SANTA CRUZ MID-COUNTY GROUNDWATER AGENCY

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Meeting Summary

Santa Cruz Mid-County Groundwater Sustainability Plan
Advisory Committee Meeting #15
January 23, 2019, 5:00 – 8:30 pm

This meeting was the fifteenth convening of the Santa Cruz Mid-County Groundwater Sustainability Planning (GSP) Advisory Committee. It took place on January 23, 2019 from 5:00 - 8:30 p.m. at the Simpkins Family Swim Center in Santa Cruz. This document summarizes key outcomes from Advisory Committee and staff discussions on the following topics: project updates; groundwater modeling results for sustainability strategies; groundwater modeling results for non-municipal pumping effects; and an update on minimum thresholds for chronic lowering of Groundwater Levels sustainability indicator. This document also provides an overview of public comment received. It is not intended to serve as a detailed transcript of the meeting.

Meeting Objectives

The primary objectives for the meeting were to:

- Continue reviewing groundwater modeling results from pumping impact scenarios.
- Discuss challenges in the Aromas Aquifer and options for moving forward.
- Discuss proposed refinements to minimum thresholds for the Chronic Lowering of Groundwater Levels Sustainability Indicator.

Action Items

Key action items from the meeting include the following:

1. Staff to convene Groundwater Modeling Enrichment Session on February 11, 2019.
    a. Staff to post an announcement for the enrichment session on the MGA website by February 4, 2019, requesting RSVPs (attendance in person or by webinar).
        i. This will not be a formal Advisory Committee meeting.
        ii. The public is welcome to attend by webinar or in person at the Community Foundation.
2. Staff to invite Committee members to the January 30th surface water interaction working group meeting, making sure to include members who expressed direct interest in participating: Marco Romanini, Jon Kennedy, Kate Anderton, Keith Gudger, and Jonathan Lear.

3. Staff to provide more opportunities to discuss climate scenarios and policy decisions relevant to GSP planning.
4. Kearns & West to revise and send confirmed meeting summary for the December 12 Committee for inclusion in the Mid-County Groundwater Agency's (MGA) Board meeting packet in March.

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. Keith Gudger, At-Large Representative
5. Bruce Jaffe, Soquel Creek Water District
6. Dana Katofsky McCarthy, Water Utility Rate Payer
7. Marco Romanini, Central Water District
8. Charlie Rous, At-Large Representative

Committee members who were absent included:

1. Rich Casale, Small Water System Management
2. Jon Kennedy, Private Well Representative
3. Jonathan Lear, At-Large Representative
4. Allyson Violante, County of Santa Cruz
5. Thomas Wyner for Cabrillo College, Institutional Representative

Meeting Key Outcomes (linked to agenda items)

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

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

Eric Poncelet, facilitator, reviewed the agenda and meeting objectives, and provided key updates to the project process for February and March as reflected on the updated GSP process timeline. Ms. Menard added that Santa Margarita Groundwater Agency's (SMGA) January 12th Water Education Series, Workshop 1 on land use and water, is now posted on the SMGA's website[1] for everyone's reference.

[1] https://smgwa.org/meetings/understanding-our-water-educational-series/

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

No public comments were provided on non-agenda items during this session.

3. Project Updates

Mr. Poncelet invited the following project updates:

- **Surface Water Interaction Working Group**
  Sierra Ryan, County of Santa Cruz, reported that the surface water interaction working group will convene on Wednesday, January 30, 2019. Ms. Ryan indicated that while the wildlife agencies will not be in attendance due to the government shutdown, staff from the Environmental Defense Fund (EDF) will be presenting their guidance for meeting the Sustainable Groundwater Management Act (SGMA) requirements.

- **February 11 GSP Modeling Enrichment Session**
  Cameron Tana, Montgomery & Associates, announced that he will be conducting a webinar enrichment session on Mid-County Groundwater modeling in support of the GSP on Monday, February 11, 2019, from 5:00 to 7:00 p.m. Mr. Tana added that there is a conference room reserved at the Community Foundation in Aptos for participants to view the webinar together and offered to present in person if there was enough interest from the Committee members.

  Tim Carson, Regional Water Management Foundation (RWMF), indicated that he will post an announcement on the enrichment session in early February. John Ricker, County of Santa Cruz, recommended that the webinar be publicly noticed as an enrichment session and not as a formal Advisory Committee meeting.

- **Upcoming Santa Margarita Basin Meetings**
  Ms. Ryan, provided a brief update on topics to be covered in the upcoming Santa Margarita Basin educational series on water in February and March, 2019, including:
  - February: Basin hydrogeology and water budget; surface water interactions; groundwater dependent ecosystems; local efforts to improve stream flows and aquatic ecosystems; and users in the Basin.
  - March: projects and management of aquifers.

