



## SANTA CRUZ MID-COUNTY GROUNDWATER AGENCY

Thursday, July 19, 2018 - 6:30 p.m.  
Simpkins Family Swim Center  
979 17th Avenue, Santa Cruz, California

### JOINT MEETING OF THE BOARD AND THE GROUNDWATER SUSTAINABILITY PLAN ADVISORY COMMITTEE

#### MINUTES

**1. Call to Order**

The meeting was called to order at 6:38 p.m. by Vice Chair LaHue.

**2. Roll Call**

Board Members Present: Mr. Abramson, Mr. Baskin, Mr. Benich, Dr. Daniels, Mr. Kennedy, Mr. Kerr, Dr. LaHue, Chair Marani (arrived late), Ms. Matthews, Mr. Romanini (initial Alternate for Chair Marani), Ms. Violante (Alternate).

Board Members Absent: Mr. Friend and Mr. Leopold.

(See Item 7 for Groundwater Sustainability Plan (GSP) Advisory Committee Roll Call.)

Staff Present: Mr. Bracamonte, Mr. Carson, Mr. Duncan, Ms. Menard, Ms. Partch, Ms. Pruitt, Mr. Ricker, and Ms. Strohm.

Others Present: Approximately 12 members of the public, as well as Mr. Poncelet and Ms. Vu of Kearns & West.

Chair Marani arrived and began chairing the meeting.

**3. Oral Communications**

Bruce Tanner requested that everyone speak up so comments are included in his meeting video recording.

Question about copies of letters that were included in the packet binders.

**4. Elections**

3.1 Elections of Chair, Vice Chair, and Secretary

MOTION: Ms. Mathews; To nominate Dr. LaHue as Chair. No other nominations. Motion passed, Dr. LaHue elected Chair.

Dr. LaHue began chairing the meeting.

MOTION: Dr. Daniels; To nominate Ms. Mathews as Vice Chair. No other nominations. Motion passed, Ms. Mathews elected as Vice Chair.

MOTION: Mr. Benich; To nominate Mr. Kerr as Secretary. No other nominations. Motion passed, Mr. Kerr elected as Secretary.

## **5. Consent Agenda**

Items 5.1 and 5.3 were pulled from the Consent Agenda.

5.2 Approve Assignment of Hydrometrics Contract to Montgomery & Associates and Approve Related Contract Modifications

5.4 Approve Communications and Engagement Plan

5.5 Accept Treasurer's Report

MOTION: Ms. Mathews; Second: Mr. Kerr. To approve Consent Agenda except for Items 5.1 and 5.3. Motion passed unanimously.

5.1 Approve Minutes from May 17, 2018 Board Meeting

Request to amend Items 6.4 and 6.5 minutes so that bullet item indentations identify the speaker on a primary level and information provided by that speaker on a secondary level.

MOTION: Dr. Daniels; Second: Mr. Kennedy. To approve the May 17, 2018 meeting minutes with the corrections specified. Motion passed with one abstention (Violante).

### 5.3 Approve Establishment of E-mail Accounts and Usage Guidelines

Request that E-mail Policy be amended to include a provision allowing Board and Advisory Committee members that do not use an institutional account to have the option of having an MGA E-mail Account and the option to have e-mail from the public sent to staff and forwarded to the Board or Advisory Committee member, rather than receiving emails from the public directly.

MOTION: Mr. Baskin; Second: Mr. Marani. To accept the proposed changes to the E-mail Policy. Motion approved unanimously.

MOTION: Mr. Baskin; Second: Mr. Marani. To accept the E-Mail Policy as amended. Motion approved unanimously.

## 6. Informational Updates

### 6.1 Staff Reports

Tim Carson provided an update on the Department of Water Resources (DWR) Groundwater Sustainability Plan (GSP) grant of 1.5 million dollars and the additional 1.5 million dollars in local matching funds from member agencies to support tasks in development of the GSP. Negotiations are ongoing with DWR staff to finalize the grant agreement scope of work, budget, and other minor updates to the prior proposal. Staff anticipates that the agreement will be finalized the next few months. Work is progressing on the GSP. The formal grant reporting and invoicing will proceed once the agreement is executed.

## 7. Welcome and Roll Call of the GSP Advisory Committee

GSP Advisory Committee Members Present: Ms. Anderton, Mr. Bargetto, Mr. Baskin, Mr. Casale, Dr. Jaffe, Mr. Kennedy, Mr. Lear, Ms. McCarthy, Mr. Romanini, Mr. Rous, Ms. Violante and Mr. Wyner.

GSP Advisory Committee Members Absent: Mr. Gudger and Mr. Ley.

## **8. Potential Projects and Concepts to Support Recovery and Sustainability of the Santa Cruz Mid-County Groundwater Basin**

### 8.1 Informational Presentations Summarizing Potential Projects and Concepts to Support Recovery and Sustainability of the Santa Cruz Mid-County Groundwater Basin

- Overview of Historical Work (John Ricker, County of Santa Cruz)
- Overview of Current Work (Rosemary Menard, City of Santa Cruz, Ron Duncan, Soquel Creek Water District)
- Process and Relation to the Groundwater Sustainability Plan development (Rosemary Menard)
- Public Input on Projects and Concepts

Presentation by Gary Lindstrom, Water for Santa Cruz County,  
“Using Water Transfers to Achieve Regional Water Security”

Presentation by Jerry Paul, Water for Santa Cruz County,  
“Lochquifer”

### **Board Discussion: Comments/Questions with Responses**

When would the Pure Water Soquel come online at full capacity?

- Expected start in 2023.

Would the withdrawal from a possible City aquifer storage and recovery project (ASR) be in be in drought periods only?

