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Meeting Summary

Santa Cruz Mid-County Groundwater Sustainability Planning (GSP) Advisory Committee Meeting #7 May 23, 2018, 5:30 – 9:00 pm

This meeting was the seventh convening of the Groundwater Sustainability Planning (GSP) Advisory Committee. It took place on May 23, 2018 from 5:30-9:00 p.m. at the Santa Cruz County Sheriff's Office. This document summarizes a presentation to the Advisory Committee and discussion focused on two Sustainability Indicators: Chronic Lowering of Groundwater Levels and Subsidence. In particular, it describes project updates by staff; presentation of a technical staff proposal and options covering Chronic Lowering of Groundwater Levels and Subsidence Minimum Thresholds; Committee perspectives on Significant and Unreasonable Conditions, and Undesirable Results related to Chronic Lowering of Groundwater Levels and Subsidence under various different options; report on technical staff incorporation of Advisory Committee input from the April 25, 2018 meeting; action items; and an overview of public comment received. It is not intended to serve as a detailed transcript of the meeting.

Meeting Objectives

The objectives for the meeting were to:

1. Discuss and share Advisory Committee input on Minimum Threshold and Undesirable Result Options with Underlying Significant and Unreasonable Conditions for the following Sustainability Indicators:
 - a. Chronic Lowering of Groundwater Levels
 - b. Subsidence
2. Report back on Technical Staff incorporation of Advisory Committee input from the April 25 meeting.

Action Items

Key action items from the meeting include the following:

1. Darcy Pruitt, Regional Water Management Foundation, to keep Advisory Committee apprised of email address assignment process.
 - o John Ricker, County of Santa Cruz to update the Advisory Committee on the County's email policy, once it is final.



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2. Sierra Ryan, County of Santa Cruz, to confirm Jason Hoppin's (the County's communications officer) participation in June 27 meeting.
3. Staff to remind Advisory Committee members of Jason Hoppin's availability at June 27 meeting for outreach support.
4. Advisory Committee members to review Proposed Draft Seawater Intrusion Minimum Thresholds and provide any additional feedback to Ms. Pruitt by May30. Ms. Pruitt to send out a reminder to the Committee on May 29.

Meeting attendance

Committee members in attendance included:

1. Kate Anderton, Environmental Representative
2. John Bargetto, Agricultural Representative
3. David Baskin, City of Santa Cruz
4. Rich Casale, Small Water System Management
5. Keith Gudger, At-Large Representative
6. Bruce Jaffe, Soquel Creek Water District
7. Dana Katofsky McCarthy, Water Utility Rate Payer
8. Jon Kennedy, Private Well Representative
9. Jonathan Lear, At-Large Representative
10. Douglas P. Ley, Business Representative
11. Marco Romanini, Central Water District
12. Allyson Violante, County of Santa Cruz
13. Thomas Wyner for Cabrillo College, Institutional Representative

Committee members who were absent included:

1. Charlie Rous, At-Large Representative

Meeting Key Outcomes (linked to agenda items)

1. Introduction and Discussion of GSP Process Timeline and Project Updates

John Ricker, County of Santa Cruz, opened the meeting and welcomed participants. Mr. Ricker then asked the GSP Advisory Committee members, Santa Cruz Mid-County Groundwater Agency (MGA) Executive Team, and the consultant support team around the room to introduce themselves. He also addressed members of the public in attendance and asked them for self-introductions.

Eric Poncelet, Facilitator, reviewed the agenda, meeting objectives, and the updated GSP process timeline, and asked staff to provide the following project updates:



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- **June 14, 2018 Mid-County Stakeholder Meeting**
Ms. Ryan, referred to a flyer she had distributed, providing some details on the anticipated June 14 stakeholder meeting, scheduled to occur at the Congregational Church in Soquel.
- **Trend Data**
Mr. Ricker updated the group on his work with HydroMetrics on developing further trend data on groundwater usage, indicating that the data will depend on the targets set by the Committee. Staff will share additional data in July.
- **Advisory Committee Email Addresses**
Ms. Pruitt provided an update on setting up email addresses for Advisory Committee and MGA Board members. The group had a brief discussion on this topic.
- **Outreach Support for Advisory Committee**
Ms. Ryan introduced Jason Hoppin, communications officer for the County, and informed the Advisory Committee that Mr. Hoppin will be available to discuss his services at the June 27 Advisory Committee meeting.
- **Advisory Committee Field Trip**
Ms. Pruitt distributed field trip ballots to the Advisory Committee members, indicating that the ballot results will assist her in coordinating useful and meaningful field visits for the Committee.

2. Oral Communications (for items *not* on the agenda)

Members of the public provided comments on non-agenda items during this session.

One speaker thanked the Committee for its hard work as volunteers and staff for giving consideration to setting up email addresses for Committee members, which had been requested at earlier Committee meetings. This speaker further thanked staff for the update at the last MGA meeting regarding the availability of the groundwater modeling for review in November and for inviting DWR to attend meetings. Additionally, this speaker expressed concern that the County was downplaying the issue of groundwater recharge from septic tanks and encouraged the Committee to consider the solutions being proposed by the organization Water for Santa Cruz County. Finally, this speaker commented that some of the audio recordings of the meetings were poor in quality.



