cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 600 cfs**
2005	6	0	25	26	31	30	28	1	0	0	0	0	**147**
2006	1	1	0	27	31	30	29	0	0	0	0	1	**120**
2007	0	0	1	3	2	0	0	0	0	0	0	0	**6**
2008	1	5	16	20	31	30	1	0	0	0	0	0	**104**
2009	0	0	0	8	31	26	0	0	0	0	0	0	**65**
2010	0	0	9	26	31	30	27	0	0	6	0	0	**129**
2011	14	0	22	30	31	30	31	7	0	0	0	14	**179**
2012	1	0	0	10	18	0	0	0	0	0	0	0	**29**
2013*	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2014	0	0	0	4	22	0	0	0	0	0	0	0	**26**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	3	21	20	0	0	0	0	0	0	**44**
2017	10	23	22	30	31	30	31	7	0	0	0	1	**185**
2018	0	0	2	14	8	2	0	0	0	0	0	0	**26**
2019	1	2	11	30	31	30	31	1	0	0	0	0	**137**
2020	0	0	0	3	25	0	0	0	0	0	0	0	**28**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	0	0	0	0	1	0	0	0	1	**2**
2023	10	0	22	30	31	30	31	29	1	0	0	1	**185**
Total	**44**	**31**	**130**	**264**	**375**	**288**	**209**	**46**	**1**	**6**	**0**	**18**	**1,412**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 600cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 600 cfs**
2005	10	4	26	30	31	30	31	15	0	0	0	0	**177**
2006	7	1	18	30	31	30	31	7	0	0	0	1	**156**
2007	0	0	2	7	28	2	0	0	0	0	0	0	**39**
2008	1	5	27	30	31	30	15	0	0	0	0	0	**139**
2009	0	1	8	30	31	30	8	0	0	0	0	0	**108**
2010	0	4	17	30	31	30	31	3	0	6	0	0	**152**
2011	17	18	31	30	31	30	31	30	0	0	0	14	**232**
2012	1	0	0	16	29	5	0	0	0	2	0	0	**53**
2013*	0	0	0	8	15	0	0	0	0	0	0	0	**23**
2014	0	0	0	4	22	0	0	0	0	0	0	0	**26**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	1	26	31	30	3	0	0	0	0	0	**91**
2017	27	28	31	30	31	30	31	26	3	0	0	1	**238**
2018	0	0	7	30	31	17	0	0	0	0	0	0	**85**
2019	1	8	31	30	31	30	31	21	2	0	0	0	**185**
2020	0	0	0	10	31	8	0	0	0	0	0	0	**49**
2021	0	0	0	0	4	0	0	0	0	0	0	0	**4**
2022	0	0	0	5	15	0	0	1	0	0	0	1	**22**
2023	14	1	22	30	31	30	31	31	25	0	0	1	**216**
Total	**78**	**70**	**221**	**376**	**485**	**332**	**243**	**134**	**30**	**8**	**0**	**18**	**1,995**

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 700cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 700 cfs**
2005	5	0	25	24	31	30	26	1	0	0	0	0	**142**
2006	1	1	0	27	31	30	25	0	0	0	0	0	**115**
2007	0	0	0	0	2	0	0	0	0	0	0	0	**2**
2008	1	1	0	18	31	28	0	0	0	0	0	0	**79**
2009	0	0	0	4	31	23	0	0	0	0	0	0	**58**
2010	0	0	2	21	31	30	23	0	0	5	0	0	**112**
2011	2	0	20	30	31	30	31	6	0	0	0	11	**161**
2012	0	0	0	10	13	0	0	0	0	0	0	0	**23**
2013*	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2014	0	0	0	0	14	0	0	0	0	0	0	0	**14**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	3	20	20	0	0	0	0	0	0	**43**
2017	9	22	22	30	31	30	31	6	0	0	0	1	**182**
2018	0	0	2	11	8	2	0	0	0	0	0	0	**23**
2019	1	2	5	30	31	30	30	0	0	0	0	0	**129**
2020	0	0	0	2	21	0	0	0	0	0	0	0	**23**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2023	7	0	22	30	31	30	31	28	0	0	0	0	**179**
Total	**26**	**26**	**98**	**240**	**357**	**283**	**197**	**41**	**0**	**5**	**0**	**12**	**1,285**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 700cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 700 cfs**
2005	6	1	25	30	31	30	31	9	0	0	0	0	**163**
2006	3	1	9	30	31	30	31	4	0	0	0	1	**140**
2007	0	0	0	2	24	0	0	0	0	0	0	0	**26**
2008	1	1	13	30	31	30	5	0	0	0	0	0	**111**
2009	0	0	4	23	31	30	5	0	0	0	0	0	**93**
2010	0	1	15	30	31	30	31	0	0	5	0	0	**143**
2011	10	0	29	30	31	30	31	23	0	0	0	11	**195**
2012	1	0	0	14	27	0	0	0	0	0	0	0	**42**
2013*	0	0	0	4	10	0	0	0	0	0	0	0	**14**
2014	0	0	0	0	14	0	0	0	0	0	0	0	**14**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	1	25	28	30	1	0	0	0	0	0	**85**
2017	20	28	31	30	31	30	31	18	0	0	0	1	**220**
2018	0	0	4	30	31	15	0	0	0	0	0	0	**80**
2019	1	4	30	30	31	30	31	14	0	0	0	0	**171**
2020	0	0	0	7	31	6	0	0	0	0	0	0	**44**
2021	0	0	0	0	1	0	0	0	0	0	0	0	**1**
2022	0	0	0	3	7	0	0	0	0	0	0	0	**10**
2023	11	0	22	30	31	30	31	31	19	0	0	0	**205**
Total	**53**	**36**	**183**	**348**	**452**	**321**	**228**	**99**	**19**	**5**	**0**	**13**	**1,757**

