Lee Vining Hydroelectric Project
FERC No. 1388

Welcome!

Using the chat, please write your name, organization, and where you want to go when the pandemic is over

AQUATIC RESOURCES
Technical Working Group Meeting

March 29, 2021

Safety Moment

Agenda

- Welcome & Introductions
  - Safety Moment
  - Review of February TWG notes
  - Meeting goals
- Discussion of Study Plan Requests
  - Objectives
  - Rationale, Nexus
  - Study Area
  - Methods
- Schedule, Next Steps, Action Items
  - Next TWG date(s)
  - Study Plan Titles/Outlines
  - Other action items
- Final Questions

Lee Vining Relicensing TWG Team

SCE Team

Matthew Woodhall
Project Manager

Martin Ostendorf
Senior Manager

Seth Carr
Operations Manager

Lyle Laven
Production Manager

Consultant Team

Finlay Anderson
Project Manager

Michael Harty
Facilitator

Shannon Luoma
Deputy PM

Terra Alpaugh
Facilitator

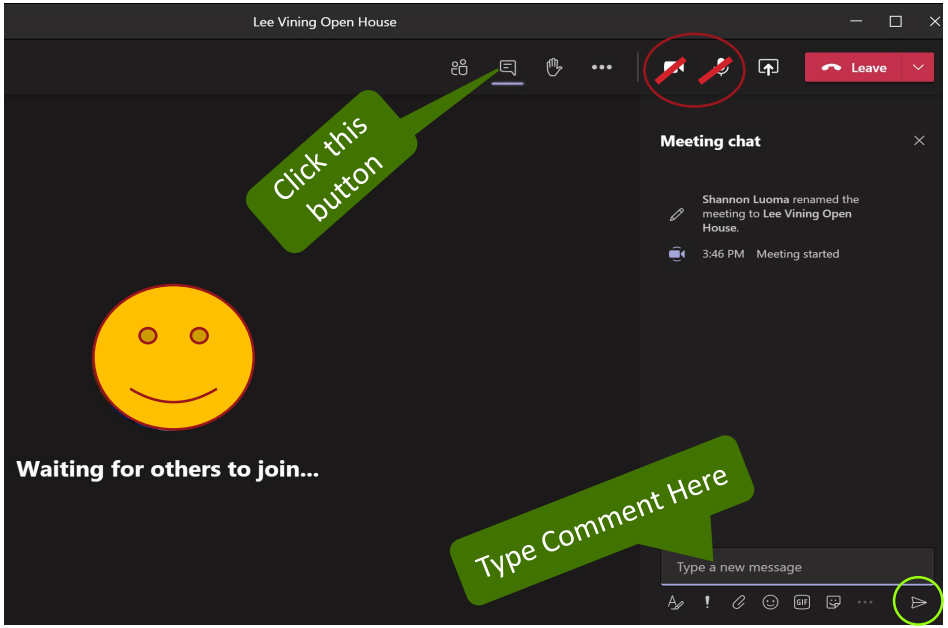
Kelly Larimer
Project Director

Heather Bowen Neff
Fish and Aquatics TWG Lead

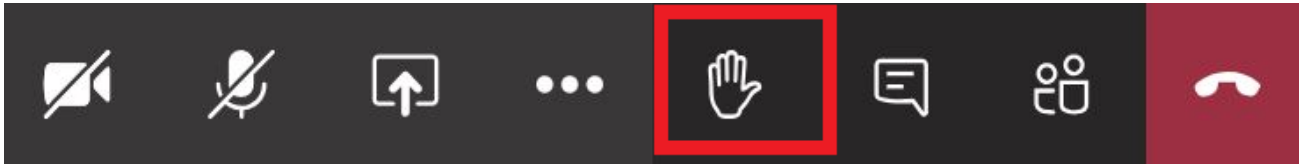
Carissa Shoemaker
TWG Coordinator

Meeting Tips and Guidelines

- Please wait to be called on and then unmute your line
  - Introduce yourself (name and affiliation) prior to speaking
- Listen and respect each other
- Stay on topic



- Ask a question by typing it into the chat box during the presentation or by using the raise your hand feature



