LOS ANGELES RIVER FLOWS Stakeholder Working Group (SWG) Meeting #2

Date: Friday, October 18, 2019

Location: Studio MLA

251 S Mission Rd, Los Angeles, CA 90033

Time: 9:30 am – 12:30 pm

MEETING NOTES SUMMARY

Prepared by:

- Lori Webber, State Water Board
- Tatyana Isupov, State Water Board
- Jenny Newman, Los Angeles Regional Water Quality Control Board
- Kris Taniguchi-Quan, PhD, Southern California Coastal Water Research Project
- Eric Stein, PhD, Southern California Coastal Water Research Project
- Lisa Beutler, Stantec
- Gilberto Ruiz, Stantec

Attendees:

• See sign-in sheet

Major Themes/Topics:

- Stakeholder Working Group Charter confirmation
- Summary of Recreational Use Study and Report
- Review of LA River Flow Technical Advisory Group meeting
- Questions & Answers on technical work to date
 - Focal habitats
 - Modeling
 - Flow scenarios
- Outreach to SWG constituents
- Next steps

NOTES:

Confirmation of Charter

• The Charter was confirmed. We reviewed the ground rules of participation and reminded of the scope of this project.

Summary of Recreational Use Study and Report

- Engaged with recreational experts (NGOs, local government, and business) on uses in the LA River. The snowball sampling approach was used to broaden engagement.
- Used social media data, such as location tagging in Instagram and linked to nearest flow gage.
- Results: a diversity of uses, including soft and concrete lined sections

- o In the high density, concrete-lined portions, the lack of open space in those areas prompts greater use of River by residents.
- Quantifying flow targets were difficult; safety and access were a primary concern, so were aesthetic value and water quality. Those surveyed cited pollutant concentration load as a point of concern and indicated that higher flows may result in better water quality.

Recreational Use Study Questions/Discussion

Is this study about increasing uses, or maintaining existing uses? Some of the answers seem to express an interest in increasing flow.

The overall project question is how will changes in flow affect existing beneficial uses. The
baseline is existing conditions. The survey purpose is to provide indicators that can be used to
model the effects of flow on the ability to provide beneficial uses. This project is not an attempt
to define a set of future uses.

How many of the surveyed uses entirely rely on the presence of water? Such as kayaking, etc. (not walking adjacent to river).

• Certain uses may not be affected by in-bank flow. The flow dependent uses are broken out in the report.

How seasonal is the flow?

 There are seasonal patterns in the flow. During the storm season, the river is a flood management channel. Those are peak flows, and not conducive to recreational uses. Path uses occur during the entire year.

How did the surveyors talk about flow (high flow, low flow) in the soft bottomed areas?

- Described it using depth estimates and as wetted area. They also described the roughness, variability of the channel surface.
 - Technical team can still use this in an iterative way to bound potential effects on uses.
 - Comment that they may still need to go back to the recreational uses group with visualizations to get feedback on their indicators and if they have been represented accurately.

Speaker wanted to make the technical team aware of a City of LA low flow study.

The technical team is aware of this study and has referenced it in their work.

How many people are actually recreating in the River?

 Social media data was most indicative of this; about 2,000 posts for 2017-18. The details of these results are found in the published report.

Review of LA River Flow Technical Advisory Group

- The presentation today reflects input from the Technical Advisory Committee (TAC). The selection of species and habitats to focus on is an important decision because it will set the course for the project and determines how we will proceed in the development of model inputs.
- Reminder that the LA River is dominated by treated effluent discharge. The purpose of this
 project is to provide technical expertise and tools to assist the water board in evaluating
 proposed changes in discharge under 1211 petitions.
 - Before you can plot out simple metrics like probability, you need to establish the assumptions (refer to PowerPoint presentation).
 - Need to understand the relationship between flows and the probability of supporting beneficial uses - goal is to make the right decision on flows
 - Engaging multiple parties is a very important component of this project want to balance use, but need to understand how flows will affect these
 - In building the models, considerations on species, habitats, seasons, management scenarios need to be considered
 - Building flow curves and developing flow criteria are complicated and require a suite of models, tools, and data
 - Assessing environmental flows along the River includes understanding the model
 - Simulating the watershed, including tributaries and catchments
 - o Two tributaries included, Rio Hondo and Compton creek.
 - Study focus is in the banks of the LA River.

