MEETING SUMMARY*
BISHOP CREEK HYDROELECTRIC PROJECT
TECHNICAL WORKING GROUP UPDATES
FERC PROJECT NO. 1394

DATE: April 27, 2022, 9:00 a.m. - 1:00 p.m.
LOCATION: Conference Call/Webinar
TOPICS: Aquatic, Sediment-Geomorphology, Botanical, & Wildlife Resources

**These meeting notes are documentation of general discussions from the meeting held on the above-noted date. These notes are not a verbatim account of proceedings, are not meeting minutes, and do not represent any final decisions or official documentation for the Project or participating agencies.*

1. OBJECTIVES

- Understand and prioritize agencies' data requests
- Clarify monitoring goals
- Explain SCE's position on operational changes

2. ATTENDEES

Relicensing Team Members
Martin Ostendorf, SCE
Matthew Woodhall, SCE
Seth Carr, SCE
Brandon Kulik, Kleinschmidt
Bret Hoffman, Kleinschmidt
Finlay Anderson, Kleinschmidt
Gabriel Martin, Kleinschmidt
Matthew Harper, Kleinschmidt
Edith Read, E Read and Associates, Inc.
Michael Donovan, Psomas

Facilitation Team
Mike Harty, Kearns & West
Lindsay Tryba, Kearns & West

Technical Working Group Members & Interested Parties
Alyssa Marquez, CDFW
Beth Lawson, CDFW
Sheila Irons, USFS
Tristan Leong, USFS
Dannon Dirgo, USFS
Blake Engelhardt, USFS
Nathan Sill, USFS
Savannah Downey, SWRCB
Rajaa Hassan, SWRCB

3. COMPILED ACTION ITEMS

- **Agencies** will caucus to define their data requests. Ideally, before the 5/3 PM&E meeting.
    - Then, **SCE** will review agencies' data requests.
- **Alyssa Marquez** (CDFW) will distribute the Fish and Game stocking data that includes past stocking dates and quantities.
- **Bret Hoffman** (Kleinschmidt) will review data with **Beth Lawson** (CDFW) to determine the appropriate data set for examining recurrence intervals for different water year-types.
- **Relicensing Team** will distribute the following materials:
    - 4/27 PM&E slides
    - Edith Read's botanical slides
    - Bishop WUA spreadsheets
- **Kleinschmidt** will coordinate with TWGs to schedule a meeting (focusing on remaining flow and sediment questions) during the week of 5/9.
    - **SCE** will meet with agencies individually to discuss concerns if needed.

4. INTRODUCTION

This Protection, Mitigation, and Enhancement (PM&E) Measures meeting provided an opportunity to continue the conversation on the Federal Regulatory Energy Commission (FERC) Scoping Document (SD1) and subsequent Technical Working Group (TWG) discussions, to review Southern California Edison's (SCE) management plans and overall goals, and to identify key areas of uncertainty among interested parties. This PM&E meeting discussed Aquatic, Botanical, and Sediment-Geomorphology resource areas; the relevant Bishop Creek Relicensing Team ("Team") resource-area leads addressed the plans and overall goals related to each resource area.

Finlay Anderson, the Team Lead, provided an overview of the proposed approach to discussing PM&Es and the timeline. Finlay explained that the DLA was filed at the end of January 2022. The FERC regulatory deadline for comments through the Integrated Licensing Process (ILP) is May 2, which is roughly 60 days before the FLA is due. The relicensing effort is in the comment phase, and SCE wants to be proactive in receiving and responding to comments before the comment period ends. Thus, SCE encouraged Technical Working Group (TWG) members to submit any comments now.

The presentation slides are available on the project website and are not summarized here. The summary below identifies the resource goals of each plan as identified by the Team resource-area lead and focuses on questions and comments from participants, followed by any action items that resulted from the conversation (all of which are compiled in Section 3.0 above).

5. PLANS AND OVERALL GOALS

The Resource Team Leads provided an overview of the plans and overall goals for the following topics: riparian monitoring, sediment supplement and monitoring, geomorphic and peak flows, management for recreational and native fisheries, minimum instream flows, and reach-by-reach goals and objectives. The discussion below captures SCE’s update on the status and focus of resource plans and participant discussion; please reference the slides for greater detail.