Review of February TWG

- Study requests from CDFW and Mono Lake Committee
- Studies and interests identified:
  - **Instream Habitat Assessment** – interest in qualitative habitat mapping
  - **Operations Model** – interest in using to better understand regulatory, contractual, and physical constraints of the system as well as operational and recreation priorities
  - **Fish Distribution Baseline Study** – interest in evaluating current trout population in river and reservoir
  - **Water Quality** – focus on baseline info for the 401 certification and the NEPA/CEQA analysis
  - **Sediment and Geomorphology** – interest in understanding sediment movement through the system and any overall sediment loss
  - **Downstream Peak Flow Objectives** – interest in spill management for geomorphic goals downstream

Review of February TWG action items

Information sharing:

- Nick Buckmaster to share study of lake with high nitrogen levels.
- Greg Reis will provide a paper on *Didymo*.
- MLC will send 2 additional study requests for hydropeaking and info sharing.

Relicensing Team/SCE next steps:

- Follow up with SCE staff and MLC to understand constraints around ramping, historical operations, and any concerns about ramping rates.
- Determine whether fish survey work planned for the upcoming summer can inform the study plan effort.
- Review Mono Lake Committee's proposed study request re: downstream restoration objectives/peak flows and come to next meeting ready to discuss.
- Flesh out goals and objectives and rough methods for the studies discussed today and will plan to continue the conversation at the next meeting.

Potential Studies for Other Resource Areas

- Terrestrial and Botanical
  - General Wildlife and Rare, Threatened, and Endangered (RTE) Species
  - Botanical (RTE and invasive)
  - Assessment of Riparian Community
- Cultural and Tribal
  - Cultural study
  - Tribal study

Potential Studies for Other Resource Areas (continued)

- Recreation and Land Use
  - Recreation Use and Needs Evaluation
  - Existing Recreation Facilities Condition Assessment
  - Project Boundary and Roads

Aquatic Resources: Potential Studies

Requested by Stakeholders

- Instream flow needs assessment (Habitat Assessment and Sediment Characterization study)
- Peak flow study (partially addressed by operations model)
- Fish distribution baseline study (creek) (Stream Fish Populations study)
- Fish distribution baseline study (reservoirs) (Reservoir Fish Populations study)
- Sediment and geomorphology (Habitat Assessment and Sediment Characterization study)
- *Didymo* and other aquatic invasive species (Aquatic Invasive Plants and Algae study)
- Water quality assessment (Water Quality study)
- Benthic Macroinvertebrate Study (new since last TWG; existing information)
- Hydropower peaking operations (new since last TWG)
- Information sharing constraints (new since last TWG)

Elements Considered but Not Included

Request	Rationale for not including
Peak Flow Study to restore conditions downstream of LADWP diversion dam	**Lack of Nexus**: No clear nexus for Project operations downstream of LADWP diversion dam. However, Operations Model and the hydrology data set to support it will generally have the information needed for MLC to compare with its Synthesis Report
Water quality assessment at Hwy 120 road pull-outs and dispersed camping areas near Project reservoirs	**Lack of Nexus**: Hwy 120 is a California State Highway maintained by Caltrans; there is no nexus to Project operations or maintenance. Dispersed camping is not related to or affected by Project operations or maintenance.

Aquatic Resources: Potential Studies

Aquatic Habitat Assessment and Sediment Characterization

- Objectives
  - Assess habitat conditions for managed fisheries within stream reaches downstream of Project reservoirs.
  - Characterize sediment condition for managed fisheries in the Project area.
- Rationale/Nexus
- Study Area

Aquatic Resources: Potential Studies

Aquatic Habitat Assessment and Sediment Characterization

- Objectives
- Rationale/Nexus
  - Project operations have the potential to affect aquatic habitat and geomorphic conditions within Project streams. Changes in environmental conditions can affect the abundance, distribution, and structure of the local fish communities.
- Study Area

Aquatic Resources: Potential Studies

Aquatic Habitat Assessment and Sediment Characterization

- Objectives
- Rationale/Nexus
- Study Area
  - Stream reaches downstream of Project reservoirs:
    - Lee Vining Creek downstream of Saddlebag Dam
    - Lee Vining Creek downstream of Rhinedollar Dam
    - Glacier Creek downstream of Tioga Dam

Aquatic Resources: Potential Studies

Operations Model / Peaking Flow Study

- Objectives
  - Develop an operations model to assist SCE and stakeholders in understanding how Project operations interact with streamflows and reservoir elevations.
  - The model will accommodate physical and hydrographic constraints to operations, including lake elevation controls at Saddlebag.
- Rationale/Nexus
- Study Area

Aquatic Resources: Potential Studies

Operations Model / Peaking Flow Study

- Objectives
- Rationale/Nexus
  - Project operations affect reservoir levels and Project stream hydrology.
- Study Area

Aquatic Resources: Potential Studies

Operations Model / Peaking Flow Study

- Objectives
- Rationale/Nexus
- Study Area
  - All Project influenced waters including Lee Vining Creek downstream of Saddlebag and Rhinedollar dams, Glacier Creek downstream of Tioga Dam, and Project reservoirs.

