MEETING NOTES

Basin Monitoring Program Task Force

May 13, 2020

STAKEHOLDERS PRESENT:

Chino Basin Watermaster, Edgar Tellez Foster*
City of Beaumont, Thaxton VanBelle*
City of Beaumont, Kevin Lee*
City of Corona, Melissa Estrada*
City of Corona, Jennifer McMullin*
City of Rialto, Tom Crowley*
City of Riverside, Bobby Gustafson*
City of Riverside, Robert Eland *
City of Riverside, Edward Filadelfia*
City of Riverside, Greg Herzog*
Eastern Municipal Water District, Al Javier*
Eastern Municipal Water District, Doug Edwards*
Elsinore Valley Municipal WD, Jesus Gastelum*
Inland Empire Utilities Agency, Eddie Lin*
Inland Empire Utilities Agency, Joshua Aguilar*
Orange County Water District, Greg Woodside*
Orange County Water District, Kevin O'Toole*
San Bernardino Valley Municipal Water District, Matt Howard*
SBMWD/RIX JPA, Jennifer Shepardson*
WMWD/WRCRWA, Mallory Gandara*
Yucaipa Valley Water District, Ashley Gibson*
Yucaipa Valley Water District, Madeline Blua*

OTHERS PRESENT:

Balleau Groundwater, Dave Romero*
GEI Consultants, Richard Meyerhoff*
Geoscience Support Services, Johnson Yeh*
Geoscience Support Services, Lauren Wicks*
Kahn Soares & Conway, Theresa (Tess) Dunham*
LeClaire & Associates, Joe LeClaire*
Risk Sciences, Tim Moore*
Santa Ana Watershed Project Authority, T. Milford Harrison*
Santa Ana Watershed Project Authority, Mark Norton*
Santa Ana Watershed Project Authority, Haley Mullay*
Santa Ana Regional Water Quality Control Board, Cindy Li*
Santa Ana Regional Water Quality Control Board, Keith Person*
WEI, Carolina Sanchez*
WEI, Samantha Adams*
WSC, Michael Cruikshank*

* Participated via conference call

STAKEHOLDERS ABSENT:

Beaumont-Cherry Valley Water District
City of Banning
City of Redlands
Irvine Ranch Water District
Jurupa Community Services District
San Gorgonio Pass Water Agency
Temescal Valley Water District

Call to Order/Introductions

The Basin Monitoring Program Task Force (Task Force) meeting commenced at 1:30 p.m. in a virtual Zoom Meeting, in response to, and in compliance with, COVID-19 regulations. Brief introductions were made.

Approval of April 22, 2020 Meeting Notes

The April 22, 2020 meeting notes were approved as posted.

Triennial Ambient Water Quality Update – WSC, Inc.

Michael Cruikshank of WSC presented a PowerPoint presentation on the Interpretative tools that were created to accompany the Technical Memorandum of the *Recomputation of Ambient Water Quality for the Period 1999 to 2018* report. The Draft Technical Memorandum was distributed before the last meeting and is available for comment. The comments are due on Monday, May 18th. There are many additional digital deliverables, including the database, geodatabase (maps, contours, point statistics) and Subwatershed Packets, that will be available for download for use once the project is completed.

Joe LeClaire, of LeClaire and Associates, continued the PowerPoint presentation, slides 7-18, elaborating on methodological factors that are most likely linked to the changes seen in the groundwater management zones. The interpretative tools will assist in many functions; one of the most helpful being that it will identify the areas that are cause for concern. The 2019 Recycled Water Policy will require the task of impairment identification and analysis, that these interpretative tools will allow this task to be much easier to conduct. The following four groundwater management zones (GMZ) were explored with interpretative tools and presented

at the Task Force meeting to demonstrate the tool's capabilities:

- Orange County GMZ forebay area
- Chino South and East GMZ
- Riverside A GMZ
- Bunker Hill B GMZ

Michael Cruikshank, of WSC, reviewed a few of the recommendations that were provided within the Technical Memorandum. These suggestions aim to aid in even better implementation of future Ambient Water Quality reports. He emphasized that beginning the data collection earlier really helped the process since data compilation can take longer than expected. Other recommendations included the support of increasing the reporting cycle from three years to five years, and an increased focus on data compilation quality to maintain a high-quality standard of work. More detail and depth for their recommendations are found on page 80 of the draft Technical Memorandum.

