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Meeting Summary

Santa Cruz Mid-County Groundwater Sustainability Planning (GSP) Advisory Committee Meeting #8 June 27, 2018, 5:00 – 8:30 pm

This meeting was the eighth convening of the Groundwater Sustainability Planning (GSP) Advisory Committee. It took place on June 27, 2018 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; presentation of a technical staff proposal and options covering two sustainability indicators—Interconnected Surface Water Depletion and Degraded Groundwater Quality Minimum Thresholds; Committee perspectives on Significant and Unreasonable Conditions related to Surface Water Depletion, and Significant and Unreasonable Conditions and Undesirable Results related to Degraded Groundwater Quality under various different options; and requests for Committee review of technical staff incorporation of Advisory Committee input on Groundwater Levels from the May 23, 2018 meeting. It 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:

1. Discuss and share Advisory Committee input on Undesirable Result Options with Underlying Significant and Unreasonable Conditions for the following Sustainability Indicators:
 - a. Surface Water Interactions
 - b. Groundwater Quality

Action Items

Key action items from the meeting include the following:

1. Executive Team to provide the Advisory Committee with reference materials on the regulatory framework for Water Quality Protection, Surface Water injection and/or groundwater replenishment.
2. Advisory Committee members to review the draft document on Proposed Draft Chronic Lowering of Groundwater Levels Sustainable Management Criteria and provide any additional feedback to Darcy Pruitt by mid-August.



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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. Allyson Violante, County of Santa Cruz
12. Thomas Wyner for Cabrillo College, Institutional Representative

Committee members who were absent included:

1. Marco Romanini, Central Water District
2. 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 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:

- **Draft Environmental Impact Report for Pure Water Soquel**
Ron Duncan announced that the draft Environmental Impact Report (EIR) for Pure Water Soquel will be released for public review in July 2018.
- **Advisory Committee Field Trip**
Darcy Pruitt, RWMF, reported that based on Committee responses to the date poll, she is in the process of scheduling a field trip for the Committee in the September/October timeframe. She



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indicated that the field trip will be three-hours long and on a weekday and that she will continue to update the Committee on further developments.

- **Outreach/Communications**

Sierra Ryan, County of Santa Cruz, gave a brief introduction of Jason Hoppin, Communications Officer with the County, and stated that he is available to the Committee as a resource related to outreach/communications matters. Jason's email address is:

Jason.Hoppin@santacruzcounty.us.

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

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

One speaker commented on whether water supply is at issue for solving the regional water issues.

Another speaker shared some details about the June 14th stakeholder meeting and indicated that she is looking forward to hearing about projects at the joint MGA Board/Advisory Committee meeting on July 19. She also briefly commented on the funding for Pure Water Soquel as it relates to possible fees imposed on private well owners.

Another participant followed up the first speaker's comment on the water supply issue and recommended that the Advisory Committee consider studies on alternative water sources, such as Lochquifer.

An Executive Team member offered a general clarifying comment on how projects will be incorporated into modeling. He explained that the Executive Team intends to provide background on projects that are underway and under consideration. He added that the discussion on project implementation and how projects impact the sustainability indicators for the Basin will not occur until early 2019.

3. Surface Water Interactions – Significant and Unreasonable Conditions

John Ricker, County of Santa Cruz, provided an overview of the Surface Water Subcommittee's analytical work over the past weeks on the topic of surface water and groundwater interconnection. Sierra Ryan, County of Santa Cruz, presented on the Subcommittee's investigation into impacts on priority groundwater dependent ecosystems, identifying aquatic species most vulnerable to depletion of surface water interconnected with groundwater. Mr. Ricker and Ms. Ryan then presented a technical staff proposal on considerations for Significant and Unreasonable depletion of interconnected surface water (i.e., conditions we want to avoid) and solicited input from the Advisory Committee accordingly.

The Advisory Committee provided input on the technical staff proposal for Significant and Unreasonable depletion of interconnected surface water, summarized below. Mr. Ricker, Ms. Ryan and Georgina King



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of Montgomery & Associates will prepare a synthesis of the Advisory Committee input as it informs development of management criteria for that sustainability indicator and share it with the Advisory Committee for review later in the summer (separate from this summary).

