



DRAFT TECHNICAL MEMORANDUM

DATE: September 3, 2021 **PROJECT #:** 9090.1401

TO: Ad Hoc Sustainable Groundwater Planning Advisory Committee (GSU22 Committee)

CC: Brian Lockwood, P.G., C.Hg. and Casey Meusel
Pajaro Valley Water Management Agency

FROM: Patrick Wickham and Cameron Tana, P.E.

PROJECT: Basin Management Plan: Groundwater Sustainability Update 2022 (GSU22)

SUBJECT: GSU22 Review Schedule and Annotated Outline

BACKGROUND

The Pajaro Valley Water Management Agency (PV Water) submitted a Groundwater Sustainability Plan (GSP) Alternative for the Pajaro Valley Subbasin (Basin) on December 31, 2016, to meet requirements under the Sustainable Groundwater Management Act (SGMA). The California Department of Water Resources (DWR) approved the Groundwater Sustainability Plan (GSP) Alternative on July 17, 2019. Under SGMA, the first 5-Year Update of the approved GSP Alternative must be submitted to DWR by January 1, 2022. The Basin Management Plan: Groundwater Sustainability Update 2022 (GSU22) will be submitted to DWR as the 5-Year Update.

In its approval of PV Water's GSP Alternative, DWR provided 10 recommended actions for PV Water to address. The GSU22 addresses the DWR recommended actions in addition to providing an update on the sustainability status of the Basin. The GSU22 will reflect the following outcomes as recommended by the GSU22 Committee and approved by the PV Water Board of Directors.

- Sustainable management criteria that DWR recommended for development;
- Statements on how additional recommended actions are addressed; and
- Statements on the sustainability status of relevant sustainability indicators.

The 12th and final scheduled monthly GSU22 Committee meeting on September 9, 2021, will address the remaining recommended actions pertaining to the monitoring plan and non-jurisdictional assessment plans. It will also include the sustainability status of remaining indicators (groundwater levels and interconnected surface water) and present the draft outline of the GSU22 shown below. After the meeting, M&A will compile information presented at the meetings and the supporting technical memoranda into a draft GSU22 to describe how recommended actions are addressed and the sustainability status.

This technical memorandum describes the process for review and approval of the GSU22 and includes an annotated outline. As detailed below, the GSU22 Committee members will have an opportunity to review the draft GSU22 before it is presented to the PV Water Board of Directors for final approval to submit to DWR.

GSU22 Review Schedule

The following bullets present the proposed schedule for review and adoption of the GSU22:

- **Friday 9/3/2021:** Provide annotated outline of draft GSU22 and review/approval process
- **Thursday 9/9/2021:** Review annotated outline of draft GSU22 and review/approval process at Committee meeting #12
- **Monday 9/20/2021:** Release public draft GSU22; request written comments following comment guidelines provided below
- **Friday 10/1/2021:** Deadline for written comments on public draft GSU22
- **Monday 10/11/2021:** Publish draft GSU22 for Board of Directors (Board) agenda including summary of comments/responses
- **Friday 10/15/2021:** Release of Board packet
- **Wednesday 10/20/2021:** Present draft GSU22 to Board as informational item
- **Monday 11/8/2021:** Publish revised GSU22 with summary of revisions for Board consideration
- **Friday 11/12/2021:** Release of Board packet for GSU22 approval
- **Wednesday 11/17/2021:** Board considers GSU22 for approval to submit to DWR

GSU22 Review Comment Guidelines

As described above, GSU22 Committee and public review of the draft GSU22 will occur between 9/20/2021 and 10/1/2021. During the review process, we request the following type of comments:

- Is there any information in the GSU22 that does not align with the outcomes that the GSU22 Committee recommended to the Board?
- Are there any additions that do not change the essence of the GSU22 Committee's recommendations that should be considered?
- Is there any language that should be considered for removal because it does not align with discussions throughout the GSU22 process?

Comments that do not follow these guidelines will not result in substantial changes to the draft GSU22 presented to the Board.

GSU22 Annotated Outline

The GSU22 annotated outline is presented on the following pages. Italicized text below each major header briefly describes included items at the section level and includes links to previously submitted documents where applicable.



GSU22 Annotated Outline

1 EXECUTIVE SUMMARY

Summary of key conclusions and sections in the GSU22 including the recommendations and statements approved by the GSU22 Committee and Board.