Aquatic Resources: Potential Studies

Stream Fish Populations

- Objectives
  - Assess species composition, density, and age-distribution of existing trout fishery in stream reaches downstream of Project reservoirs.
- Rationale/Nexus
- Study Area

Aquatic Resources: Potential Studies

Stream Fish Populations

- Objectives
- Rationale/Nexus
  - Project operations have the potential to affect environmental conditions within Project streams, including water quality and quantity. Changes in these environmental conditions can affect the abundance, distribution, and structure of the local fish communities.
- Study Area

Aquatic Resources: Potential Studies

Stream Fish Populations

- Objectives
- Rationale/Nexus
- Study Area
  - Stream reaches downstream of Project reservoirs:
    - Lee Vining Creek downstream of Saddlebag Dam
    - Lee Vining Creek downstream of Rhinedollar Dam
    - Glacier Creek downstream of Tioga Dam

Aquatic Resources: Potential Studies

Reservoir Fish Populations

- Objectives
  - Assess species composition, density, and age-distribution of existing trout fishery in Project reservoirs.
- Rationale/Nexus
- Study Area

Aquatic Resources: Potential Studies

Reservoir Fish Populations

- Objectives
- Rationale/Nexus
  - Project operations have the potential to affect environmental conditions within Project reservoirs, including water quality and water surface elevations. Changes in these environmental conditions can affect the abundance, distribution, and structure of the local fish communities.
- Study Area

Aquatic Resources: Potential Studies

Reservoir Fish Populations

- Objectives
- Rationale/Nexus
- Study Area
  - Project reservoirs including Saddlebag Lake, Ellery Lake and Tioga Lake

Aquatic Resources: Potential Studies

Aquatic Invasive Plants and Algae

- Objectives
  - Assess the extent and distribution of invasive aquatic plants and algae (including *didymosphenia geminate*) in stream reaches downstream of Project reservoirs.
- Rationale/Nexus
- Study Area

Aquatic Resources: Potential Studies

Aquatic Invasive Plants and Algae

- Objectives
- Rationale/Nexus
  - Project operations could affect the extent of invasive aquatic plants and algae in Project waters, which may affect the BMI community and potentially the spread to other watersheds by recreators.
- Study Area

Aquatic Resources: Potential Studies

Aquatic Invasive Plants and Algae

- Objectives
- Rationale/Nexus
- Study Area
  - Stream reaches downstream of Project reservoirs:
    - Lee Vining Creek downstream of Saddlebag Dam
    - Lee Vining Creek downstream of Poole Powerhouse
    - Glacier Creek downstream of Tioga Dam

Aquatic Resources: Potential Studies

Water Quality Assessment

- Objectives
  - Assess water quality within Project-affected stream reaches and Project reservoirs.
- Rationale/Nexus
- Study Area

