



2022 Groundwater Monitoring Program - Next Steps

January 26, 2023

Objectives and Agenda

Objective: Communicate the next steps to finalizing the 2022 Groundwater Monitoring Program (2022 GMP)

Agenda

- Reminder of draft 2022 GMP report contents
- Reminder of comments received on draft 2022 GMP
- How 2022 GMP deliverable will be completed for delivery to Regional Board
- Next steps for addressing components extracted from final 2022 GMP (data gaps and implementation plan)

2022 Groundwater Monitoring Program Report Outline

- Section 1 – Introduction
- Section 2 – Groundwater Monitoring Program Approach
- Section 3 – Groundwater Management Zone Monitoring Networks and Potential Data Gaps
- Section 4 – 2021 Ambient Water Quality Pilot Study
- Section 5 – Implementation Plan (Actions for FY 2022/23 through 2028/29)

Comments Received

Written Comments from:

- OCWD
- IEUA
- WMWD
- City of Riverside
- EVMWD
- Mark Norton
- Tess Dunham
- Regional Board

Verbal discussions with:

- Yucaipa Valley WD
- City of Corona

Comments Received

- Main focus was on Potential Data Gaps analysis (Section 3.2)
- Redlines to refine regulatory language and interpretations
- Requested additional details on some of the Task Force feedback during workshops (use of the Integrated Model for AWQ, in particular)
- Minor clarifications on AWQ Pilot Study
- Reduce final report to what is explicitly requested in the Basin Plan amendment for regulatory compliance – other work products can be extracted and repurposed
 - Separate out Sections 3.2, 4.3, 4.4, and 5

2022 GWMP Overview

Section 1 Introduction

- Purpose and organization of report
- Regulatory setting
- 2005 Groundwater Monitoring Program
- 2022 GWMP Requirements and Goals
 - Table 1-1 Reference Guide

Changes to finalize report:

- Rework to reflect eliminated sections.
- Update regulatory language
- Address minor edits

Table 1-1. How the 2022 Groundwater Monitoring Plan Addresses the Required Elements of the 2019 Recycled Water Policy and the 2021 Basin Plan Amendment

Required Elements	How the Report Addresses the Required Element
Recycled Water Policy (Section 6.2.4.1)	
Define an appropriate network of monitoring locations that:	
Provide a reasonable, cost-effective means of determining whether water quality in the basin is consistent with applicable water quality objectives	<ul style="list-style-type: none"> The 2022 GMP defines a monitoring network that includes all wells in each GMZ that are monitored for TDS and/or nitrate. In GMZs with potential data gaps, a stepwise process has been defined to confirm the data gaps prior to investing money in new well construction. Both of these approaches ensure a cost-effective means of collecting the monitoring data needed to assess AWQ and assimilative capacity every five years.
Consider basin-specific conditions in establishing the number, type, or density of monitoring locations to be sampled	<ul style="list-style-type: none"> Local conditions were considered. Due to the complexity, variability, and diversity of aquifer conditions and uses across the SAR Watershed, a qualitative approach to determining the sufficiency of the monitoring network was applied. The analysis of potential data gaps is described in Section 3.3 and the potential data gaps in each GMZ are identified in Appendix C
Target areas with surface and ground water connectivity, where applicable	<ul style="list-style-type: none"> Because monitoring network includes all wells in each GMZ that are monitored for TDS and/or nitrate, and potential data gaps are identified, the 2022 GMP sufficiently addresses this criteria.
Include existing wells that are located and screened appropriately to determine water quality throughout the most critical areas of the basin	<ul style="list-style-type: none"> The 2022 GMP defines a monitoring network that includes all wells in each GMZ that are monitored for TDS and/or nitrate, including all municipal groundwater supply wells. Thus, the most critical areas of the GMZs are covered.
Leverage the wells in other regulatory programs, such as those defined for compliance with the Sustainable Groundwater Management Act	<ul style="list-style-type: none"> The 2022 GMP defines a monitoring network that includes all wells in each GMZ that are monitored for TDS and/or nitrate.

2022 GWMP Overview

Section 2 –Groundwater Monitoring Program Approach

- Approach to Obtain Task Force Input
 - Table 2-1 – record of workshops
 - Appendix D - PPTs
- Data Collection, Review, and Analysis
 - Appendix B – GMZ maps
- Summary of Key Findings and Lessons Learned
- Task Force Input and Feedback
 - Table 2-2 – Considerations, feedback, and recommendation

