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Meeting Summary

Santa Cruz Mid-County Groundwater Sustainability Planning (GSP) Advisory Committee Meeting #6 April 25, 2018, 6:00 – 9:00 pm

This meeting was the sixth convening of the Groundwater Sustainability Planning (GSP) Advisory Committee. It took place on April 25, 2018 from 6:00-9:00 p.m. at the Santa Cruz County Sheriff's Office. This document summarizes a presentation to the Advisory Committee and discussion focused on Seawater Intrusion¹. It also captures additional information provided on trend data; presentation of a technical staff proposal and options covering Seawater Intrusion Minimum Thresholds; Advisory Committee general consensus on SGMA risk factors for Seawater Intrusion under various scenarios; Committee perspectives on Significant and Unreasonable Conditions and Undesirable Results related to Seawater Intrusion under various scenarios; 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. Receive additional background information about basin conditions.
2. Share Advisory Committee input on Minimum Threshold and Undesirable Result Options with Underlying Significant and Unreasonable Conditions for the following Sustainability Indicators:
 - a. Seawater Intrusion
 - b. Subsidence

Action Items

Key action items from the meeting include the following:

Background Information:

- Staff to follow up with Jon Kennedy for feedback on the trend data (*Soquel Creek Water District, 1965 – 2017: Groundwater Pumping, Connections, and Rainfall*) presented.

¹ Both Seawater Intrusion and Subsidence were on the agenda for discussion, but due to time constraints, the Committee and staff were only able to cover Seawater Intrusion. Subsidence will be covered at the May 23 Advisory Committee meeting.



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Seawater Intrusion Presentation/Proposal

- Technical staff provide further explanation regarding how Soquel Creek Water District determined/chose the 70% threshold to represent their terms/policy of risk for Seawater Intrusion.
- Technical staff to present additional information on differences in Seawater Intrusion at all the intruded wells, and a comparison of historical maximum and the last five years of intrusion levels.
- Technical staff to confirm whether bifurcating the Seawater Intrusion standards for coastal vs. inland monitoring wells would make better sense or be necessary in selecting Significant and Unreasonable Seawater Intrusion conditions.

General

- Staff to explore options for Advisory Committee field trip of the Mid-County Basin.
- Staff to consider using a document sharing platform to store GSP/Advisory Committee-related documents and establishing public-facing email addresses for Advisory Committee members.

Meeting attendance

Committee members in attendance included:

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

Committee members who were absent included:

1. David Baskin, City of Santa Cruz
2. Bruce Jaffe, Soquel Creek Water District
3. Jon Kennedy, Private Well Representative
4. Charlie Rous, At-Large Representative



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Meeting Key Outcomes (linked to agenda items)

1. Introduction and Discussion of GSP Process Timeline and Framework

Rosemary Menard, City of Santa Cruz, opened the meeting and welcomed participants. Ms. Menard then asked MGA Executive Team, staff and the consultant support team around the room to introduce themselves. She then addressed members of the public in attendance and asked them for self-introductions.

Eric Poncelet, Facilitator, reviewed the agenda, meeting objectives, the updated GSP process timeline, and ground rules and asked Ms. Menard to provide her overview of the GSP process framework.

Ms. Menard referred to the GSP process slide (spiral), explaining the iterative nature of the GSP process, involves various rounds of discussions on proposals presented on each of the six Sustainability Indicators and other GSP-related issues. She added that each round of discussion, as such, would result in technical staff-developed models based on input from Advisory Committee members, which would then be returned to the Committee for further feedback and additional refinement by technical staff. Ms. Menard stressed that this process will be repeated until the Committee feels comfortable with its recommendations. Ms. Menard emphasized that the group is currently at the launching point and as it works through the process (spiral), staff is hopeful that Committee members will feel more confident in discussing the issues and proposals and providing input and recommendations on the GSP components.

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

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

The first participant shared handouts on Water for Santa Cruz County's proposal/option on water issues and transfers and requested time at the next MGA Board meeting to present this information in detail.