Riparian Monitoring:

SCE update on status and focus of the Riparian Monitoring Plan:

- SCE continues to believe Riparian Communities are thriving and do not exhibit Project effects.
- SCE suggests desired conditions should focus on vertical structure and general riparian rather than a focus on black cottonwood.
- Management goals suggest opportunities in lower reaches:
    - Follow up to 4/22 call on botanical [agencies to provide additional info request].
    - Concerns about monitoring plan.

Questions and comments from participants included:

- Comment (C) (USFS): In general, USFS agrees with the riparian monitoring goal; however, it is difficult to establish what "thrive" means, because the qualitative data might not exist at this point. USFS agrees that today's monitoring goals are a response to the original license. USFS wants any changes in flows to be interconnected with riparian improvements. Additionally, USFS would like monitoring to focus on what happens to riparian habitat as in response to changes in flows (as opposed to monitoring for the sake of monitoring). For example, data collection could look at the appropriate conditions in relation to new sediment. The monitoring efforts should show SCE and the agencies how to manage for improvements, but they must have clear goals about what information to gather from monitoring efforts.
- (C) (CDFW): CDFW agrees with USFS that changes to flows should be interconnected with riparian monitoring.

Sediment Supplementation and Monitoring Plan:

Next steps to advance Sediment Supplementation and Monitoring Plan:

- Collecting SWRCB input / Lahontan Plan
    - Discuss water quality (WQ) concerns (turbidity)
- Work session with LADWP
    - Discuss concerns over impacts to LADWP system

Questions and comments from participants included:

- (C) (USFS): Could we work to make this goal multifaceted? For example, in addition to improving cottonwoods and a diverse system, we should also focus on issues like maintaining operational functionality and allowing sediment to pass through systems as it would in a natural system.
    - (R) (Team): Yes, the Team agrees and is seeking operational flexibility that can mimic a natural flow. The Team is interested in using higher water years to move sediment downstream and improve riparian habitat; they recognize the need to balance multiple agencies' needs.
- (Q) (USFS): Can you share LADWP's concerns and desires?
    - (R) (Team): LADWP's main concern is ensuring that they can manage sediment flows throughout their system. For example, once water leaves Powerhouse 6, it goes through complex aqueducts, and LADWP needs to understand how to manage the sediment through that system.

        - (Q) (USFS): Would a high water year create the same issues?
            - (R) (Team): We are planning to discuss this type of question with LADWP's operations team tomorrow to better understand their needs and concerns.

Geomorphic and Peak Flows:

SCE shared their key takeaways related to a geomorphic and peak flow plan:

- SCE is not seeing Project effects but appreciates management objective.
- Objective can be best accomplished opportunistically during wet years.
- SCE has identified flows that are suitable for mobilizing sediment and would be operationally viable (I.e., not preclude compliance with Chandler decree or other constraints).

There were no questions or comments from participants.

Management for Recreational and Native Fish

Management for Recreation-Related Fish

- If the focus is on fishing/angler experience,
    - Size/abundance relatively insensitive to flows; therefore, stocking is an obvious mechanism for meeting need.
    - SCE would propose % sharing similar to model at Ellery Lake.

Management for Native Fish

- Native fish management in lower reaches achievable by shifting flows.
- SCE troubled by lack of plans for introduction.
    - Time horizon/flow requirement.

Questions and comments from participants included:

- (C) (CDFW): We need Nick Buckmaster's comments on native fish management.
    - (Q) (Team): Is CDFW drafting a plan?
        - (R) (CDFW): Yes, it is in the works now, but we are waiting for Nick Buckmaster to return from the field to provide comments.
- (Q) (USFS): This is a question for CDFW. In the Rec 1 creel data, the dates were not exact. Does CDFW keep an exact record of when fish are stocked?
    - (R) (CDFW): Yes, I believe so. I can try to locate and find stocking data that includes stocking dates and quantities.
        - [**Action**]: Alyssa Marquez (CDFW) will locate and distribute Fish and Game stocking data that includes stocking dates and quantities.

Minimum Instream Flows

SCE Plans

- In general, existing flows appear to be consistent with need, given other operational constraints.