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3. Chronic Lowering of Groundwater Levels – Undesirable Results with Underlying Significant and Unreasonable Conditions.

Georgina King, from HydroMetrics, presented a technical staff proposal and options for Chronic Lowering of Groundwater Levels Minimum Thresholds, which included requests for Advisory Committee members to determine: 1) what they want to avoid for the Basin (i.e., what is considered Significant and Unreasonable); and 2) what set of conditions they view as causing significant and unreasonable impacts for the Basin (i.e., Undesirable Results). Prior to soliciting Committee input on the staff proposals, Ms. King provided the Committee with some historical information on historic changes in groundwater elevations in various areas of the basin, including illustrating impacts of lowered groundwater levels on pumping wells.

The Advisory Committee provided their input on the technical staff proposal for avoiding chronic lowering of groundwater levels. A synthesis of the Advisory Committee input will be prepared by HydroMetrics and shared with the Advisory Committee for review (separate from this summary).

General Committee Reflections on Chronic Lowering of Groundwater Levels

The Committee expressed the general view that it is important to keep groundwater levels high enough to protect against seawater intrusion. The Advisory Committee understood the need to address chronic lowering of groundwater levels separately from seawater intrusion because it is a separate state mandated sustainability indicator that must be included in the GSP. Committee members generally agreed with technical staff's assertion that protective groundwater elevations that prevent seawater intrusion will also generally avoid chronic lowering of groundwater levels near the coast.

Committee Perspective on Significant and Unreasonable Conditions - Chronic Lowering of Groundwater

“Significant and Unreasonable Conditions” are the conditions we want to avoid related to chronic lowering of groundwater levels in our groundwater basin.

Committee members responded to the following technical staff proposal: Lowering of groundwater levels that cause 5% or more of all groundwater pumping wells to fall below a level that is 20 feet from the bottom of the well would be a significant and unreasonable condition in the groundwater basin. Staff's rationale was that groundwater levels falling to 20 feet above the bottom of a production well will reduce well productivity and the ability to pump groundwater from the well.

The Committee expressed the general view that the proposed statement was too numerical and needed to be more qualitative. Additionally, as we do not know where all the private wells are in the basin, this would make it impossible to determine the 5% or more measure in the staff proposal. There is also not yet enough statistical information on the depth of wells in relation to the well screens to come up with a defensible distance above the bottom of wells. Several committee members wanted to look at simulated groundwater levels from the model for this indicator when they are available and discuss the



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technical proposal in greater detail at that time. Other Committee members suggested that significant and unreasonable conditions might be better evaluated by determining the water demand needed to support current and planned land uses, and relate that to groundwater levels.

Committee Perspective on Undesirable Results – Chronic Lowering of Groundwater

“Undesirable Results” are the set of conditions that would cause significant and unreasonable impacts to occur related to chronic lowering of groundwater levels, as measured at representative monitoring wells and adjacent to municipal production wells.

Committee members responded to the following technical staff proposal: An Undesirable Result will occur if the “one-month average representative monitoring well groundwater elevation” falls below the minimum threshold, provided that all representative monitoring wells have data loggers. Staff’s rationale was that a monthly average would identify and monitor for seasonal low groundwater levels.

The Committee shared the general view that the staff proposal, which provides for continuous monitoring of groundwater levels and compares a monthly average to the minimum threshold, would protect groundwater in the basin. The Committee requested clarification on how the “monthly average” would be determined and what back-up monitoring measurements would be implemented in case a well’s data logger were to fail.

4. Public Comment

During this segment, Mr. Poncelet invited members of the public to comment on the Committee’s discussions on Groundwater Levels and any other Advisory Committee work.

A participant asked whether it would make sense to tie in the qualitative proposal with objectives for private well owners. Further, the participant commented that it would be beneficial to private well owners to know that the water district prioritizes providing a healthy environment and also that it would be an Unreasonable Condition if water could not be delivered to users. The participant asked whether the City and County are maintaining a database to record monitoring wells in this respect.

5. Subsidence - Undesirable Results with Underlying Significant and Unreasonable Conditions

Georgina King, from HydroMetrics, presented a technical staff proposal and options for Subsidence Minimum Thresholds, which included requests for Advisory Committee members to determine: 1) what they want to avoid for the basin (i.e., what is considered Significant and Unreasonable); and 2) what set of conditions they see as causing significant and unreasonable impacts for the Basin (i.e., Undesirable Results). Prior to soliciting Committee input on the proposals, Ms. King provided the Committee with background information on what subsidence is and how it is related to lowering of groundwater levels.



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She also provided some historical information on changes in groundwater elevations in various areas of the basin and how no subsidence has been reported that was related to lowered groundwater levels.

The Advisory Committee then provided their input on the technical staff proposal for avoiding subsidence in the basin. A synthesis of the Advisory Committee input will be prepared by HydroMetrics and shared with the Advisory Committee for review (separate from this summary).