2 INTRODUCTION TO THE PAJARO VALLEY BASIN GROUNDWATER SUSTAINABILITY UPDATE 2022 (GSU22)

Description of GSU22 context within SGMA and supporting administrative processes

- 2.1 BACKGROUND
- 2.2 DWR RECOMMENDED ACTIONS FOR GSU22
- 2.3 SUSTAINABILITY STATUS
- 2.4 STAKEHOLDER PROCESS

3 SUSTAINABLE MANAGEMENT CRITERIA (SMC) FOR SEAWATER INTRUSION

Development and presentation of SMC for SWI. Primary content previously presented in [Proposed Sustainable Management Criteria for Seawater Intrusion Technical Memorandum \(3/9/21\)](#)

- 3.1 BACKGROUND
- 3.2 SUMMARY OF SUSTAINABLE MANAGEMENT CRITERIA
- 3.3 SIGNIFICANT AND UNREASONABLE CONDITIONS
- 3.4 MINIMUM THRESHOLD
- 3.5 UNDESIRABLE RESULTS
- 3.6 MEASURABLE OBJECTIVE
- 3.7 RECOMMENDATION FOR ADDITIONAL LOCATIONS TO MONITOR SUSTAINABLE MANAGEMENT CRITERIA

4 SUSTAINABLE MANAGEMENT CRITERIA FOR CHRONIC LOWERING OF GROUNDWATER LEVELS

Development and presentation of SMC for GWL. Primary content previously presented in [Development of Sustainable Management Criteria for Chronic Lowering of Groundwater Level Technical Memorandum \(4/2/21\)](#)

- 4.1 BACKGROUND
- 4.2 SUMMARY OF SUSTAINABLE MANAGEMENT CRITERIA
- 4.3 SIGNIFICANT AND UNREASONABLE CONDITIONS
- 4.4 REPRESENTATIVE MONITORING POINTS
- 4.5 WELL DEPTH ANALYSIS
- 4.6 MINIMUM THRESHOLDS



- 4.7 UNDESIRABLE RESULTS
- 4.8 MEASURABLE OBJECTIVES
- 4.9 INTERIM MILESTONES
- 4.10 RECOMMENDATION FOR ADDITIONAL REPRESENTATIVE MONITORING POINTS

5 GROUNDWATER DEPENDENT ECOSYSTEMS (GDES)

Evaluation of GDEs and application of GWL SMCs for GDEs. Primary content previously presented in [Identification of Groundwater Dependent Ecosystems \(GDE\) \(1/8/21\)](#) and [Development of Sustainable Management Criteria for Chronic Lowering of Groundwater Level Technical Memorandum \(4/2/21\)](#)

- 5.1 BACKGROUND
- 5.2 IDENTIFICATION OF GDES
- 5.3 DATA GAPS
- 5.3 APPLICATION OF GWL SUSTAINABLE MANAGEMENT CRITERIA FOR GDES
- 5.4 RECOMMENDATION FOR ADDITIONAL EVALUATION OF GDES

6 SUSTAINABLE MANAGEMENT CRITERIA FOR DEPLETIONS OF INTERCONNECTED SURFACE WATERS

Development and presentation of SMC for ISW. Primary content previously presented in [Quantify Depletions of Interconnected Surface Waters \(1/8/21\)](#) and [Sustainability Management Criteria for Depletions of Interconnected Surface Waters Technical Memorandum \(5/7/21\)](#)

- 6.1 BACKGROUND
- 6.2 SUMMARY OF SUSTAINABLE MANAGEMENT CRITERIA
- 6.3 FINDINGS FOR INTERCONNECTED SURFACE WATER
- 6.4 RATIONALE FOR NO MINIMUM THRESHOLDS AND NO UNDESIRABLE RESULTS
- 6.6 REPRESENTATIVE MONITORING POINTS
- 6.6 MEASURABLE OBJECTIVES
- 6.7 INTERIM MILESTONES
- 6.8 RECOMMENDATION FOR ADDITIONAL REPRESENTATIVE MONITORING POINTS

7 SUBSIDENCE EVALUATION

Evaluation of the subsidence within the Basin. Analysis previously presented in [Findings and Proposed Recommendation for Subsidence Technical Memorandum \(6/4/21\)](#)

