



San Pasqual Valley (SPV) Groundwater Sustainability Plan (GSP)

Community Workshop #3

Meeting Summary

The following is a summary of the Community Workshop, comments, and questions. This summary reflects the general content and spirit of each discussion point, but is not a verbatim recording.

Date: August 12, 2026, at 1 p.m.

Location: Virtual Teams Meeting

Purpose: Stakeholder Workshop

Attendees:	Public • Matt Witman • Mayra Molina • Nathan Lacy • Rancho Guejito • Steve Anderson • Tedi Jackson • Zachary Ellis	Groundwater Sustainability Agency (GSA) <u>City of San Diego (City)</u> • Andrew Funk • Sergio Angulo • Megan Hickey <u>County of San Diego (County)</u> • Jim Bennett <u>Consultant Team</u> • Rosalyn Prickett (Rincon Consultants) • Kristin Pittack (Rincon Consultants) • Kara Bedwell (Rincon Consultants) • Heather Curran (Rincon Consultants) • Marisa Earll (INTERA) • Trey Driscoll (INTERA) • Liana Letsos (JPW Communications)
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Welcome and Introductions

Andrew Funk welcomed participants to the third community workshop for the San Pasqual Valley Groundwater Basin Five-Year Periodic Evaluation and introduced representatives from the City, County and consultant team.

Rosalyn Prickett reviewed the workshop agenda and encouraged participants to ask questions throughout the presentation. The workshop included an overview of the Water Year 2025 Annual Report, findings from the Five-Year Periodic Evaluation, updates to the groundwater model, proposed projects and management actions, and upcoming opportunities for public review and engagement.

Review SGMA Requirements for San Pasqual Valley Basin

Rosalyn provided an overview of the Sustainable Groundwater Management Act (SGMA) and the requirements for the San Pasqual Valley Basin.

The basin's sustainability goal, established in the 2022 Groundwater Sustainability Plan (GSP), is to maintain a locally managed, economically viable and sustainable groundwater resources for existing and future beneficial uses.

Under SGMA, Groundwater Sustainability Agencies must:

- Implement the SPV Basin GSP.
- Submit Annual Reports documenting groundwater conditions.
- Conduct a Periodic Evaluation of the GSP every five years.

Rosalyn also reviewed the six sustainability indicators applicable to the basin:

- Groundwater Level Decline
- Groundwater Storage Reductions
- Land Subsidence
- Water Quality Degradation
- Interconnected Surface Water Depletions
- Seawater Intrusion (Not applicable in SPV Basin)

Sustainable Management Criteria (SMC) for San Pasqual Valley Basin



- **Minimum thresholds (MTs)** The quantitative value that represents the groundwater conditions at a monitoring site that, when exceeded individually or in combination with others, may cause an undesirable result(s) in the basin.
- **Planning threshold (PTs)** The non-regulatory thresholds that assist the GSAs with planning and implementation of response actions as groundwater conditions near the MTs.
- **Undesirable results (URs)** The groundwater conditions that are significant and unreasonable as related to the five sustainability indicators.

MTs and PTs for groundwater levels and quality were established in 2022 SPV Basin GSP

- **Groundwater Levels:** MT = variable based on location and historic data, protective of well infrastructure.
- **Groundwater Quality:** Nitrate MT = 10 mg/L and TDS MT = variable based on location and historic data, considers drinking water standards and concentrations flowing into Basin.

Summary of Water Year 2025 Annual Report

Rosalyn Prickett provided an overview of the Water Year 2025 Annual Report, including groundwater monitoring, water quality and groundwater storage conditions across the basin.

Monitoring Networks

- Groundwater levels are monitored in spring and fall using the representative monitoring network established in the 2022 GSP.
- The groundwater quality monitoring network includes 10 representative monitoring wells.
- The interconnected surface water monitoring network includes six wells in the western portion of the basin near areas previously identified as potential groundwater-dependent ecosystems (GDEs).



- Updates to portions of the monitoring network are being considered through the Five-Year Periodic Evaluation to address wells that are no longer accessible.