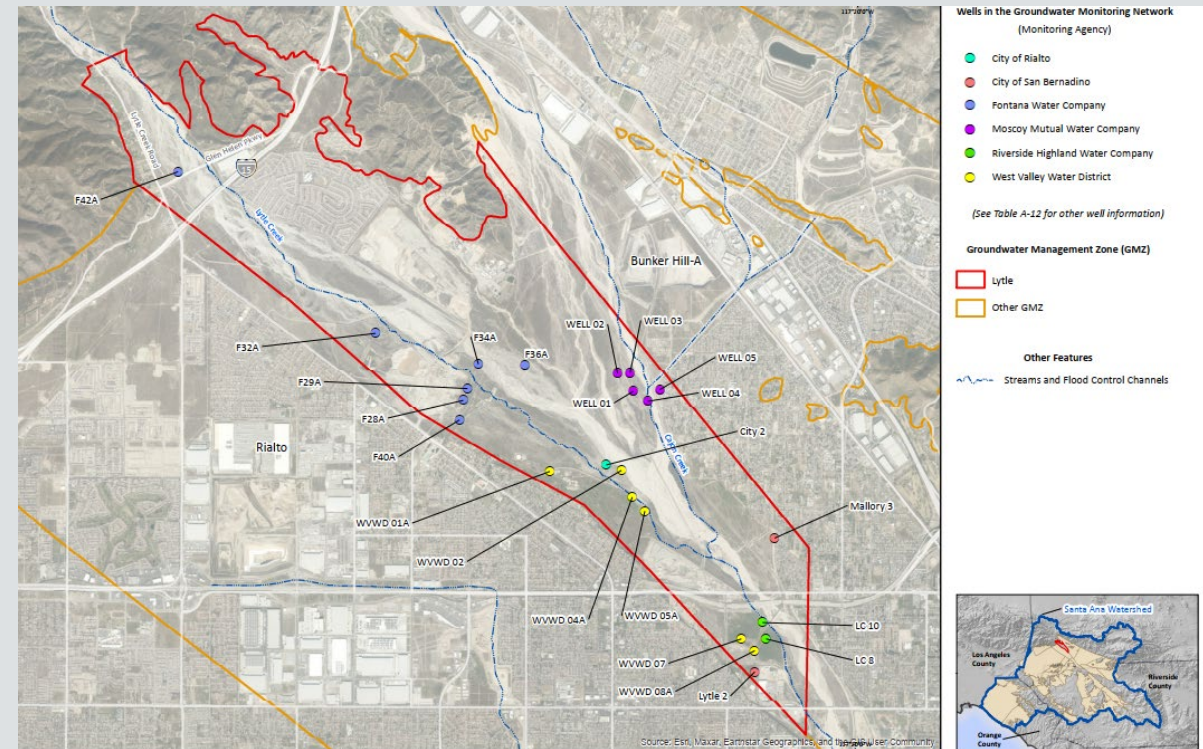
Changes to finalize report:

- Rework to include additional details on Task Force feedback during workshops
- Address minor edits

2022 GWMP Overview

Section 3 – GMZ Monitoring Networks and Potential Data Gaps

- 3.1 Current GMZ Monitoring Network
 - Appendix A (Well Table, Map)
- ~~3.2 Potential Data Gaps~~
 - ~~Assessment of Data Gaps~~
 - ~~Appendix C (Maps)~~
 - ~~Process to Investigate Potential Data Gaps~~
 - ~~Schedule (to complete investigation steps) — 2 years~~
 - ~~Responsible Parties — Table 3-1~~



Changes to finalize report:

- Delete Section 3.2
- Address minor edits

2022 GWMP Overview

Section 4 – 2021 AWQ Pilot Study

- 4.1 Objectives and Intended Outcomes
- 4.2 Scope of Work
- ~~4.3 Schedule – Table 4-1~~
- ~~4.4 Planning Level Budget – Table 4-2~~

Changes to finalize report:

- Delete Sections 4.3 and 4.4
- Update Section 3.2 to reflect minor change to scope requested by scoping committee and included in West Yost Proposal

2022 GWMP Overview

Section 5 – Implementation Plan

- One stated goal of the 2022 GMP was to identify the work that the Task Force will need to perform through fiscal year 2028/29 to comply with the Basin Plan SNMP.
- Table 5 1 shows a schedule for when the work items generally need to be performed.

Changes to finalize report:

- Delete Section 5

Task (Task Lead)	Task Duration						
	Fiscal Year						
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
2021 Ambient Water Quality Pilot Study (Task Force)	Start: Jan 2023	Finish: Oct 2023					
Complete First Five-Year Assessment of the Basin Plan SNMP (Santa Ana Water Board, with Task Force Support)	Start: Jul 2023	Finish: April 2024					
Perform Four-Step Process to Address Potential Data Gaps Identified in 2022 GMP (Responsible Parties)		Start: Jan 2023		Finish: Dec 2025			
Annual Data Collection (Task Force)			Jul-Dec 2024	Jul-Dec 2025	Jul-Dec 2026	Jul-Dec 2027	Jul-Dec 2028
Update GMZ Aquifer Storage Models (Task Force)			Start: Jul 2024		Finish: Jun 2027		
Identify New Potential Data Gaps (Task Force)					Jan-Jun 2027		
Compute AWQ and Assimilative Capacity (Task Force)						Start: Jul 2027	Finish: Oct 2028
Complete Second Five-Year Assessment of the Basin Plan SNMP (Santa Ana Water Board, with Task Force Support)							Oct 2028 - Apr 2029