- Adjustments can be made to shift flows from reaches 3 & 4 to lower reaches to address ecological and native fish management objectives (note previous concerns around reintroduction).

There were no questions or comments from participants.

6. REACH-BY-REACH GOALS AND OBJECTIVES

The following section includes the discussion of goals and objectives for each reach; please reference the slides for greater detail.

Reach 10: South Fork Bishop Creek below South Lake

Bret Hoffman, Kleinschmidt, displayed a graph showing the percentage of days where the target instream flows were missed in Reaches 8 and 10.

Questions and comments from participants included:

- (Q) (USFS): Is the starting point at 8 cfs? What is the average Chandler flow requirement? And the Chandler max?
    - (R) (Team): Yes, the starting point is around 8 cfs. The Chandler decree has variable flow targets throughout the year; this graph shows the average and maximum flows achieved in the system according to the Chandler Decree.
- (Q) (USFS): In circumstances where the inflow is less than the minimum instream flows, how will you meet those requirements?
    - (R) (Team): The Team continuously communicates with LADWP to alert them when the Project is going to the minimum instream flow. The Project may reduce the storage of the reservoir to support instream flows if this occurs. By April, the reservoirs are close to empty, so that the reservoirs can fill with spring/summer runoff.
- (Q) (USFS): How would a defined minimum instream flow change the operation? Is it a target or strict minimum? What is the level of flexibility?
    - (R) (Team): The instream flows meet operation needs as well as the Chandler decree. We would use inflows to meet requirements if nothing else is available.
- (C) (USFS): We can continue to explore this issue within the modeling discussions offline to understand how often the flows cannot be met, especially during dry years.
- (C) (CDFW): We could make some graphics that show the daily plots to show how often the minimum instream flows are not met and Operations pull water from the reservoir.
    - **Agencies** will caucus to define their data requests, ideally, before the 5/3 PM&E meeting.
        - Then, **SCE** will review agencies' data requests.

Reach 9: Below South Fork Diversion

Questions and comments from participants included:

- (Q) (USFS): Can you distribute these slides after the meeting?
    - (R) (Team): Yes.

Reach 8: Bishop Creek Below Lake Sabrina

Questions and comments from participants included:

- (Q) (CDFW): Did the spring flows of 110 cfs only occur in wet years?
    - (R) (Team): Spring flows of 110 cfs are fairly standard, and this is the time when Operations seeks to tie flows to geomorphic improvements.

Reach 7 and 6: Below Intake 2 to Powerhouse 2

There were no questions or comments from participants.

Reach 5: Bishop Creek Below Intake Number 3 Reservoir

Questions and comments from participants included:

- (Q) (CDFW): Would you have these flows in wet years? Is there an increased frequency at which we see improvements? It would be helpful to see recurrence interval graphics that show the benefit to the environment. We may also want to have a conversation about how to define a wet year.
    - (R) (Team): Yes, these flows in wet years are reasonable.
        - [**Action**]: Bret **Hoffman** (Kleinschmidt) will work with **Beth Lawson** (CDFW) to gather data on the recurrence intervals at specific reaches to understand how the modeling data could pose differences from the existing data.

Reach 4 and 3: Below Intake 4 (Powerhouse 3) and Intake 5 (Powerhouse 4)

Brandon Kulik presented the spreadsheets for the Bishop Weighted Useable Area (WUA) curves (which were already distributed in the study plans). Brandon shared that the graphic for "Reach 3 Habitat Suitability Revised for Native Species" was created following a conversation with CDFW regarding CDFW's concern for managing native species.

Questions and comments from participants included:

- (Q) (CDFW): Can you recirculate the Bishop WUA spreadsheets?
    - (R) (Team): Yes.
        - [**Action**]: Brandon Kulik will re-circulate the spreadsheets for the Bishop WUA (which were already distributed in the study plans).

Reach 2: Between Intake 5 (Power 4) and Intake 6 (Powerhouse 5)

Questions and comments from participants included:

- (C) (USFS): We should continue the dialogue regarding how to manage the redds.
- (C) (CDFW): If we need to move and clean the streams to create adequate spawning habitat, then we should consider whether mechanical disruption would be enough or if a more substantial method is needed.