Groundwater Quality Results

- No undesirable results in Water Year 2025.
- Nitrate concentrations exceeded 10 milligrams per liter at three monitoring wells in the central portion of the basin, with historical data indicating that elevated nitrate levels in this area predate SGMA.
- Two monitoring wells, SP036 and SP006m in the western basin could not be sampled because of access issues.

Groundwater Storage

- Groundwater Storage has been relatively stable since the adoption of SGMA and in the timeframe of the 5-Year Periodic Evaluation.
- Water Year 2025 was a critically dry year locally.
- Groundwater storage decreased in the eastern aquifers of the basin, declined slightly in the central basin, and remained stable or slightly increased in the western basin.
- Groundwater storage continues to respond strongly to wet and dry hydrologic cycles.

Water Year 2025 Overall Findings

- Simulated groundwater storage varied across the basin, with a small cumulative net decrease in WY 2025; however, overall conditions remained sustainable.
- No groundwater monitoring wells fell below their respective minimum thresholds.
- No negative impacts to ISWs or GDEs.
- TDS and nitrate MT exceedances in some wells, but not an undesirable result.
- SMC not established for land subsidence, and therefore was not assessed.

Summary of the Water Year 2025 Annual Report



Rosalyn explained that the Five-Year Periodic Evaluation expands on the Annual Report by reviewing groundwater conditions and GSP implementation over the entire 2020 to 2024 evaluation period.

The evaluation also responds to corrective actions and recommendations provided by the California Department of Water Resources (DWR) following approval of the 2022 GSP.

DWR recommendations included:

- Evaluating how groundwater-level minimum thresholds relate to other sustainability indicators.
- Revising the definition of undesirable results for groundwater quality.
- Establishing an approach to land subsidence monitoring and management.
- Filling data gaps related to interconnected surface waters.
- Establish a monitoring network for land subsidence and improve the understanding of monitoring well construction.
- Completing the proposed GDE study.

Groundwater Level Sustainability Indicator

Rosalyn reviewed groundwater-level SMCs and monitoring and findings from the Periodic Evaluation. The DWR corrective actions were to evaluate how groundwater-level MTs may affect beneficial uses and users, improve understanding of monitoring well construction details, and assess how chronic groundwater-level declines may affect other sustainability indicators, including subsidence, groundwater quality, and depletion of interconnected surface waters.

- A well survey in October 2025 helped fill data gaps and improve information about monitoring well construction.
- MTs for groundwater level and relation to ISWs, groundwater quality, and subsidence presented their respective sections
- The existing network of 15 representative groundwater-level monitoring wells is proposed to remain in place.



- All representative monitoring wells remain accessible for continued monitoring.
- The evaluation also considered how groundwater-level thresholds relate to other sustainability indicators and beneficial uses.

Groundwater Storage Sustainability Indicator

Rosalyn reviewed groundwater storage conditions and updates made to improve the basin's storage estimates. There were no specific DWR corrective actions pertaining to groundwater storage.

- Groundwater levels continue to serve as a proxy for evaluating groundwater storage.
- Updated modeling shows a cumulative net-positive change in groundwater storage of more than 2,000 acre-feet between October 2014 and December 2024.
- The groundwater model was refined using updated hydrologic data to provide a more accurate assessment of storage conditions.
- The updated findings indicate that groundwater storage conditions remain sustainable.

Groundwater Quality Sustainability Indicator

Rosalyn Prickett presented updated findings related to groundwater quality. The DWR corrective action was to revise the definition of undesirable results for degraded groundwater quality to account for MT exceedances caused by groundwater extraction, regardless of whether they result directly from groundwater management activities.

- The analysis did not identify groundwater pumping as the cause of groundwater quality exceedances.
- Three northern-area wells showed increasing nitrate above the MT, one well exceeded the TDS MT, and upstream MS4 wells consistently exceeded the non-stormwater action level for total nitrogen from 2022–2024.