Questions on Technical Work

Are the selected species aquatic, non-aquatic?

 They are primarily aquatic, in that they rely on the river for at least some part of their life history.

Are you relying on vertebrates or invertebrates?

 Both vertebrate and invertebrates will be used as ecological indicators. The technical team will also include bioassessment indicators as a surrogate for water quality conditions (benthic macroinvertebrates and algal communities).

How do the assemblages of species relate to the area downstream of the wastewater treatment plants (WTPs)?

We characterized assemblages from the WTPs to the river mouth. We also included the
upper tributaries to include opportunities for upstream restoration that may be used by
species for habitat (as a tool to prioritize restoration).

Does this project consider restoration of species that do not currently occur in the River?

• This study considers restoration potential to a limited extent. For example, the TAC decided to include steelhead as an indicator species for migratory potential, to better understand potential for future restoration. However, the primary focus of the study is

to determine how reductions in discharges from wastewater treatment facilities would impact existing uses in the river.

How were species selected?

• The species were selected to bound the range of flow and temperature tolerances associated with the major habitat types in the river. Species were selected as an iterative discussion with the TAC.

Audubon society question- Planning to piggyback off this study and identify important bird area.

• That is beyond the scope of this study.

Are fish passage barriers being considered?

• Yes, we are taking note of fish passage barriers in the model, but not the focus of the modeling. Hopefully this can inform future studies.

Focal Habitats

- Conducted a webinar and agreed on approach with the TAC, including sensitivity curve
- Identified definition of habitats
- 65 species using river during some part of their life history (included aquatic and nonaquatic)
- Included cold water species that may not be in the river yet
- Divided River into zones
- Looked for range of sensitivities (temperature, etc.)
- Used bio assessment criteria too
- Cold water included because, though it does not occur now, it is a possible use that informs management decisions.
- Established thresholds for migration and reproduction
- Warm water included as surrogate for invasive species. There is the potential that a reduction in warmwater habitat can reduce habitat for invasive species.

Focal Habitats Discussion

If there is greater potential of sediment deposition and woody vegetation in the River channel, will that affect the flood control capacity?

- We are not asking the question about whether the County will maintain the vegetation or trying to increase vegetation.
- Comment from the County Flood Control District: this is being monitored by the County
 and highlights that flood control is the major purpose of the river. They have staff
 involved in the TAC and do not see this being an issue that interferes with flood control
 capacity.

Is there a bias to certain beneficial uses in this study? (Perhaps to the detriment of flood control?)

• The County Flood Control district are included in the TAC to make sure the requirements of flood protection are not impeded by the recommendations of this study.

Is the Army Corp involved with this study?

Yes, Chris Solek from USACE.

What is the trade-off between the flood management and vegetation/habitat?

This isn't really a trade off since they will dominate at different times of year. Key
assumption is that the role of the LA River as a flood control channel is not changing.

Are the technical team and dischargers taking into account how to reduce the water temperature? The existing discharge is warm (80 degrees). If the discharge is reduced, is it possible to reduce the temperature? Second question, is the Board engaging with the County to preserve habitat in channel and managing flood control?

- Hassan: The dischargers have no control over the temperature in a reasonable/feasible way.
- Eric: Temperature model has been developed by Colorado school of mines that will be included in this study.
- Madeline: The discharge seems to be encouraging more invasive species then, so the
 reduction in flows may be less detrimental ecologically than initially thought. Board has
 been closely engaged with the County on how to deal with habitat. County have done
 very detailed work to preserve habitats in areas that are flood prone.

Modelling Approaches

- Using several models to get a more accurate view of the system: hydrology, hydraulic, groundwater, estuarine, and water quality.
- Using existing studies and models to inform work.
- Model calibration is currently ongoing but soon to be completed.

Modelling Approaches Discussion

What is the time increment on the gages for model inputs?

• We are using hourly data. The flow metrics will be at the daily time step.

Are the regulatory impacts to TMDL standards being considered? Will there be a regulatory adjustment to accommodate changes in flow that could affect permitting?