General Advisory Committee Input on Depletion of Interconnected Surface Water

The general sentiment expressed by several Committee members was that there may not be adequate information about the interconnection between groundwater and surface water across the basin to set the right groundwater pumping parameters to characterize groundwater influence on streamflow. The Committee referenced staff's presentation, which indicated many factors other than groundwater interactions impact streamflow, including evapotranspiration and surface water extractions, in addition to groundwater pumping. Members of the Advisory Committee who also participated in the Streamflow Subcommittee stated that the staff presentation accurately captured the Subcommittee's consideration of species and habitats that rely on streamflows to support healthy groundwater dependent ecosystems.

Committee Perspectives on Significant and Unreasonable Conditions – Depletion of Interconnected Surface Water

Background: "Significant and Unreasonable Conditions" are the conditions we want to avoid related to depletion of interconnected surface water in the groundwater basin.

Committee members responded to the following technical staff proposal: "Lowering of groundwater levels adjacent to interconnected salmonid bearing streams as a result of groundwater extraction that results in a significant decrease in stream baseflow during the driest period from August-October would be a significant and unreasonable condition."

Committee members expressed the view that the technical proposal was generally appropriate. However, several members wanted additional assurances that all sensitive species and habitats would be protected by identifying salmonid-bearing streams during the August to October time period. A specific concern raised is that Rodeo Gulch is not a salmonid-bearing stream but does contribute freshwater to the sensitive habitat at Corcoran Lagoon. Committee members also wanted to look at groundwater model outputs for surface water and groundwater interaction and discuss the species and timeframes in greater detail when model information is available.

In addition to the concerns expressed about habitats and timeframes, a few Committee members stated that the lack of data regarding surface water/groundwater interactions in the basin is problematic. Some members believed that the lack of definitive data on groundwater pumping's direct and indirect impacts on the gaining and losing reaches of Soquel Creek would make groundwater management a guessing game. Committee members also had concerns about the lack of data for Aptos and Valencia creeks;



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however, the fact that these creeks seem to be disconnected from groundwater made these data problems less of a priority.

Several committee members stated that the lack of data regarding groundwater pumping's impacts on streamflow made further data collection an important priority, especially in light of the reliance on the groundwater model for setting sustainable management criteria. One Committee member who participated in the Streamflow Subcommittee suggested isotope characterization to determine groundwater's contribution to baseflow as a possible remedy for the lack of data.

DWR's representative at the meeting indicated that other valid methods exist that are less data driven for setting minimum thresholds to protect against depletion of interconnected surface water in the basin. These could include identifying beneficial uses of the surface waters and setting minimum thresholds to prevent surface water depletions from occurring with regard to those beneficial uses. These beneficial uses might be recreational, commercial, or other uses in addition to species and habitat concerns.

Committee Perspective on Undesirable Results – Depletion of Interconnected Surface Water

The Committee did not discuss undesirable results regarding the depletion of Interconnected Surface Water. This topic will be addressed after the groundwater model is developed.

4. Public Comment

During this segment, Mr. Poncelet invited members of the public to comment on the Committee's discussions on Surface Water Interactions and any other Advisory Committee work.

A participant commented that it may be inappropriate to model groundwater extraction resulting in a significant decrease in stream baseflow during the driest period from August-October, as it is difficult to prove that humans are responsible for this. The participant also pointed out that as the dry season peaks in August (at its peak) and as stream flow increases later in the season, the Committee should consider designating the timeframe for model between July and September.

Another participant agreed with the staff proposal and indicated that she favored using salmonid species as a proxy and expanding the monitoring time span, as it would provide a critical protection baseline for streams, especially in the context of climate change and unpredictability of rain.

A speaker asked about the accuracy of the data being used for modeling Surface Water Interactions and whether historic data will be included. She appealed to the Committee to consider other species in the biotic community other than salmonid. She also requested a discussion on the Aptos Polo Grounds well, as the yield is declining and it is a part of Soquel Creek Water District.



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5. Water Quality – Undesirable Results with Underlying Significant and Unreasonable Conditions

Georgina King, from Montgomery & Associates, presented a technical staff proposal and options for degraded Groundwater Quality 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 staff proposals, Ms. King provided the Committee with background information on Groundwater Quality in the Basin, including trends. She also provided a list of proposed Representative Monitoring Wells.

The Advisory Committee provided input on the technical staff proposal on degraded Groundwater Quality Minimum Thresholds as summarized below. A separate synthesis of Advisory Committee input on Groundwater Quality management criteria will be prepared by Montgomery & Associates and shared with the Advisory Committee for review at a later time.