Aquatic Resources: Potential Studies

Water Quality Assessment

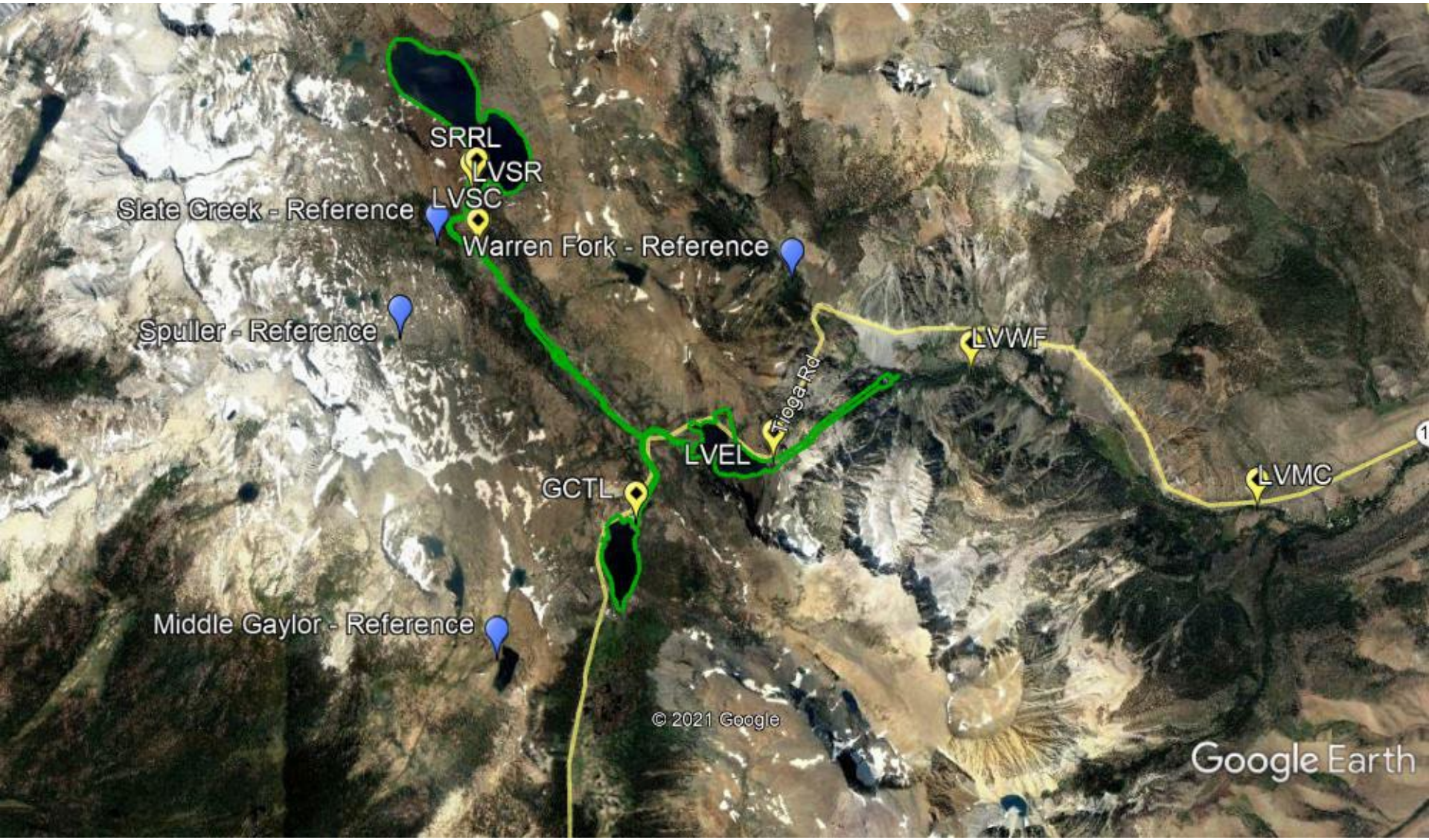
- Objectives
- Rationale/Nexus
  - Project operations may affect water quality in Project reservoirs and reaches downstream of Project reservoirs.
- Study Area

Aquatic Resources: Potential Studies

Water Quality Assessment

- Objectives
- Rationale/Nexus
- Study Area
  - Project reservoirs
  - Stream reaches downstream of Project reservoirs, and downstream of Poole PH to the LADWP diversion