The model doesn't consider the effects of reduced flow on the concentrations of
pollutants in or the assimilative capacity of the Los Angeles River. However, if conditions
in the river change as a result of reduced flows, the Regional Board can reconsider the
TMDLs to adjust the allowable pollutant allocations for discharges to the river, which
could affect permit requirements for those discharges.

Does this study take into consideration the Rec 1 impacts of reduced flows?

• No, because that is primarily a bacteria/pathogen question. Those are very difficult to model in dry weather conditions and are beyond the scope of this project.

Management Scenarios Discussion

Comment: It would be helpful to include in management scenarios some way of parsing out in the results/model the discharge of different treatment plants. For example, as one plant reduces output, you could hold two static, what does that look like?

Water rights: This model may prove useful in supporting the analysis for a permit reduction. SWG input is very important related to flow curve model and your input is critical and can inform RWQCB decisions.

How are you going to deal with the stormwater capture portion? 100 percent stormwater capture is not a desired outcome or what is planned for.

• We have looked at the existing plans (EWIMPS) and county stormwater strategy documents; bounding it as 100% is just a method of bounding the planned stormwater capture programs. It's a way of characterizing the buffet of water sources. This refers to 100% implementation of the plans, not 100% stormwater capture.

Question on graphic of % water discharge: what is the time/baseline. Reduction relative to what?

• It is not a static item, this has been a major discussion in the TAC.

As you go deeper in developing models, there may be conflicting needs between ecological and recreational uses. How do you plan to handle that?

We are expecting to see potential mismatches for those uses; It is uncertain if we can
optimize for those uses. The products of this effort will provide the water board staff
with tools to help evaluate tradeoffs and different scenarios.

What is meant by the text in slide that states: "offsetting habitat in upper reaches to create more suitable habitat"?

This refers to places above the discharge points where restoration or management
actions can be used to potentially offset effects of reductions in discharge. This
information would help answer the question of what might be needed to make those
offsets.

Why are we not studying more of the upper tributaries/reaches if this is being considered?

 We are hydrologically modelling the entire watershed. However, the focus is to answer questions about potential effects in the mainstem LA River below discharge points. The models produced could be used in the upper reaches in future studies.

Comment (Shona- TNC): Soil types might be an important consideration. Also, need to make sure to include public health and climate change considerations. We should not be trading off on public health.

Considering an increase in population and a need for more housing in LA, how does that affect your study?

• We are not considering changes in population. We are assuming that urban runoff will be primarily impacted by implementation of best management policies (BMPs).

Comment on mitigation: There are lots of ways to get to a desired outcome that are not related to discharge.

Did the technical team do a literature review? Are steelhead one of the species; did you look at the steelhead recovery plan 2012 to inform?

- Yes, it's the focal species for the migration element. Yes, we have looked at the plan, also informed by NOAA and NMPHS. Yes, we did a literature review, but always looking for additional information.
- Make sure to resend the request to send the technical team additional literature that may inform the study.

Outreach Reports

- Obligation of chartered members to get feedback from constituents.
- Has anyone in the group had a chance to engage with their constituents?

Responses:

- It would be helpful to provide members with the slides from the presentations here.
 - We will distribute slides via email.
- The LA River Master Plan meetings, there is a station for folks to comment on flow
 - Couple this with master plan discussion and better collaborate.
- FOLAR has engaged their stakeholders
 - The biggest question is why does this matter? A fact sheet or something would be helpful to share with interested members.
 - We do have a one pager that touches on this (We can develop a more lay person version)
- Having stock slides charter group members can use to present to their group.
 - o Kris and Sean have presented on this. They can send out those slides.
- People like maps and visuals; a map of just Tillman going south would be helpful.
- What did the group think of the maps in this slide?
 - Make legend more explicit, more focused on the study area. This is a good start. Include landmarks in the map-like freeways or park.
 - Label Pacoima Wash
 - o Post list after the meeting with folks attended to follow up directly.
- → Action item: SCCWRP to update the habitat map based on stakeholder feedback
- More discussion time would be helpful in meeting.
 - More frequent meetings as opposed to longer.
 - Suggestion: Convene SWG for an online meeting for content delivery, and then the in-person meeting to discuss.
- → Action item: SWG to prepare pre-prepared materials for constituent outreach (simplified slides, maps, handout).

Next steps:

Please reach out if you are willing to host a meeting.