Tim Moore, of Risk Sciences, suggested that it would be beneficial to make an in-depth comparison between the three objective periods of ambient water quality. The three objective periods (1954 – 1973, 1978-1997, and 1999 – 2018) since these periods no longer overlap each other. This comparison may provide some insight into any incidence of exceedance. Since the new Recycled Water Policy's first deadline is not until April of 2024, the Task Force debated completing this additional work now, as opposed to waiting for the next reporting cycle. Mark Norton suggested that a smaller group of the Task Force can meet, in addition to Task Force meetings, to spend time on the oversee the work being completed.

Cindy Li, of the Regional Water Quality Control Board (RWQCB), Tess Dunham (Kahn, Soares, & Conway LLP), Michael Cruikshank, of WSC, and the State Water Resources Control Board had a discussion after the last Task Force meeting to discuss the Recycled Water Policy and it's many requirements. According to the conversation, the policy requirements will be applied **after** the submission for the April 2024 deadline, including the annual compilation and submission of well data. Fortunately, based on feedback from the State Water Resources Control Board the annual data reporting can be submitted in the format that the Task Force has available, and the State Water Resources Control Board will format it to fit into their system, if necessary. Tess Dunham and Cindy Li will be drafting an e-mail to the State Board to get written confirmation of the discussion to further the understanding of the requirements amongst the Task Force.

Santa Ana River Wasteload Allocation Model Recalibration – WEI Evaluation of Upper Temescal Recalibration Results

Carolina Sanchez (Part 1) & Samantha Adams (Part 2), of Wildermuth Environmental, Inc. (WEI), provided a PowerPoint presentation to review the process taken to evaluate the 2017 Wasteload Allocation Model (WLAM) for the Salt Nutrient Management Plan (SNMP) update that WEI is conducting for Elsinore Valley Municipal Water District (EVMWD) and Eastern Municipal Water District (EMWD). They presented this item, at the request of the Task Force, to provide guidance on how to verify accuracy of the WLAM.

Carolina Sanchez began with reviewing their process in setting up for the SNMP update and calibrating the WLAM prior to utilization. They reviewed the scope of their work and the rationale behind the steps taken by WEI. The three main points of examination for their process were:

- Model connection
- Model parameters
- Streambed Infiltration TDS estimates

In their evaluation, WEI found that the models were connected, but concluded that their approach differs from the model parameters and the methodology of the streambed infiltration rates for TDS employed by Geoscience. One of the challenges faced for the Upper Temescal Valley GMZ, is that the infiltration rate is not thoroughly evidenced, by data or documentation. This significant lack of information in recent years puts

the model at a disadvantaged because it relies heavily on conceptual ideas instead of verifiable data. For their project, WEI used the model under the following assumptions, from slide 10 of their presentation:

- "The model results for streamflow and streambed infiltration to the Upper Temescal Valley GMZ (which excludes Reaches 44, 46, and 48) will be used if the Task Force and Regional Board proceed with the WLAM planning runs based on this version of the model calibration.
- For days where the WLAM model estimates zero TDS concentration for streambed infiltration, the TDS will be estimated based on the volume-weighted TDS concentration of the inputs to the surface flow of each reach that's drying up for that specific day."

Samantha Adams, of WEI, presented their recommendations for the Task Force in implementing a review of the model to dampen any concerns they may have regarding WLAM accuracy. Their recommendations are reviewed fully on slides 21 and 24 with supportive graphs and tables of data from the WLAM. Slide 31 summarizes their recommended approach as:

- "Schematics, charts and tables similar to those prepared for the [Upper Temescal Valley] SNMP could be readily assembled for other GMZs from the model input and output files.
- The exhibits can be reviewed by the Task Force members and other overlying agencies and experts in the local hydrogeology of the GMZs to assess if (1) obvious errors exist and (2) the results reasonably represent the GMZ
- A finding that the representation of a GMZ is not fully reasonable does not mean the WLAM could not move forward to completion, but it would enable the Task Force to: highlight limitations in the use of the model and identify areas where additional monitoring and/or studies are needed to improve future versions of the model."