BMI Existing Data



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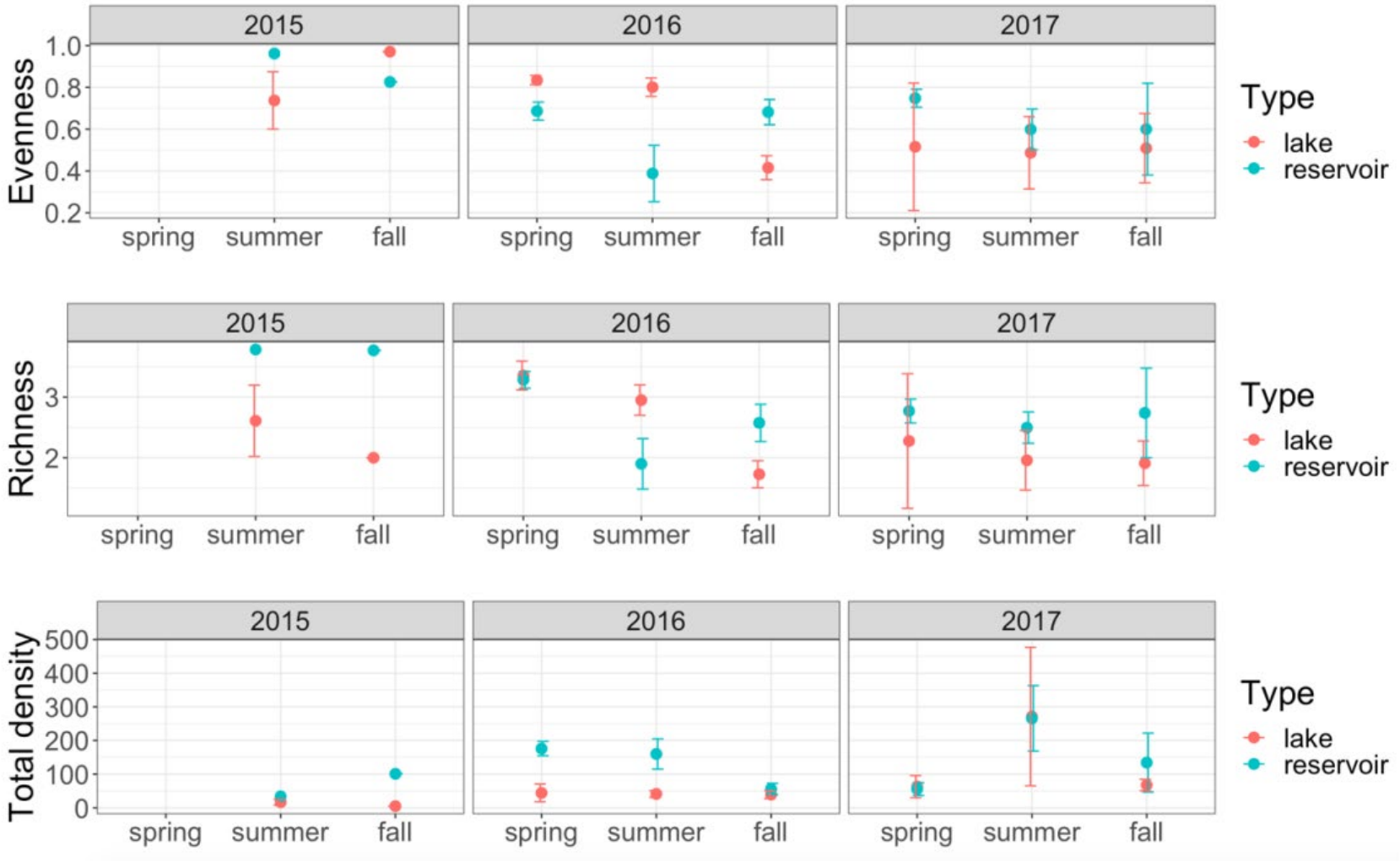