The second participant requested confirmation on the prediction published in the Santa Cruz Sentinel that Seawater Intrusion can permanently impact monitoring wells in the Basin in two years. If so, the speaker urged the Committee and staff to expeditiously take action to prevent this impact.

3. Additional Background Information

- **Chloride Level Changes from 1987 to 2017**

Marco Romanini, Central Water District shared data on Chloride levels for a sample set of wells with Committee members, staff and meeting participants. The data showed the difference in Chloride level trend for 1987 and 2017 as the approximate change in such levels during that 30-



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year period, by computing and graphing the annual average of Chloride levels. (*This informational item was not originally on the agenda.*)

- **Trend Data for Soquel Creek Water District, 1965 – 2017: Groundwater Pumping, Connections, and Rainfall.**

Georgina King, HydroMetrics presented trend data for Groundwater pumping, connections and rainfall in Soquel Creek Water District from 1965 – 2017. Ms. King prepared this data chart showing how Soquel Creek Water District has managed its Groundwater production, in response to a request from an Advisory Committee member.

The group discussed the following key points following Ms. King's presentation:

- In general, this trend data is helpful and additional layers (e.g., Groundwater Levels, change in Groundwater Storage) could be added as requested by Committee members.
- The trend data graph shows that Soquel Creek Water District has managed water consumption well, and this is a direct correlation with the water conservation program that it has instituted.
- This data mostly represents residential water consumption for the Soquel Creek aquifer.

4. Seawater Intrusion – Undesirable Results with Underlying Significant and Unreasonable Conditions.

Cameron Tana, HydroMetrics presented a technical staff proposals and options on Seawater Intrusion Minimum Thresholds, which included requests for Advisory Committee members to determine: 1) what they want to avoid for the Basin (what is considered Significant and Unreasonable Condition); and 2) what set of conditions they see would cause significant and unreasonable impacts for the Basin (Undesirable Results). Prior to soliciting Committee input on the proposals, Mr. Tana provided the Committee with some background on current Seawater Intrusion Management for the Aromas and Purisima Areas, including risk policy goals that have been previously established.

The Advisory Committee then offered provisional policy statements on SGMA risk factors for Seawater Intrusion below and were polled after each category of risk factors. A synthesis of the Advisory Committee selected options will be prepared by HydroMetrics and shared with the Advisory Committee for review.

General Committee Consensus

The general feeling of the group was that the goal should be to recover the basin and improve water supply reliability and environmental quality overall. However, the committee also understands that groundwater management at the southern end of the basin may be difficult to control because of



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geological and jurisdictional constraints. The committee expressed an interest in setting a realistic minimum threshold baseline that protects the basin from seawater intrusion. They are also concerned about state intervention in basin management if they set the minimum threshold at a level that is adequately protective, but can also be met if another severe drought were to occur before supplemental supply projects could be approved/implemented.

Committee Perspective on Significant and Unreasonable Conditions - Seawater Intrusion

“Significant and Unreasonable Conditions” are the conditions we want to avoid related to seawater intrusion in our groundwater basin. Generally, the committee felt that the staff proposal (restated below) which keeps saltwater intrusion at its current extent (or its historical maximum to provide a little more management flexibility) was the committee’s provisional recommendation. The committee doesn’t want seawater intrusion to get measurably worse.

Aromas aquifer – Where seawater intrusion exists, keep seawater intrusion confined to its current extent. Seawater intrusion at depths shallower than those currently observed in intruded Coastal monitoring wells is not acceptable (i.e., existing seawater intrusion is acceptable baseline condition).

Purisima aquifer – Where seawater intrusion does not exist, keep seawater intrusion from moving inland from the coast (i.e., no measurable onshore seawater intrusion is acceptable).

Purisima aquifer – Where seawater intrusion exists, keep seawater intrusion confined to its current extent. Seawater intrusion found at depths shallower than those observed in currently intruded Purisima A unit Coastal monitoring wells is not acceptable (Soquel Point (Med))(i.e., existing seawater intrusion is acceptable baseline condition).

