Los Angeles River Temperature Study
Technical Advisory Committee Meeting – Dec. 8th 2025

Participants

Full Name	Organization
Annie Chen	LASAN
Celine Gallon	LARWQCB
Chris Minton	LWA
Danielle Robinson	LARWQCB
Don Tsai	LARWQCB
Eric Stein	SCCWRP
Jeong-Hee Lim	LARWQCB
Mitch Mysliwiec	LWA
Nick Steffen	LASAN
Ron Mayuyu	LASAN
Ryan Thiha	LASAN
Stefani Daryanto	LARWQCB
Stephen Walker	Burbank
Steven Webb	LARWQCB
Tyler Linton	GLEC
Veronica Cuevas	LARWQCB

Meeting Notes

- **Summary of Study Findings and Biological Analysis:** Chris presented a summary of the study findings, focusing on the potential impact of water reclamation plant (WRP) effluent temperature on biological communities, with contributions from Eric, Ryan, Steven, Danielle, Veronica, and Tyler, and addressed questions about data analysis, site selection, and biological endpoints.
    - **Study Objectives and Data Compilation:** Chris explained that the study aimed to assess the potential impact of WRP effluent temperature on biological communities by compiling historical and new data, including eDNA, benthic macroinvertebrate (BMI), and algae data, and focusing on differences upstream and downstream of WRP discharges.
    - **Biological Community Findings:** The team conducted qualitative assessments, Wilcoxon statistical analyses, and cluster analyses to determine if there were significant differences in biological communities related to WRP discharges, concluding that there were no meaningful or statistical differences between upstream and downstream sites. Additional analysis found that the most sensitive taxa are supported by current temperature regimes, and that alterations to receiving water temperatures by WRP effluent are not adversely affecting the warm beneficial

use, as evidenced by the lack of unique downstream communities and the presence of tolerant species throughout the study area.

    - **Temperature Data and Modeling:** Temperature monitoring revealed exceedances of 80 degrees F both upstream and downstream of WRPs and daily fluctuations of more than 5 degrees F, with daily fluctuations influenced by factors such as solar radiation and air temperature that are beyond the control of WRPs; modeling showed that river temperatures return to baseline downstream of WRPs regardless of potential control measures.

    - **Potential Control Measures and Feasibility:** The study evaluated alternative and traditional control measures, including cooling towers and chillers, finding that chillers could meet both the 80 degree and delta 5 degree limits but would require significant capital investment, increased energy use, greenhouse gas emissions, and potable water consumption, with space limitations at the plants posing additional challenges.

- **Clarifications and Report Revisions:** Participants (including Steven, Danielle, Veronica, and Stefani) raised questions and suggestions regarding report content, site naming, operator attribution, definitions, and data presentation, with Chris and Tyler providing clarifications and agreeing to incorporate revisions for accuracy and clarity.

    - **Site Naming and Monitoring Locations:** Danielle asked about the change in monitoring site names from Sepulveda to Kester, and Chris confirmed the change was made to align with historical sites used by the LA River Watershed Monitoring Program. Chris agreed to look into the differences in site names between the work plan and the report, and if necessary, document the rationale in the Study report. NOTE: Following the meeting Chris reviewed the last version of the work plan submitted to the Regional Board in May 2024 and the referenced site is the same in both the last version of the work plan and the Study report. As such, no change is required in the Study report.

    - **Operator Attribution and Consistency:** Veronica requested corrections to the report's description of who is responsible for operating the Burbank WRP, as it is currently operated by Inframark under contract with Burbank., The group agreed to revise the language to avoid confusion and ensure consistency in how the information is presented amongst the Cities.

    - **Definition of Warm Beneficial Use:** Veronica suggested including the definition of 'warm beneficial use' from Chapter 2 of the Basin Plan in Section 1 of the Study report for clarity. Chris agreed to move the definition, which is currently included in Section 2, to Section 1, to an earlier section for better context.

    - **Clarification of 'Meaningful Difference':** Veronica and Danielle requested a clearer definition of 'meaningful difference' in the context of BMI and algae results, leading Tyler and Chris to explain that minor differences in taxa are not biologically significant, and agreeing to provide clarification in the Study report. Veronica also

requested that, if applicable, the word “statistical” (or some version) be included when discussing differences.

- **Thermal Tolerance and Life Stage Data:** Veronica and Stefani inquired about the presentation of thermal tolerance data and life stages for fish species, with Chris and Tyler clarifying the tables and appendices, and agreeing to consider revisions to Table ES-1 (and similar tables) for clarity in footnote #3 related to implication of concrete-lined reaches on reproduction and the full range of the spawning seasons (more than one month [May]). Appendix 7 provides detailed thermal tolerances and table in Executive Summary documents effects on most thermally tolerant spp.