General Committee Perspective on Subsidence:

The general view of the group was to keep groundwater levels high enough to prevent any measurable subsidence within our groundwater basin. Technical staff indicated that the geology found in the Mid-County region is not susceptible to subsidence, even during times of historically low groundwater levels. Technical staff also indicated that if groundwater levels were to fall below historic lows related to subsidence, other sustainability indicators, especially related to seawater intrusion, would be exceeding their respective minimum thresholds. Committee members recognized that there has been no documented subsidence linked to groundwater pumping in the basin. Several members questioned the need to address subsidence in our GSP. However, the Advisory Committee understood the need to address subsidence within the plan because it is a separate state mandated sustainability indicator that must be included for plan approval. They also understood that basin management that protects against seawater intrusion will also protect against subsidence. There were concerns expressed about the costs involved to directly monitor subsidence in the Purisima AA/TU unit, especially if the geology is not susceptible to subsidence.

Committee Perspective on Significant and Unreasonable Conditions - Subsidence

Committee members responded to the following technical staff proposal: any land subsidence occurring within the basin would be considered a significant and unreasonable condition. Staff's rationale was that land within the MGA groundwater basin has shown no evidence of subsidence related to past groundwater pumping.

Committee members shared the general view that the technical staff proposal reflects their view that subsidence should not occur. However, because the technical recommendation involves using historic low groundwater levels as a "proxy" to evaluate subsidence, several committee members suggested investigating a process with DWR to acknowledge that the basin is not susceptible to subsidence, so that additional subsidence monitoring would not be required if groundwater levels were to temporarily fall below historic lows.

Committee Perspective on Undesirable Results – Subsidence in Aromas and Purisima A BC, and DEF

Committee members responded to the following technical staff proposal: an Undesirable Result would be any Representative Monitoring Well in the Aromas and Purisima A, BC, and DEF units with average



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annual groundwater elevations below their historic lows in any part of the basin. Staff's rationale was that no subsidence occurred related to groundwater pumping at historical low groundwater levels within the groundwater basin. Staying above those historic low groundwater levels will ensure land subsidence does not happen in the future.

Committee members shared the general view that the staff proposal, which provides for continuous monitoring of groundwater levels and compares an annual average groundwater level to the minimum threshold will protect against subsidence in the basin. However, because the technical recommendation involves using historic low groundwater levels as a "proxy" to evaluate subsidence, several committee members suggested a groundwater elevation "trigger." The suggested trigger would require direct subsidence monitoring should groundwater elevations fall below historic lows to ensure that subsidence is not occurring.

Committee Perspective on Undesirable Results – Subsidence in Purisima AA/Tu:

Committee members responded to the following technical staff proposal: any land subsidence occurring where groundwater is being pumped or injected into from the Purisima AA/Tu unit would be an undesirable result. Staff's rationale was that direct monitoring of subsidence is needed for the Purisima AA/Tu unit because there is not enough data to determine the impact of groundwater production based on historic low groundwater levels.

Committee members shared the general view that the staff proposal, which would monitor subsidence directly, would provide data to prevent the impacts of subsidence in the basin. The committee continued its discussion that there might be an argument that the basin is not susceptible to subsidence. Committee members asked that the proposal be revised to remove the words "injected into."

6. Public Comment

During this last public comment session, Mr. Poncelet invited members of the public to focus comments on the Committee's recent discussions on Subsidence or on any other Advisory Committee work. The participants commented as follows:

- One speaker with experience working on a recycled water study clarified that the proposed sites for injection are close to Beltz 12 and Monitoring Well SC-22 in the Tu aquifer.
- Another speaker asked whether a proxy for using historic low and annual average should be lowered to a monthly average instead, as by the time compaction occurs, there would be storage loss. The participant explained that, in this case, a user would want to know sooner than the average annual data could be collected, thus enabling more timely resolution of any issues. The speaker also commented that one would not want an impacted aquifer to damage infrastructure (e.g., pipelines) and that staff and Committee members should consider these points.



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7. Confirm Various Project Documents

- **April 25, 2018 Advisory Committee Meeting Summary**

The Advisory Committee members did not have any edits or comments on the draft April 25, 2018 Advisory Committee meeting summary. Mr. Poncelet confirmed it for submission to the MGA Board.

- **Staff incorporation of Advisory Committee input from April 25 meeting – to inform development of Minimum Thresholds**

Georgina King, HydroMetrics reviewed the proposed draft Seawater Intrusion Minimum Thresholds based on her incorporation of Advisory Committee input from the April 25 meeting. The group discussed the draft proposal, and there was general agreement that the format and synthesis was helpful to the Committee as it continues advising on the GSP development. Staff invited Committee members to review Proposed Draft Seawater Intrusion Minimum Thresholds document and provide any additional feedback to Ms. Pruitt by May 30, 2018.

8. Next Steps

In closing, Mr. Poncelet reviewed the anticipated meeting objectives for the June Advisory Committee meeting and the July joint MGA and Advisory Committee meeting. Executive staff members closed the meeting by thanking the attendees for their participation.