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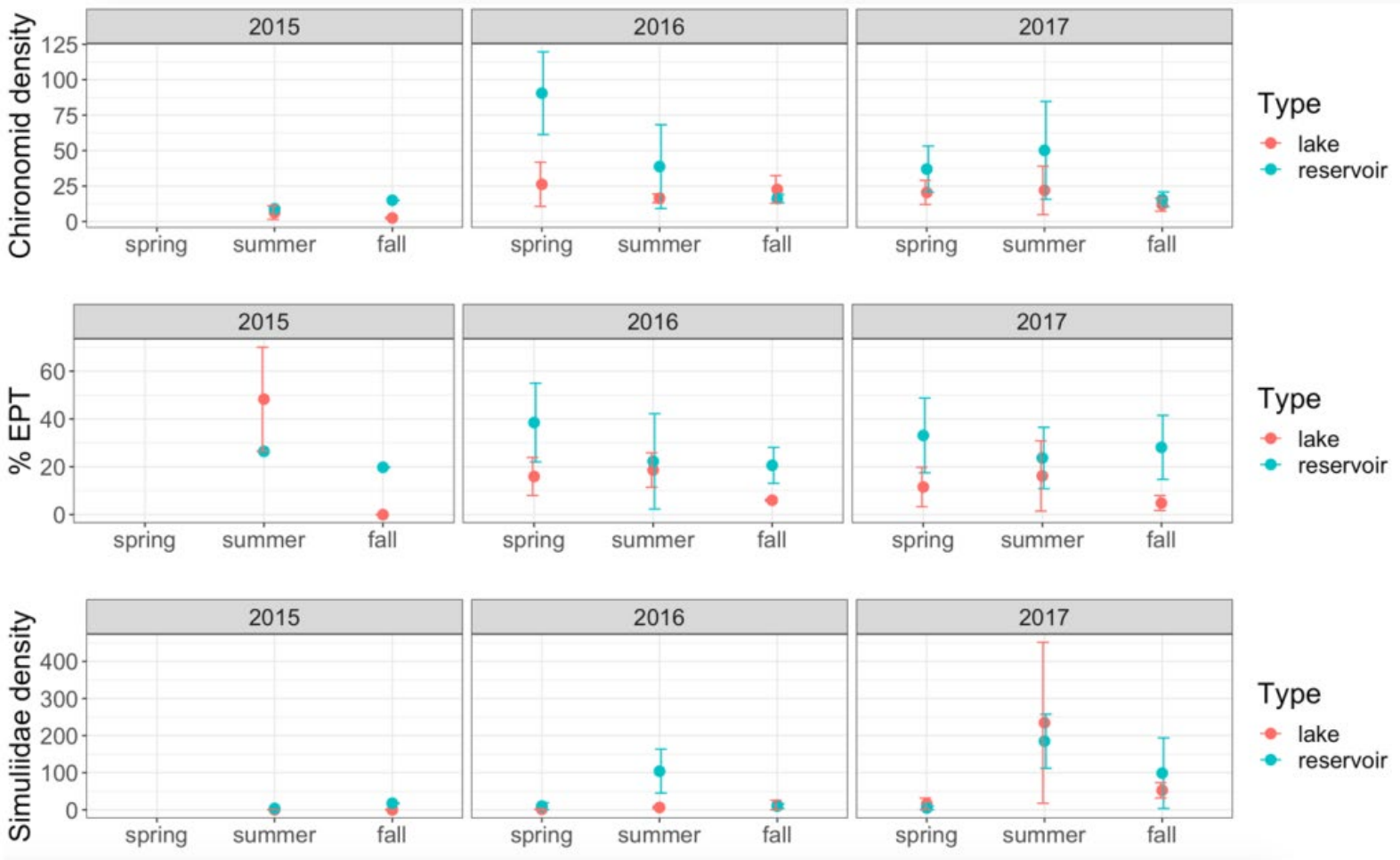

Status and Clarification of Outstanding Study Requests

- Hydropeaking
- Information Sharing

RELICENSING SCHEDULE OVERVIEW

Date	Activity
August 2, 2021	SCE Files Notice of Intent/Pre-Application Document (NOI/PAD)
September 2021	FERC initiates Tribal consultation
September – October 2021	*If ILP*: FERC issues Notice of Commencement and Scoping Document 1 (SD1) and hosts scoping meeting/site visit *If TLP*: FERC approves use of TLP
October 2021	Public Meeting to discuss PAD and NOI
October/November 2021	Stakeholders file comments on NOI/PAD and request studies
November 13, 2021	SCE files proposed Study Plans
January 2022	SCE hosts Study Plan Meeting
April 2022	Revise Study Plans as appropriate
Spring/Summer 2022-2023	Conduct field studies
September 3, 2024	SCE Files Draft License Application
January 31, 2025	SCE Files Final License Application

Tentative TWG Meeting Schedule

Date		Activity
Week of May 24, 2021	**Monday, May 24**	**Aquatic Resources TWG 4**
	Wednesday AM, May 26	Terrestrial and Botanical TWG 4
	Wednesday PM, May 26	Cultural and Tribal TWG 4
	Thursday, May 27	Recreation and Land Use TWG 4

How to Stay Involved

- Check the Project website for updates/news at www.sce.com/leevining
- You can view other SCE relicensing Projects at www.sce.com/regulatory/hydro-licensing
- Sign-up to receive Project-related emails through the Contact Registration Form/Project Questionnaire on the Project website
- Participate in an ongoing TWG
- Sign up for FERC's for e-subscription (docket number "P-1388") at www.ferc.gov
- Email Carissa Shoemaker with questions carissa.shoemaker@erm.com

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Thank you!