- **DWR Update**
  Ms. Menard provided the DWR update on behalf of Amanda Peisch-Derby, DWR, in her absence. The update addressed the Advisory Committee's inquiry at the December 12, 2018 meeting regarding DWR's approach for determining whether a basin's (e.g., Pajaro Valley) decision for an

alternative plan will adversely affect the ability of an adjacent basin (e.g., Mid-County) to implement its GSP or impede the achievement of its sustainability goal. Ms. Menard reported that DWR will consider and review alternative plans as they would GSPs, while strongly encouraging coordination among basin agencies on any adverse cross boundary effects resulting from either the alternative plan or GSP.

Given this response from DWR, John Ricker, County of Santa Cruz, informed the Committee that the Executive Team is beginning this coordination process and will be discussing Pajaro Valley's alternative plan with the Pajaro Valley Water Management Agency's (PVWMA) Board.

A Committee member asked how far south does the Pajaro Valley Basin extend and whether this area is within district boundaries. Mr. Ricker responded that the Pajaro Valley Basin extends to Elkhorn Slough, which is within the district boundaries. He added that the Basin is limited in its recycled water production, and the College Lake project is critical to augment the amount of water available for their pipeline.

- **Water Exchanges**

  Ms. Menard indicated that the City of Santa Cruz made water transfers to Soquel Creek on December 3, 2018. Since then, the water exchanges have been operating consistently, with only weekend shutdowns. She reported that the City's Aquifer Storage and Recovery (ASR) project is being piloted at Beltz 12 and is currently in round two of the seven-day injection process, which would go into a 30-day injection cycle thereafter. Ms. Menard added that the pilot is showing a good level of water availability as the inflows from the recent storms have been strong.

  A Committee member asked whether ASR operates seasonally. Ms. Menard responded that the pilot has only run for two months, and the City will continue with the 30-day injection cycle in order to determine water quality and measure and understand any water losses.

- **Pure Water Soquel**

  Ron Duncan, Soquel Creek Water District (SqCWD), reported that Pure Water Soquel's (PWS) Environmental Impact Report (EIR) has been certified, and the project was approved in December, 2018. Mr. Duncan added that a member of the public has recently filed a California Environmental Quality Act (CEQA) lawsuit against PWS. He indicated that SqCWD plans to defend the PWS EIR. Mr. Duncan added that SqCWD intends to apply for a second round of Proposition 1 funding.

Taj DuFour, Soquel Creek Water District shared that the recent comments about ammonia issues at the O'Neil well are incorrect and that the PWS wells have been run using an approach intended to, in good faith, coordinate with the City of Santa Cruz's schedule.

4. Groundwater Modeling Results for Sustainability Strategies

In this segment, Mr. Tana introduced the Committee members to additional evaluations of modeling results, presented the approach of using 10 year averages to evaluate groundwater level proxies for seawater intrusion sustainable management criteria, and discussed areas affected by a project or management action that reduces municipal pumping and a preliminary iteration of the City's Aquifer Storage and Recovery (ASR) project.[2] Mr. Tana explained that the projects and management actions discussed are primarily evaluated based on the seawater intrusion sustainability indicator. Further, he stated that because of the Basin's objective for long term prevention of seawater intrusion, groundwater level proxies for sustainability management criteria have been proposed to use a trailing 10-year average to ensure that groundwater levels are high enough to counteract seawater intrusion. Therefore trailing 10 year averages are calculated from model results for groundwater levels to compare to groundwater level proxies for minimum thresholds and measurable objectives.

Following Mr. Tana's presentation, Committee members shared the following key points with respect to the groundwater modeling results for sustainability strategies:

- The increase in sea level rise from 1.5 feet (from fall 2018) to 2.3 feet in the most recent DWR update infers a possible upward trend in water levels. As it also relates to evaluating minimum threshold for the seawater intrusion sustainability indicator, it is worth closely monitoring.
- Proactive evaluation of a basin's sustainability based on the 10-year average approach should include analyses of data trends. If modeling can show that long term averages of groundwater levels and concentrations are achievable, there is a higher chance of preventing seawater intrusion.
- In contemplating the Technical Advisory Committee's (TAC) recommended climate catalog approach to modeling longer term severe climate change patterns, some Advisory Committee members expressed the desire to further discuss the policy implications of the modeling work on climate, unpack and analyze the scientific assumptions and the purpose, and discuss the intersection of these two issues (policy and science).

[2] Model results for these projects and management actions were previously covered at the October 2018 Advisory Committee meeting.

5. Public Comment

Mr. Poncelet, facilitator, invited members of the public to comment on Mr. Tana's presentation on groundwater modeling results on sustainable strategies, the Advisory Committee's comments on the presentation, and any other Advisory Committee work.

One participant asked for further justification on the TAC's recommended climate catalog approach to modeling and emphasized that it is important to choose the best model at the beginning.