- 7.1 INTRODUCTION
- 7.2 SUMMARY OF PROPOSED RECOMMENDATION FOR SUBSIDENCE



- 7.3 TECHNICAL BACKGROUND
- 7.4 USGS EVALUATION METHODOLOGY
- 7.5 USGS EVALUATION RESULTS
- 7.7 CONCLUSIONS

8 SUSTAINABILITY STATUS

Evaluation of Basin sustainability status relative to sustainability indicators. Includes evaluation of status of projects and management actions. Analysis previously presented in [Sustainability Status in Pajaro Valley Subbasin: Implementation Status of Projects and Management Actions and Progress for Groundwater in Storage and Seawater Intrusion Indicators Technical Memorandum \(7/2/21\)](#), [Sustainability Status in Pajaro Valley Subbasin: Water Quality Technical Memorandum \(8/7/21\)](#), and [Sustainability Status in Pajaro Valley Subbasin: Chronic Lowering of Groundwater Levels and Depletion of Interconnected Surface Water Technical Memorandum \(9/3/21\)](#)

- 8.1 STATUS OF PROJECTS AND MANAGEMENT ACTIONS
- 8.2 SUSTAINABILITY STATUS FOR SEAWATER INTRUSION
- 8.3 SUSTAINABILITY STATUS FOR GROUNDWATER IN STORAGE
- 8.4 SUSTAINABILITY STATUS FOR CHRONIC LOWERING OF GROUNDWATER LEVELS
- 8.5 SUSTAINABILITY STATUS FOR DEPLETION OF INTERCONNECTED SURFACE WATER
- 8.6 SUSTAINABILITY STATUS FOR WATER QUALITY

9 DROUGHT RESILIENCY ACTIONS

Evaluation of implemented and planned drought resiliency actions within the Basin. Analysis previously presented in [Findings and Proposed Recommendation for Drought Resiliency Actions Technical Memorandum \(6/4/21\)](#)

- 9.1 BACKGROUND
- 9.2 SUMMARY OF PROPOSED RECOMMENDATION FOR DROUGHT RESILIENCY ACTIONS
- 9.3 DROUGHT RESILIENCY OF PROJECTS AND MANAGEMENT ACTIONS
- 9.4 SUMMARY OF CONSERVATION PROGRAM
- 9.5 SUMMARY OF PROJECTS TO INCREASE RECYCLED WATER DELIVERIES
- 9.6 EVALUATION OF DROUGHT RESILIENCY OF PROJECTS AND MANAGEMENT ACTIONS DURING IMPLEMENTATION TO DATE
- 9.7 CONCLUSIONS

10 GROUNDWATER BUDGETS



Evaluation of historical, current, and projected groundwater budgets. Analysis previously presented in [Projected Water Budget Analyses Technical Memorandum \(8/9/21\)](#) and [Climate Change and Sea Level Rise Uncertainty Analysis for Projected Water Budget Technical Memorandum \(9/2/21\)](#)

10.1 BACKGROUND

10.2 SUMMARY OF STATEMENT FOR PROJECTED WATER BUDGETS

10.3 OVERVIEW OF WATER BUDGET DEVELOPMENT

10.4 GROUNDWATER BUDGET RESULTS

10.4.1 Basin Historical and Current Groundwater Budgets

10.4.2 Basin Projected Groundwater Budgets

10.4.3 Groundwater Budget Components for Aromas aquifer

10.5 NON-JURISDICTIONAL AREA ASSESSMENT

10.6 CLIMATE CHANGE AND SEA LEVEL RISE UNCERTAINTY ANALYSIS

10.7 KEY FINDINGS

11 MONITORING NETWORKS AND PLAN

Evaluations, update, and summary of PV Water's monitoring networks to be presented 9/9/21 as [Groundwater Sustainability Update 2022 \(GSU22\) Monitoring Plan \(9/3/21\)](#)

11.1 BACKGROUND

11.2 MONITORING OBJECTIVES

11.3 DESCRIPTION OF MONITORING NETWORK

11.4 MONITORING PROTOCOLS FOR DATA COLLECTION AND MONITORING

11.5 ASSESSMENT AND IMPROVEMENT OF MONITORING NETWORK

11.6 DATA MANAGEMENT SYSTEM AND DATA REPORTING

12 NON-JURISDICTIONAL AREA ASSESSMENT PLAN

Plan for ongoing assessment of adverse effects within Basin occurring across jurisdictional boundary. Analysis to be presented 9/9/21 as [Non-Jurisdictional Area Assessment Plan Technical Memorandum \(9/3/21\)](#)

12.1 BACKGROUND

12.2 GROUNDWATER LEVEL MONITORING

12.3 LAND USE MONITORING

12.4 GROUNDWATER MODEL ASSESSMENTS

13 SUMMARY OF COMMUNICATIONS AND ENGAGEMENT

Summary of PV Water communications and engagement during GSU22 process.

14 REFERENCES