San Gabriel River Watershed Temperature Project

Technical Advisory Committee Meeting #5
August 20, 2025 – 1:00 – 2:30 p.m.
Meeting Summary

Agenda

1. Introductions and meeting goals
2. Project background
3. Temperature Management Analysis
4. Final Technical Studies Report
5. Next steps
6. Questions and Discussion

Attendees:

Los Angeles County Sanitation Districts (LACSD): Ajay Malik, Jodie Lanza, Erika Bensch, Josh Westfall, Katie Marjanovic, Elizabeth Roswell
Larry Walker Associates (LWA): Chris Minton, David Vilas
Great Lakes Environment Center (GLEC): Tyler Linton
Southern California Coastal Water Resource Project (SCCWRP): Eric Stein, Kris Taniguchi-Quan, Lara Jansen
Los Angeles Regional Water Quality Control Board (LARWQCB): Stefani Daryanto**,** Jeong-Hee Lim, Steven Webb, Veronica Cuevas, Danielle Robinson, Don Tsai
CA State Water Resources Control Board: Ryan Ham
California Department of Fish and Wildlife (CDFW): Mayra Molina
US Fish and Wildlife Services (USFWS): Christine Medak
Resource Conservation District of Santa Monica Mountains (RCDSMM): Rosi Dagit
Los Angeles Sanitation & Environment (LA City): Janet Samala, Annie Chen
Stetson Engineers: Jenny Savron
Water Replenishment District (WRD): Brittany Liu

Summary

- **Eric Stein (SCCWRP)** kicked off the meeting and reviewed the agenda and meeting goals.
- **Liz Roswell (LACSD)** provided background on the study area and technical studies. Roswell then discussed the preliminary estimates for costs, energy usage, and greenhouse gas emissions associated with operating mechanical chillers to meet the new temperature limit. Roswell emphasized that this analysis was conducted as part of the project workplan's alternatives evaluation and was not a commitment by the Districts to proceed with implementing chillers.
    - Total estimated capital costs to meet the 80°F and delta 5°F temperature limits at all five WRPs exceed $1 billion; total operating costs are approximately $13 million per year.
    - Total energy demand is about 54 million kWh per year, which would result in about 28 million pounds of CO2 in greenhouse gas equivalents emitted per year which equals the emissions of about 3,800 passenger cars or electricity for about 4,400 homes.[1]

[1] Greenhouse Gas Equivalencies Calculator | US EPA

- Implementing chillers would also require significant upgrades to electrical infrastructure, including new or upgraded electrical substations.

Roswell presented the various limitations and challenges associated with nature-based temperature management options. None of the nature-based options evaluated (e.g., cooling with surface or groundwater, wetlands, spray ponds, hyporheic zone injection, shading) provided the temperature reduction needed for the WRPs to be in compliance with the temperature limits. In addition, the nature-based options have various other feasibility challenges (e.g., large space requirements, permitting challenges). Shading implementation is logistically prohibitive due to significant jurisdictional constraints that prevent any construction or planting in or along the river. Roswell also mentioned that in-plant process modifications would not achieve compliance because the WRPs' treatment processes are not major contributors to the elevated temperature.

- **Liz Roswell (LACSD)** addressed the following questions from attendees:
  - Veronica Cuevas (LARWQCB) asked if temperature reduction associated with shading was modeled for the river. Roswell clarified that LACSD does not have a temperature model for the SGR study; instead, a high-level analysis was conducted by the District's consultant, and it suggested that the temperature reduction would be insufficient to bring the WRPs into compliance. Roswell also restated the feasibility challenges associated with shading. Chris Medak (USFWS) said that shading should be considered even if its not logistically feasible because it may have an impact on water temperatures. Tyler Linton (LWA) provided context on the extreme daily temperature swings in the river, noting that atmospheric and concrete channel conditions drive high water temperatures, making shading unlikely to achieve the necessary reductions.
- **Chris Minton (LWA)** reviewed the technical study work and findings, including temperature and biological monitoring, fish and BMI surveys, thermal tolerance analysis, and the impact of WRP discharges on river biology. Minton also discussed the changes made to the final report based on the TAC comments. These report changes included the following:
  - Additional information about study area including station pictures and descriptions, WRP flows and upstream water sources, and descriptions of flood control infrastructure.
  - Clarifications on aquatic species present within the study area, including additional emphasis on the conclusion that native fish species are no longer supported in the study area due to habitat modifications such as concrete lining and dams.
  - Thermal tolerance discussion was reframed and reorganized to include only the lowest thermal tolerances of the most sensitive species present, rather than calculated average tolerances. Additional information was provided on the limitations of using lab-based thermal tolerances, emphasizing the importance of field observations as a key source of evidence for in-situ river temperature tolerances that reflect real-world conditions.

  Ultimately, the report conclusions remained the same:
  - Algae and BMI taxa presence and their relative abundances and community composition and structure downstream of WRP discharges do not differ significantly (or meaningfully) from that which exists upstream of the WRP discharges.
  - While taxa are exposed to river temperatures above literature-based thermal tolerance thresholds, they are reproducing and their various life stages continue to be supported within the study area.
  - The ecological functions that the algae and BMI communities carry out in downstream reaches are unaffected by the thermal water quality of the WRP effluents.
  - WRP Discharges are not adversely affecting algae and BMI community composition, structure, or function in these waterbodies.

    - Improvements to biological conditions in the study area would require addressing factors unrelated to WRP thermal discharges and outside the Districts' control (e.g., flood control infrastructure).
- **Chris Minton (LWA) and LACSD** addressed the following questions from attendees:
    - Veronica Cuevas (LARWQCB) asked which fish were found in which areas of the river; David Vilas (LWA) said that the information is provided in Table 21 of the report. Cuevas also asked for clarification on the location of one of the temperature monitoring stations near Los Coyotes WRP; Josh Westfall (LACSD) clarified the location. Cuevas asked if the report includes a description of which BMI species are associated with pollution; Westfall clarified that looking at the overall CSCI/ASCI index score is much more representative of biological condition than presence/absence of individual species. Cuevas asked if we have stream slope information in the report; Westfall explained that the report does not have stream slope but that the river has been designed with a relatively low slope (below 1%).
    - Chris Medak (USFWS) stated that the only biota in the SGR that are left are those that can survive the high temperatures. Roswell clarified that the native species are likely not present due to things besides high temperatures, such as the concrete lining, removal of substrate and vegetation, and impassible fish barriers such as dams. Medak asked whether the study's aim was to improve the river conditions. Steven Webb (LARWQCB) replied that the studies are intended to understand whether the 80°F limit is protective of the WARM beneficial use.
    - Kris Taniguchi-Quan (SCCWRP) asked if the team had looked at patterns in the historical CSCI/ASCI index scores. Westfall stated that the information is part of the technical studies.
- **Eric Stein (SCCWRP)** asked if there were any additional comments or questions on the studies; there were no additional questions (beyond those listed above) or comments mentioned by the TAC. Roswell discussed next steps, which include continued investigation into industrial waste sources of temperature, finalizing the management options analysis, and evaluating potential regulatory pathways.