Next Steps

- Finalize 2022 GMP as presented and circulate for final Task Force Review
- As noted, we will delete some content for the final 2022 GMP – but the content doesn't go away
- Potential Data Gaps – this will be a separate deliverable that will support the Regional Board in demonstrating conformance with the 2019 Recycled Water Policy
- Implementation Actions – this will get folded into an update of the Task Force Planning Priorities document

Final 2022 GMP Report

- Deliver revised draft for Task Force by February 6
- Task Force has 3 weeks to review – return comments to West Yost by February 24
- Final 2022 GMP delivered to SAWPA by March 10
- SAWPA deliver Final 2022 to Regional Board by March 31

How to Finalize Potential Data Gaps Analysis

- **Purpose:** To create a framework to identify and resolve potential data gaps in each GMZ, including creating documentation of how they are addressed (for the record)
- **Rationale:**
 - Attrition analysis and notification to well owners didn't work
 - Regional Board seeks assurance that sufficient data is being collected to fully assess GMZ-wide water quality conditions
- **Approach:** Draft 2022 GMP included a 4-step approach that to determine if “Potential” are “Actual” data gaps, providing two years to complete the steps
 - Step 1. Determine if it is important to address the potential data gaps now (based on GMZ RW use and other factors)
 - Step 2. Demonstrate no potential data gaps with new (since 2004) hydrogeologic information
 - Step 3. Eliminate potential data gaps by identifying and monitoring existing wells
 - Step 4. Prepare plan to fill actual data gaps with construction of new monitoring wells (or document why not possible to address the actual data gap)

How to Finalize Potential Data Gaps Analysis

Agency concerns based on Comments Received:

- Does RB have authority to require agencies to fill actual data gaps?
 - Regional Board seeks collaborative implementation to address a known problem that is consistent with past Task Force cooperation, not to issue orders
- Identifying Responsible Parties. (*Attempted in Table 3-1 – Responsible Parties*)
 - Need more time to work out who is responsible
 - Responsibility to perform process vs. responsibility to perform monitoring
 - How to engage well owners that are not Task Force participants – can they be named responsible?
- Timing to complete proposed process – potentially need more time
- Address cross-over with GSA efforts to fill data gaps for SGMA compliance
- Need improved criteria for whether potential data gaps in each GMZ are to be addressed now, or can be deferred
 - Tie directly to RW Policy
 - Tie to process to update GMZ storage parameters

How to Finalize Potential Data Gaps Analysis

Recommended Process

Prepare TM documenting Potential Data Gaps Analysis and Framework to Address Data Gaps in time for Regional Board to include in their analysis of conformance.

Due by October 2023 (end of month ok)

- Process to develop the final TM:
 - Schedule individual GMZ meetings at SAWPA with Regional Board staff and consultant to review identified potential data gaps (can group logical GMZs together – e.g. San Jacinto GMZs) – over 1-2 day period at SAWPA, in person
 - Use outcomes of individual meetings to propose/present the following at TF meetings:
 - Process to finalize assignment of Responsible Parties for each GMZ
 - Revised identification of potential data gaps in each GMZ
 - Revised framework for addressing potential data gaps

How to Finalize Potential Data Gaps Analysis

Proposed Schedule

- April 2023 – Approve technical consultant budget and schedule to complete Potential Data Gaps Analysis
- May 2023 – Hold individual meetings at SAWPA with stakeholders from each GMZ to review potential data gaps
- June 2023 – Task Force meeting discussion summarizing outcomes of individual meetings and next steps for assigning responsible agencies
- July 2023 – Task Force meeting discussion to present revised potential data gaps in each GMZ
- August 2023 – Task Force meeting discussion to present revised framework for addressing potential data gaps
- September 25, 2023 – Deliver Draft TM to task force
- October 16, 2023 – Deliver revised Draft TM to task force with comments addressed
- October 27, 2023 – Deliver Final TM to SAWPA
- October 30, 2023 – SAWPA deliver Final TM to Regional Board

How to Reframe Implementation Plan into Planning Priorities Document

- **Purpose:** To communicate the necessary Task Force work to comply with the Basin Plan SNMP and Recycled Water Policy through the next ambient water quality update due in October 2028, including a tentative schedule for the tasks to be performed each year
- **Rationale:**
 - Supports prioritization and planning for Task Force to complete necessary work, development of annual budgets, and procuring technical consultants
 - Provides assurance to Regional Board that TF understands the work that needs to be done and when it will generally be planned to be done
 - Supports Regional Board assessment of conformance with the Recycled Water Policy
- **Approach:** Incorporate into an updated “Planning Priorities” Document
 - Planning Priorities document as living document that is updated annually based on outcomes of work
 - Planning Priorities of Task Force include addressing both GW and SW compliance with Basin Plan SNMP
 - Effort to be led by Tess Dunham (Regulatory Consultant)

How to Reframe Implementation Plan into Planning Priorities Document

Proposed Schedule

- TBD but should also be completed in time to
 - Support Regional Board assessment of conformance with Recycled Water Policy (October 2023)
 - Support development of FY 24/25 budget

THANK YOU

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