Committee Perspective on Undesirable Results – Seawater Intrusion and chloride concentrations

“Undesirable Results” are the set of conditions that would cause significant and unreasonable impacts to occur related to seawater intrusion as measured by chloride concentrations in our groundwater basin. Generally, the committee felt that the staff proposal (restated below) which measures chloride concentrations quarterly and assesses those measurements against a running 5-year average with a 25% sample variance standard (to allow for some management flexibility) was the committee’s provisional recommendation. The committee doesn’t want chloride concentrations to get measurably worse or to exceed their historical maximum. The committee also discussed but did not make a recommendation on whether the chloride concentration threshold of 250 mg/L should be reduced in monitoring wells where seawater intrusion did not currently exist.

Undesirable Results for Coastal Monitoring wells where seawater intrusion exists, An undesirable result occurs if any coastal monitoring well with current seawater intrusion has a chloride concentration above



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its running 5-year average chloride concentration. This chloride concentration must be exceeded in more than 75% of the last 8 consecutive samples (quarterly sampled wells).

Undesirable Results for Inland and Coastal Monitoring Wells where seawater intrusion does not exist: An undesirable result occurs if any Inland Representative Monitoring or Coastal Monitoring Well where seawater intrusion does not exist has a chloride concentration above 250 mg/L. This concentration must be exceeded in more than 2 (50%) of the last 4 consecutive samples.

Committee Perspective on Undesirable Results – Seawater Intrusion and use of Protective Elevations as an ongoing Assessment Tool

“Undesirable Results” are the set of conditions that would cause significant and unreasonable impacts to occur related to seawater intrusion as measured by protective elevations in our groundwater basin. Generally, the committee felt that the staff proposal (restated below) which measures protective elevations at our coastal monitoring network was a good measure for seawater intrusion. All of the committee members present at the end of the meeting approved continuing to use “protective elevations” as an ongoing management criteria, even though not required by the GSP guidelines. Several committee members suggested linkages to the measurement and success criteria of chloride concentrations, but all felt that the

Undesirable Results for Protective Groundwater Elevations in Coastal Monitoring wells: Five-year average groundwater elevations below protective groundwater elevations in Coastal Monitoring Wells for any well would be unacceptable.

5. Public Comments (focused on meeting agenda items and other Advisory Committee work).

During this segment, Mr. Poncelet asked members of the public to limit comments to those related to Seawater Intrusion and any Advisory Committee work. The participants made the following comments:

- One of the participants cautioned the Advisory Committee and staff on the possible public misconception of the term “less protective” used to evaluation Seawater Intrusion conditions in the Basin.
- Another participant asked a question regarding the Advisory Committee’s outlook on how it would determine success and failure of its GSP-related decisions and how they would relate this outlook to success as framed in the Charter.
- A participant requested HydroMetrics address two questions:
 - 1) What assumptions are you making in the model regarding the amount of annual pumping of out Soquel Creek wells?



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2) Have or could you model the influx of water in large quantities into the basin from elsewhere (e.g., surface water transfers from the City of Santa Cruz) so that groundwater pumping levels were reduced?

- The last speaker expressed disappointment in the opportunities offered for public comment at the meetings and requested more access to Advisory Committee members outside of the meeting (e.g., via email, telephone). This speaker also requested that a DWR representative attend and have a more active role at each Advisory Committee meeting and suggested inviting representatives from neighboring basins to speak at future meetings. Last, the speaker encouraged the Advisory Committee to consider future concerns (and not just current concerns) of all those concerned in the basins, including agriculture and the cannabis industry.

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

This proposal was not discussed at this meeting and was deferred for discussion at the May 23, 2018 meeting.

7. Confirm March 28, 2018 Advisory Committee Meeting Summary

The Advisory Committee members did not have any edits or comments on the March 28, 2018 Advisory Committee meeting summary. Mr. Poncelet confirmed it for submission to the MGA Board.

8. Next Steps

In closing, Mr. Poncelet reviewed the anticipated meeting objectives for the May and June Advisory Committee meetings, and confirmed that the joint MGA and Advisory Committee meeting will be held on July 19. The group also discussed the possibility of a field trip of the Basin, and setting up document sharing and email addresses for Advisory Committee members. Executive staff members closed the meeting by thanking the attendees for their participation.