- **Discussion of Control Measures and Source Control:** Steven, Ryan, and Veronica raised questions about the feasibility of source control, power availability, and in-plant temperature increases, with Chris, Stephen, and Ryan providing responses and discussing the limitations and challenges of various control measures.
  - **Source Control and Pretreatment:** Steven asked about the potential for source control or industrial pretreatment (e.g., local limits on temperature), and Chris responded that industrial sources are a minor component of flows to the WRPs and unlikely to impact influent temperatures significantly, but agreed to look into it and either consider documenting this in the Study report or providing the information separately.
  - **Power Availability for Chillers:** Ryan highlighted challenges with power availability at the DCTWRP, noting that the grid may not support the additional draw required for chillers, and Chris acknowledged that all three WRPs would face similar challenges, with power upgrades potentially taking several years to over a decade.

    In-Plant Temperature Increases: Veronica referenced Burbank's pollution prevention plan, noting a 2–6 degree increase in temperatures over the course of the treatment process at the Burbank WRP, and asked about monitoring within the treatment process; Ryan and Stephen indicated that aeration tanks are likely the main source of temperature increase, consistent with other plants. Stephen indicated that the PPP provided a rough estimate and Chris indicated that work conducted by the Sanitation Districts could be helpful in providing a better estimate. Chris suggested consulting with the Sanitation Districts, who have conducted in-plant temperature measurements, to determine if their findings are applicable to the three WRPs in the study.

- **Regulatory Approach:** Chris, Eric, Steven, Celine, Jeong, and others discussed potential regulatory approaches based on the study findings, including Basin Plan amendments, implementation changes, variances, and the need for a concrete proposal from the cities, with agreement to provide more specificity and rationale in future submissions.
  - **Request:** Based on the findings of the Study that the WRP effluent temperatures are not impacting the WARM beneficial use, the Cities requested that the Regional Board staff work with the Cities to identify and adopt a regulatory option.

- **Potential Regulatory Options:** Chris outlined three categories of regulatory options: revising the numeric or narrative component of the Basin Plan objectives, changing implementation provisions in the Basin Plan to clarify when temperature limits are required or providing for allowable exceedances, and variances (either a water quality standards variance or thermal variance), with input from Regional Board staff on the feasibility and challenges of each approach.
- **Board Staff Feedback:** Steven, Celine, and Jeong provided feedback that changes to Chapter 3 (objectives) are less preferred (although interest in reviewing potential changes to the narrative component was expressed), site-specific objectives are challenging, and any proposal should be concrete, narrowly tailored, and supported by data, especially regarding seasonal or site-specific limits. Steven also noted that a single exceedance does not establish a need for changing Basin Plan objectives, and proposals must be supported by data.
- **Need for Specific Proposal:** Board staff emphasized the importance of a clear, data-supported proposal specifying the requested limits, timeframes, and rationale, rather than broad or general requests, to facilitate regulatory review and decision-making.

Follow-Up Tasks

- **Source Control and Local Limits Discussion:** Evaluate whether industrial contributions to influent temperature are significant or not to determine if revisions to existing local limits for temperature are likely to have an impact. Consider documenting this in the Study report or providing the information separately. (Chris)
- **Monitoring Site Change Documentation:** No change required as there are no differences between the last version of the work plan and the Study report. (Chris)
- **Burbank Plant Operator Description:** Revise all references in the Study report to clarify that the Burbank Water Reclamation Plant is owned by the City of Burbank and operated by Inframark under contract, or use consistent language such as "owned by" for all plants. (Chris, Stephen)
- **Definition of Warm Beneficial Use:** Add the definition of "warm beneficial use" in Chapter 2 of the Basin Plan to Section 1 of the report for clarity (or move from Section 2 to Section 1). (Chris)
- **Clarification of "Meaningful Difference" in BMI/Algae Analysis:** Refine the language in the Executive Summary (and other pertinent sections of the Study report) to clarify what meaningful difference in BMI and algae composition data means, and if applicable, add the word “statistical” (or some version) be included when discussing differences. (Chris)
- **Thermal Tolerance Table Clarification:** Clarify in Table ES-1 (and similar tables) footnote #3 related to implication of concrete-lined reaches on reproduction and the full range of the spawning seasons (more than one month [May]). (Chris)

- **Proposal for Regulatory Approach:** Develop and submit a clear, specific proposal for a regulatory approach and supporting rationale/information. (Chris, Eric)
- **Board Meeting Date Confirmation:** Confirm and communicate the date of the next scheduled board meeting (February or March) for presentation of the technical report and compliance schedule item. (Jeong-Hee)
- **Scheduling Next Meeting:** Send a list of potential dates and times for the next meeting in mid-January to the group and coordinate to finalize the meeting date. Regional Board staff will aim to provide initial written comments by then, and to clarify the timing of the compliance schedule and board meeting dates. (Chris, Eric)