- Existing exceedances generally predate SGMA implementation and do not constitute undesirable results as defined in the GSP.
- Surface water runoff was identified as a likely contributing source of elevated nitrate concentrations.
- Monitoring well SP036 is no longer accessible and is proposed to be replaced by SP023 in the groundwater quality monitoring network.

Land Subsidence Sustainability Indicator

Rosalyn Prickett presented updated findings related to land subsidence. The DWR corrective actions was to establish sustainable management criteria and a monitoring network that directly measures land elevation change.

- Less than approximately half a foot of subsidence was observed across the basin during the evaluation period.
- No significant infrastructure impacts related to subsidence were identified.
- InSAR data are proposed to serve as the ongoing land subsidence monitoring network.
- Proposed 0.5 ft Planning Threshold (relative to Jan 2022) if exceeded results in susceptible infrastructure identification and SMC establishment

Interconnected Surface Waters (ISWs) Sustainability Indicator

Heather Curran presented updated findings related to interconnected surface waters. The DWR corrective actions was to revise the ISW undesirable results definition to include quantitative MT exceedance criteria, continue filling monitoring and data gaps, and coordinate with regulatory agencies and interested parties to better understand ISW uses and users.

- Areas with potential ISWs are primarily located in the western basin; Cloverdale Creek, the San Dieguito River, and potentially Sycamore Creek.

- Certain stream segments may transition between gaining, losing and disconnected conditions depending on groundwater levels and surface flows.
- Confluence of San Dieguito River and Cloverdale Creek may provide seasonally interconnected aquatic habitat for protected amphibians.
- Monitoring well SP070 is proposed to be added to the ISW monitoring network because of its proximity to a GDE.
- SP014 is proposed to be removed from the ISW monitoring network because no GDEs were identified along the relevant portion of Sycamore Creek. The well will continue to be monitored as part of the groundwater-level network.

Groundwater Dependent Ecosystems (GDEs) Sustainability Indicator

Heather Curran presented updated findings related to Groundwater-Dependent Ecosystems (GDEs). The DWR corrective actions are to complete the proposed GDE study before the first periodic evaluation and use the findings to update MTs and quantify undesirable results based on the best available information.

- GDEs consist of willow communities in western Basin.
- GDEs provide habitat for many wildlife species.
- Plant health data indicate that GDE conditions have remained relatively consistent since 1985.
- Existing groundwater-level and ISW thresholds are considered likely to be protective of GDE health.

Future GDE monitoring will include:

- Desktop analysis during each five-year Periodic Evaluation using vegetation health indicators, aerial imagery and groundwater data.
- Monitoring of Normalized Difference Vegetation Index (NDVI) and Normalized Difference Moisture Index (NDMI) data to evaluate vegetation greenness and moisture.



- Biological field surveys if desktop monitoring identifies potential declines in GDE health associated with groundwater conditions.
- Additional annual monitoring if planning thresholds are exceeded at two of the six ISW monitoring wells for two consecutive sampling events.

Projects and Management Actions

Rosalyn reviewed the GSP's existing tiered approach to projects and management actions (PMAs).

- Tier 0 actions consist primarily of ongoing activities such as program management, monitoring, outreach and reporting.
- Tier 1 actions may be implemented when planning thresholds are exceeded.
- Tier 2 actions may be implemented in response to minimum threshold exceedances.

Based on the surface water recharge evaluation completed under Management Action 7, the project team is proposing two new management actions related to potential controlled releases from Sutherland Reservoir.

Management Action 13: Sutherland Reservoir Release Plan

- Proposed as a Tier 1 management action.
- Would be triggered if groundwater-level planning thresholds are exceeded at five monitoring wells, representing approximately 30% of the monitoring network, over a two-year period.
- Would establish a framework for potential controlled reservoir releases to support groundwater recharge.
- The plan would consider release triggers, decision criteria, water availability, timing, volume, monitoring and reporting.

Management Action 14: Sutherland Reservoir Controlled Releases for Recharge

- Proposed as a Tier 2 management action.