Reach 1: Between Intake 6 (Powerhouse 5) and Powerhouse 6

Brandon shared that lowest that the Team could model in this reach was 6 cfs, so there is no documentation between the current MIF of 0 cfs and the proposed MIF of 2 cfs.

Questions and comments from participants included:

- (Q) (USFS): Why were you unable to model below 6 cfs?
    - (R) (Team): The channel is boney, so at flows lower than 6 cfs, the accuracy of the hydraulic model is poor.

Reach 0: Below Powerhouse 6

Questions and comments from participants included:

- (Q) (USFS): Where does LADWP's responsibility begin? Is there a screen on the canal?
    - (R) (Team): About 20 yards downstream of Powerhouse 6. The Team is not aware of any screens on this canal.

Birch Creek

There were no questions or comments from participants.

McGee Creek

There were no questions or comments from participants.

Below Green Creek Diversion

There were no questions or comments from participants.

7. BOTANICAL

Edith Read, Relicensing Team Botanical Lead, provided an overview of the black cottonwood data. See slides for graphs and further detail.

- The Team conducted a brief review of black cottonwood and riparian data from monitoring site 5, located upstream of Powerhouse 5, as well as groundwater depth data from monitoring site 3 located below Powerhouse 3. These reaches were typically dry during the growing season before implementation of the minimum instream flow program required under the existing license.
- Edith presented overlay 2014 and 2019 location data for black cottonwood and stream stage data on a geomorphic profile of one transect near the stream stage sensor, to assess site-specific flow conditions.

Questions and comments from participants included:

- (C) (USFS): To investigate future disturbances and operational effects, we will need more specific mapping of changes throughout time to quantify resource management needs and requests (I.e., to predict future needs and scenarios).
    - (R) (Team): Once the agencies caucus (see action above) and identify their primary data requests, the Team can address data and modeling requests.

- (Q) (USFS): This is helpful to look at this information. I would like to understand what is happening over the course of several seasons and water years: e.g., is the cover of *Robinia pseudoacacia* prohibiting an increase in other species?
    - (R) (Team): Once the agencies caucus (see action above) and identify their primary data requests, the Team can address data and modeling requests.
- (C) (USFS): We may be interested in changing how we want to look at data to include more graphics.
- (Q) (USFS): What is the average distance from the stream where you find riparian community?
    - (R) (Team): Roughly 10 meters. The black cottonwood plants that occur further from the stream become more dependent upon higher groundwater levels.
- (Q) (CDFW): Do you have height data for all wooded species?
    - (R) (Team): Yes, we have height data for all wooded species in the botanical study plans.
- (Q) (CDFW): Could you please distribute these slides?
    - (R) (Team): Yes.
        - [**Action**]: Relicensing Team will distribute a copy of the botanical slides that Edith Read presented to TWGs.

8. SEDIMENT MANAGEMENT PLAN

Tyler Kreider, Kleinschmidt, provided an overview of the updated sediment management plan. The plan is still being drafted, and the Relicensing Team is working with resource agencies to understand their primary concerns and objectives.

Questions and comments from participants included:

- (Q) (USFS): Are you looking at different plans than proposed before?
    - (R) (Team): The overall plan and approach is the same, but we are working to reach agreement between parties.
- (C) (SWRCB): Will sediment removal flush chemicals downstream? When was the last time that the sediment was removed from the system? Can we control the amount of sediment removed each year?
    - (R) (Team): We anticipate there will be unconsolidated sediment on the bottom because it has been about ten years since SCE flushed water through the stream. To initiate the sediment removal, we will begin the drawdown in a dry year and then use wet years to flush it down.
- (C) (CDFW): CDFW has previously worked with SWRCB to write conditions that work through a water quality control plan that allow for sediment removal.
    - (C) (Team): Yes, that is correct. Also, the Team has worked with Parker Thaler (SWRCB) over several years on sediment management plans.
- (C) (SWRCB): There may be some flexibility with SWRCB, so we are open to sediment release conversations related to the Lahontan plan.

The next Bishop Creek PM&E meeting will occur on May 3rd from 9am-1pm PDT, focusing on recreation. The Relicensing Team thanked participants for their continued engagement and adjourned the meeting.