Another participant asked for confirmation of the outer limit of the time period associated with the 2.3 feet sea level rise. Mr. Tana responded that the outer limit of the time period is 2070.

6. Groundwater Modeling Results for Non-municipal Pumping Effects

In this discussion on groundwater modeling results for non-municipal pumping effects, Mr. Tana underscored that non-municipal pumping inland of the municipal pumping area has a greater effect at the coastal Purisima wells than non-municipal pumping in the municipal pumping area due to the extraction of larger volumes in that area. Mr. Tana illustrated this effect by showing sensitivity analyses of various categories and areas of pumping.

Key discussion points on the topic of groundwater modeling results for non-municipal pumping effects included:

- The Committee should contemplate how to model non-municipal pumping to determine management actions; and from a policy perspective, how to monitor the modeling results in order to come up with longer term solutions to collective problems.
- It would be useful for the Committee to better understand the following related to non-municipal pumping modeling:
    - The breakdown or categorization of pumpers, especially the *di minimis* pumpers (e.g., private, institutional, etc.).
    - The methodology behind the measurement and plotting of the change in groundwater levels.

7. Groundwater Modeling Results for Theoretical Managed Recharge in Coastal Aromas Area

Mr. Poncelet referred to ongoing coordination with Pajaro Valley Water Management Agency (PVWMA) and turned it over to Mr. Tana to present new groundwater modeling scenarios for theoretical managed recharge in the coastal Aromas Area. Ms. Georgina King pointed out that Montgomery & Associates had already presented on the differences between the Purisima and Aromas Aquifers in previous meetings.

Mr. Tana asked for the Committee's feedback on how groundwater levels and seawater intrusion in the theoretical areas should be addressed.

The Advisory Committee discussed the following ideas on how to address groundwater levels and seawater intrusion in the theoretical areas:

- Recharge would be most effective at site SC-A8 if it is the only scenario to address in the Aromas area. However, other in-lieu alternatives can boost groundwater levels in that area, possibly rendering managed recharge unnecessary.
- Recharge at 500 acre feet (160 M gallons) seasonally is a good approach.
- There are tradeoffs to keeping water levels high as Pajaro Valley would be able to benefit from the overflow. This could be managed and compensated for through inter-basin agreements.
- There may be a potential need to use recycled water or conduct additional recharge using water from Watsonville Slough.

8. Update on Minimum Thresholds for Chronic Lowering of Groundwater Levels Sustainability Indicator

Ms. King presented an updated version of the sustainable management criteria to be included in the GSP for chronic lowering of groundwater levels. She emphasized that in this version, the minimum threshold analysis selected nearby wells with similar screened elevations to the screened elevations of the representative monitoring wells to use to determine minimum well depths for the analysis of minimum thresholds. The previous draft used depths of the wells. The other sustainable management criteria, including significant and unreasonable conditions and undesirable results, have not changed.

In her updated proposal, Ms. King recommended using 30 feet below historic low groundwater levels as the maximum decline allowed before it is considered significant and unreasonable. She asked the Committee members to provide feedback on whether they agree with this maximum decline or if another decline depth should be used.

The Committee members indicated that they did not have enough information to make a determination on whether the 30 feet is the maximum decline should be used. One Committee member requested that the assumptions for the 30 feet recommendation be clearly incorporated into the GSP.

9. Public Comment

During this final public comment session, Mr. Poncelet invited members of the public to focus comments on the Committee's discussion of modeling results for non-municipal pumping, approaches to addressing challenges in the Aromas Aquifer, the updated minimum thresholds for chronic lowering of groundwater levels sustainability indicator, and on any other Advisory Committee work.

One participant suggested additional outreach to private well owners on pumping protocols. This participant also expressed that 500 acre feet of recharge is too much for the Aromas area and suggested combining recharge for two sites. Last, the same participant suggested modeling groundwater levels for seawater intrusion using average minimum rather than a 10-year average approach. Mr. Tana addressed the participant's last point, explaining that the minimum average approach uses one data point, which would not represent overall conditions over time and thus would not help in preventing long term seawater intrusion.

10. Confirm the October 23, 2018 GSP Advisory Committee Field Trip and the October 24, 2018 Advisory Committee Meeting Summaries

One Committee member identified a possible inaccuracy in the segment on the differences between the Aromas and Purisima. Mr. Poncelet indicated that staff will review this segment and make the necessary edits before forwarding it to the MGA Board.

11. Next Steps

In closing, Mr. Poncelet provided a recap of the GSP process timeline February and March 2019 and discussed general next steps.

Before the meeting adjourned, Mr. Carson reminded the Committee that the next MGA Board meeting is on March 21st at 7:00 p.m.

Executive Team members closed the meeting by thanking the attendees for their participation.