- Would be triggered if groundwater-level minimum thresholds are exceeded at five monitoring wells over a two-year period.
- Would implement the procedures developed under Management Action 13.
- Controlled releases would only occur when additional recharge is needed, sufficient water is available and reservoir operating and hydrologic conditions are favorable.

Sam Pasqual Valley Basin Groundwater Model Overview and Update Conclusions

Marisa Earll presented updates to the San Pasqual Valley groundwater model and summarized findings related to model performance, groundwater storage and future climate conditions.

- The model was updated with five additional years of observed data through 2024, including groundwater levels, stream inflows, climate data and Lake Hodges reservoir stage information.
- Agricultural land use remained generally consistent, and OpenET satellite data supported the model's representation of agricultural water demand at the basin scale.
- Simulated groundwater levels showed a strong correlation with observed groundwater levels, indicating that the updated model continues to represent basin conditions well.
- Historical and future modeling show that groundwater storage responds strongly to the duration and sequence of wet and dry periods, with declines during drought conditions and recovery during wetter periods.
- Overall, the updated model remains consistent with the findings of the 2022 GSP, indicates that the basin continues to meet its sustainability objectives and reinforces the importance of continued monitoring and adaptive management.

Community Engagement



The following questions and comments were shared by members of the public during the Q&A portion of the workshop.

Question:

Requested additional information about how septic return flows are incorporated into the groundwater model and the amount of water represented by those inputs.

Response:

The project team explained that septic return flows are estimated using population and census data and estimates of indoor water use. These flows are represented as relatively small inputs to the groundwater model and are separate from agricultural irrigation pumping.

Question:

Asked about groundwater wells and surface water conditions near Idaho Avenue and San Pasqual Valley Road and whether flows entering the basin in that area influence groundwater conditions.

Response:

The project team explained that surface water monitoring in that area has identified elevated nitrate concentrations. Some of the data used in the analysis came from surface water monitoring conducted under stormwater permit programs and were considered when evaluating potential nitrate sources.

Question:

Requested additional detail on how remote sensing tools will be used to evaluate GDE health and how the project team will distinguish impacts from groundwater management from other factors affecting vegetation.

Response:

The project team explained that NDVI and NDMI use long-term Landsat imagery to evaluate vegetation greenness and moisture. Data is available back



to 1985 and allows the team to review long-term and five-year trends in plant health.

These indicators will be evaluated alongside groundwater levels, groundwater extraction, climate conditions and aerial imagery. If the combined data indicate declining vegetation health that may be associated with groundwater conditions, biological field surveys may be conducted to evaluate conditions on the ground and determine potential causes.

Aerial imagery will also help distinguish native GDE vegetation from invasive species that may appear healthy in vegetation indices but do not represent the condition of native willow communities.

Question:

Asked how the project team will account for potential delays between declining groundwater levels and visible impacts to vegetation and how the different monitoring results will be interpreted when determining whether management changes are needed.

Response:

The project team explained that GDE monitoring and groundwater-level management will work together. If groundwater levels decline enough to trigger planning or minimum thresholds, Tier 1 or Tier 2 management responses could already be implemented while GDE conditions are being evaluated.

The five-year desktop analysis will also allow the project team to consider multiple consecutive years of vegetation data, recognizing that changes in vegetation health may lag behind groundwater-level declines. Monitoring results will be evaluated collectively to determine whether additional investigation or management responses are warranted.

Closing Remarks



Rosalyn reminded participants that the draft Five-Year Periodic Evaluation is available for public review.

- The public comment period opened Aug. 3, 2026, and closes Sept. 4, 2026.
- Comments received will be reviewed and incorporated into the response-to-comments process.
- Community Workshop #4 is scheduled for Oct. 28, 2026.
 - Workshop #4 will summarize public comments, discuss any resulting adjustments to the Periodic Evaluation and present final findings.
- The final Periodic Evaluation is expected to be submitted to DWR by Jan. 28, 2027.

The project team encouraged participants to continue providing comments and questions through the GSA's project contacts and public engagement opportunities. Comments received throughout the planning process will be documented as part of the Periodic Evaluation.