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 800cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 800 cfs**
2005	4	0	20	21	31	30	25	0	0	0	0	0	**131**
2006	1	1	0	25	31	30	15	0	0	0	0	0	**103**
2007	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2008	0	1	0	12	31	27	0	0	0	0	0	0	**71**
2009	0	0	0	1	30	8	0	0	0	0	0	0	**39**
2010	0	0	2	14	31	30	22	0	0	2	0	0	**101**
2011	0	0	15	30	31	30	31	5	0	0	0	10	**152**
2012	0	0	0	8	6	0	0	0	0	0	0	0	**14**
2013*	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2014	0	0	0	0	10	0	0	0	0	0	0	0	**10**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	0	11	16	0	0	0	0	0	0	**27**
2017	9	21	20	30	31	30	31	3	0	0	0	1	**176**
2018	0	0	2	7	4	0	0	0	0	0	0	0	**13**
2019	1	1	4	29	31	30	29	0	0	0	0	0	**125**
2020	0	0	0	2	9	0	0	0	0	0	0	0	**11**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2023	4	0	22	30	31	30	31	26	0	0	0	0	**174**
Total	**19**	**24**	**85**	**209**	**318**	**261**	**184**	**34**	**0**	**2**	**0**	**11**	**1,147**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 800cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 800 cfs**
2005	4	0	22	30	31	30	31	2	0	0	0	0	**150**
2006	2	1	5	30	31	30	31	1	0	0	0	1	**132**
2007	0	0	0	1	20	0	0	0	0	0	0	0	**21**
2008	0	1	9	27	31	30	2	0	0	0	0	0	**100**
2009	0	0	0	14	31	30	4	0	0	0	0	0	**79**
2010	0	0	13	29	31	30	28	0	0	2	0	0	**133**
2011	0	0	25	30	31	30	31	17	0	0	0	10	**174**
2012	1	0	0	12	25	0	0	0	0	0	0	0	**38**
2013*	0	0	0	2	6	0	0	0	0	0	0	0	**8**
2014	0	0	0	0	10	0	0	0	0	0	0	0	**10**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	1	11	24	25	0	0	0	0	0	0	**61**
2017	17	26	31	30	31	30	31	13	0	0	0	1	**210**
2018	0	0	3	22	31	9	0	0	0	0	0	0	**65**
2019	1	4	30	30	31	30	31	10	0	0	0	0	**167**
2020	0	0	0	7	31	2	0	0	0	0	0	0	**40**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	1	1	0	0	0	0	0	0	0	**2**
2023	10	0	22	30	31	30	31	31	15	0	0	0	**200**
Total	**35**	**32**	**161**	**306**	**427**	**306**	**220**	**74**	**15**	**2**	**0**	**12**	**1,590**

Count of Days on Fairview Dam Bypass Reach where Gage 401 >= 1000cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Bypass Reach (Gage 401) >= 1,000 cfs**
2005	3	0	14	16	31	30	19	0	0	0	0	0	**113**
2006	0	1	0	17	31	30	12	0	0	0	0	0	**91**
2007	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2008	0	0	0	5	27	23	0	0	0	0	0	0	**55**
2009	0	0	0	0	25	1	0	0	0	0	0	0	**26**
2010	0	0	0	10	31	30	21	0	0	1	0	0	**93**
2011	0	0	3	30	31	30	31	3	0	0	0	6	**134**
2012	0	0	0	3	3	0	0	0	0	0	0	0	**6**
2013*	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2014	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	0	10	12	0	0	0	0	0	0	**22**
2017	6	19	19	30	31	30	28	0	0	0	0	1	**164**
2018	0	0	1	5	0	0	0	0	0	0	0	0	**6**
2019	1	1	3	23	31	30	28	0	0	0	0	0	**117**
2020	0	0	0	1	4	0	0	0	0	0	0	0	**5**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2023	3	0	22	25	31	30	31	17	0	0	0	0	**159**
Total	**13**	**21**	**62**	**165**	**286**	**246**	**170**	**20**	**0**	**1**	**0**	**7**	**991**

Count of Days of Fairview Dam inflow where Gage 401 + 402 >= 1000cfs from 10 AM to 5 PM													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual Days Fairview Dam Inflow (Gages 401 + 402) >= 1,000 cfs**
2005	3	0	15	30	31	30	29	0	0	0	0	0	**138**
2006	1	1	0	28	31	30	30	0	0	0	0	0	**121**
2007	0	0	0	0	7	0	0	0	0	0	0	0	**7**
2008	0	0	0	18	31	27	0	0	0	0	0	0	**76**
2009	0	0	0	10	31	23	0	0	0	0	0	0	**64**
2010	0	0	3	19	31	30	23	0	0	1	0	0	**107**
2011	0	0	20	30	31	30	31	11	0	0	0	6	**159**
2012	0	0	0	11	23	0	0	0	0	0	0	0	**34**
2013*	0	0	0	1	0	0	0	0	0	0	0	0	**1**
2014	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2015	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2016	0	0	0	5	22	21	0	0	0	0	0	0	**48**
2017	10	24	30	30	31	30	31	8	0	0	0	1	**195**
2018	0	0	2	17	17	3	0	0	0	0	0	0	**39**
2019	1	3	22	30	31	30	31	3	0	0	0	0	**151**
2020	0	0	0	5	25	0	0	0	0	0	0	0	**30**
2021	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2022	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2023	8	0	22	30	31	30	31	31	4	0	0	0	**187**
Total	**23**	**28**	**114**	**264**	**373**	**284**	**206**	**53**	**4**	**1**	**0**	**7**	**1,357**