Santa Ana River Wasteload Allocation Model Recalibration – Geoscience Response to WE Inc. Evaluation

Johnson Yeh, of Geoscience, gave a PowerPoint presentation to the Task Force explained the modeling approach taken for the current (2017) Wasteload Allocation Model in the Upper Temescal Valley groundwater management zone. Geoscience provided a comparison between the previous WLAM, and the 2018 version they just completed for the Task Force. They reviewed the procedural differences between the 2008 WLAM and 2017 WLAM while highlighting the significance of the assumptions of rising groundwater in Reaches A-44, A-46, and A-48. For the Streambed Infiltration Rate for the TDS/TIN Estimates in the Upper Temescal GMZ, Geoscience will be updating the methodology in the 2017 WLAM to the match that provided by WEI.

Santa Ana River Wasteload Allocation Model Recalibration – Feedback from SAR Integrated Tool Peer Reviewers -SAWPA

Mark Norton, of SAWPA, introduced Dave Romero, of Balleau Groundwater, a hydrogeology and hydrology advisory group that works out of Albuquerque, New Mexico. They have experience peer reviewing groundwater models in the Bunker Hill and the Rialto-Colton Basins, and are currently consulting on the Santa Ana River Integrated tool model for San Bernardino Valley Municipal Water District.

Dave Romero provided a brief outline of an assessment that Balleau Groundwater would be able to provide the Task Force in assessing Wasteload Allocation Model. They would be available around mid-July to start, working a strategy similar to what Wildermuth Environmental, Inc. had summarized earlier in the meeting presentation for the Task Force. The first part includes the assessment of the model, obtaining the files, developing model workspace and review input and output of the model on key areas to familiarize themselves with the region/model. The second part is providing a half-day video workshop for the Task Force that describes general observations and findings of the assessment. For part 1 and 2, he estimated cost to be approximately $40,000 with completion of both tasks around the end of August. A third part of the process could be added on to do any follow up work, if needed, for approximately $15,000. He will provide a summary document, with timeline and cost, of taking on the peer review process to be distributed via email to the Task Force after the meeting.

After hearing the proposal from Dave Romero, of Balleau Groundwater, Tim Moore, of Risk Sciences, expressed his support of the current WLAM and the work that Geoscience intends to revise and update based on its intended purpose, which is to support adoption of National Pollution Discharge Elimination System (NPDES) permits at existing effluent limits. He explained that any agencies that request effluent limits to be less stringent have completed more in-depth modeling and analysis for their respective areas to accomplish their goals. Since the current WLAM was adopted in 2004, based on data from 2002, there is a major concern of delaying the 2017 WLAM submission to the Regional Water Quality Control Board. With that being noted, Tim Moore suggested that the WLAM be approved by the Task Force on the caveat that any agency requesting less stringent effluent limits would be required to develop and proceed with conducting a more thorough study of their areas of discharge to support the 2017 WLAM. He also recommended that the Task Force request to remove dewatering discharges from the maximum discharge scenarios, and that any such requests for dewatering discharges cannot occur unless they are in compliance with the current objectives. Any concerns that were present were put at ease with this explanation, which allows the Task Force to progress forward with the 2017 WLAM.

> **MOVED,** to approve the 2017 Wasteload Allocation Model, with the discussed updates and revisions presented by Geoscience, to support the adoption of NPDES and POTW permits within the existing effluent limits. If a permittee is requesting a less stringent effluent limit, the permittee will need to commit to conducting additional site-specific analysis to supplement the WLAM to support any changes being approved to the permit limits.
>
> Results: **Adopted (Unanimously)**
> Motion/Second: J. Shepardson/E. Filadelfia

Schedule Future Meetings

The next Basin Monitoring Program Task Force meetings, which will be conducted virtually due to COVID-19, have been scheduled for:

- Wednesday, June 24th, 2020 1:30 p.m. – 4:00 p.m.

Adjournment

The meeting adjourned at 12:08 p.m.