General Advisory Committee Input on Water Quality Degradation

In general, Committee members appeared to appreciate the content of staff's background presentation on groundwater quality. Georgina King outlined the requirements that make up California's drinking water standards for potable water and the monitoring conducted to comply with those state or county requirements. She also provided background on the generally high quality groundwater that exists in the basin, and she described issues that may arise as water quality standards are modified and as new standards are set for contaminants of emerging concern (CECs).

Committee Perspectives on Significant and Unreasonable Conditions – Water Quality Degradation

Committee members responded to the following technical staff proposal: "Significant and unreasonable conditions occur when groundwater quality, attributable to groundwater pumping or managed aquifer recharge, exceeds state drinking water standards."

The Committee generally thought that drinking water standards were a good measure of water quality in the basin. They discussed a few of the naturally occurring constituents (arsenic and chromium VI) and CECs that exceed state drinking water standards or may exceed state drinking water standards once standards are set for them. A few expressed concern that the quality of water injected into the basin would be of poor quality and would need to meet state non-degradation policies. They also discussed what responsibility the Groundwater Sustainability Agency (GSA) would have over naturally occurring constituents in groundwater that exceeds state standards.

Committee Perspectives on Undesirable Results – Water Quality Degradation



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Background: “Undesirable Results” are the set of conditions that would cause significant and unreasonable conditions to occur related to water quality degradation in the basin as measured at representative monitoring wells and municipal production wells.

Staff asked Committee members to respond to two technical staff proposals associated with two proposed management areas within the basin: the Aromas and Purisima F, and the Purisima Formation. The rationale for having two management areas is the difference in groundwater quality and confined/unconfined nature of aquifers in each management area.

Technical staff proposal of undesirable results for the Aromas area: “Undesirable results in the basin occur when as a result of groundwater pumping or managed aquifer recharge, 33% or more Representative Monitoring Wells exceed any <minimum threshold> annually.”

Technical staff proposal of undesirable results for the Purisima area: “Undesirable results in the basin occur when as a result of groundwater pumping or managed aquifer recharge, 25% or more Representative Monitoring Wells exceed any <minimum threshold> annually.”

Many Committee members were not satisfied with the water quality technical staff proposals because they believed that allowing water quality in 25-33% of the representative monitoring wells to fail any drinking water standard would be too many. Part of the Committee’s concerns about this percentage is that many of the representative monitoring wells identified for water quality monitoring are municipal production wells. Ms. King pointed out that several of the municipal wells recommended as representative monitoring wells, especially in the Aromas area, already fail drinking water standards and are treated before the water is delivered to customers.

There was an extensive conversation around the issue of what would be a better definition for an Undesirable Result related to water quality degradation. The Committee discussed the State Water Resources Control Board’s 1968 Resolution 68-16 anti-degradation policy to maintain high quality waters in California. Several Committee members also suggested that other regulatory frameworks related to water quality, water production and water injection projects might provide additional guidance to develop a more representative definition of Undesirable Result for Water Quality in the basin.

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 Groundwater Quality or on any other Advisory Committee work.

One participant urged Pure Water Soquel to consider the impacts of contamination at wells. She also inquired about the process for participation in the Surface Water Subcommittee.



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7. Confirm Various Project Documents

- **May 23, 2018 Advisory Committee Meeting Summary**

The Advisory Committee members did not have any edits or comments on the draft May 23, 2018 Advisory Committee meeting summary. Mr. Poncelet confirmed it for submission to the Mid-County Groundwater Agency (MGA) Board.

- **Staff incorporation of Advisory Committee input from May 23, 2018 meeting – to inform development of Minimum Thresholds for Groundwater Levels**

Staff distributed a draft Minimum Thresholds proposal for Groundwater Levels and invited Committee members to review it and provide feedback to Ms. Pruitt through August. Staff also reported that the Subsidence Minimum Threshold proposal is still under discussion with DWR and will be shared with the Committee in due course.

8. Next Steps

In closing, Mr. Poncelet reviewed the anticipated meeting objectives for the July 19th joint MGA Board/ Advisory Committee meeting and provided an overview of the GSP process timeline through December 2018. Executive Team members closed the meeting by thanking the attendees for their participation.