- This would depend upon the characteristics of the aquifer which would be better understood after pilot testing. The idea is to store water in normal and wet years, and to use that water in dry years. A key question that will drive decision making on operations is how much recharge water can be recovered over what period of time and what are the losses and how much do they change when the water remains in storage for longer periods.

The ASR injection takes place in wet months?

- Yes. The analysis presented assumes that all available water (above fish flows, City demands) could go into storage or be provided as in lieu

recharge to neighboring groundwater agencies regardless of the time of year. For a variety of reasons, including realistic operating constraints of possible recipients of in lieu service, that assumption is likely not realistic. The idea is that water would mostly be taken in wet months when it is available and above the required fish flows and within the water rights constraints.

The ASR water would not pulled out until needed?

- Yes, in general this is the idea, but it is subject to verification based on actual pilot testing results.

The City's ASR idea is that additional water would be put into the Mid-County aquifer, more so than was pulled back to the City, except in extreme situations?

- This is where we need the modeling. It may be that the threat of further sea water intrusion to the Mid-County aquifers is such that the City could put in ten gallons but only expect to get back only a small portion of the water it may be able to inject in the near term with the potential for taking more as the basin stabilizes and recovers. To meet the City's near term needs for drought supply, however, the City will need to focus on developing supplies that are available to meet its needs.

Board member Dr. Bruce Daniels offered additional background information:

- Scotts Valley has done modeling to look at the effect of a recycled water plant and putting water into their basin every year.
- Modeling results indicate that groundwater levels in the basin went up for about 30 years, and then leveled off. The explanation for this result from the model is that raising groundwater levels through adding injected water, water levels in the Lompico aquifer rose high enough that they overflowed into the Santa Margarita aquifer and resulted in higher groundwater discharges to base flows to local streams.
- If the water is not continually put into the basin, the groundwater levels start going back down again and stream baseflow (the flow in summer, early autumn) decline.
- In the event of a drought, the model scenario run projected higher groundwater usage that showed, within three years of higher usage

- and no injections, groundwater levels would return to where they had been before the injection program started.
- One of the issues with sharing the basin is that in a bad year we might not get much river water, might not get much recharge, but Soquel Creek Water District and the City would each need to take water out for their customers. In this case the basin would get hit really hard, which we need to understand.

For these options, are there damage controls for facilities and infrastructure? If all the eggs are in one, or several, baskets, how would they respond to a threat from contamination, terrorism, arson, earthquakes, etc.?

- The importance of a diversified portfolio, compartmentalization, duplication, keeping multiple options available, and mimicking Mother Nature as a guide.
- Importance of Advisory Committee recommendations with a process for moving forward on creating more comparable information on a range of projects. Also have a decision process that includes criteria such as cost, time, robustness, ability to adapt (climate change), so that we can take whatever comes. The City is definitely looking at all those questions for water system infrastructure as well as supply. The City recently had among the driest and the wettest years over the past four years, with big lessons for the kinds of variabilities the City may need to be planning for in the future.

Regarding deep water desalination project in Monterey County, how realistic would it be to get access to a 15 mile pipeline?

- It remains to be seen how this project moves forward, but at this stage we don't want to take any project off the table if it is under consideration in the region. Monterey is assessing a range of potential projects and approaches and "if, then" scenarios: Pure Water Monterey, then the Cal-Am desal project. If the Cal-Am desal project happens, then deep water desal may be less likely.

Would there be access to the 15 mile pipeline, if that happened?

- It is in the public right of way. Not cheap, and the price of water would be steep.

What are the storm water recharge options?

- Looked at wide area, after overlaying a variety of factors, had about 30 sites, which were then reduced by other factors to just a handful of sites. Some on a golf course that just went up for sale; still working on it. The amount of water from storm water recharge has been evaluated not to be sufficient to be the only supplemental water supply strategy needed.

Regarding potable water reuse, where is the EIR in terms of narrowing down a likely location?

- It is a component-based EIR with three potential sites: City wastewater facility, near Chanticleer, and on District property. For example, it might be split use two different facilities, water purified at one spot, then polished in Soquel or Chanticleer. Lines then go out towards Cabrillo College where the water would be used for recharge. Three possible pipeline routes where water would be recharged, keeping options open in the EIR to see what would work best.

Any comments from Ms. Menard on the Water For Santa Cruz County presentation?

- From the City Water Department's perspective, there are several issues about surface water transfers being proposed by others that are somewhat problematic. Key issues include the following:
  - Limited analysis of long term data which tends to over-estimate the reliability and quantity of availability supply;
  - Consistent under-representation of the likely cost of in lieu to potential customers such as the Soquel Creek Water District;
  - Recommending sizing facilities to maximize the ability to withdraw water in years such as this one to the handful of days in March and April when water was available to take without taking into account that the capacity of other City infrastructure such as the Graham Hill Water Treatment Plant would need to be expanded to receive and process diverted water on the day it is taken as there is no other place to put it;
  - Failing to acknowledge that the City's San Lorenzo River water rights do not include the Soquel Creek Water District's service are in the established place of use; and
  - Persistent over-simplification of assumptions that results in making what might be a very viable alternative to support regional conjunctive use of surface water and groundwater seem almost too good to be true.

Can City water from its North Coast water rights be sent to Soquel Creek without addressing place of use questions?

- Yes, and this is the basis of the existing agreement between the City and Soquel Creek Water District for a pilot project to try water transfers.

County staff was asked if there are there smaller managed aquifer recharge projects (MAR) under consideration where we know the recharge is good?

- Yes, Working with the Resource Conversation District, the County is reaching out to private well owners about water use efficiency and what they can do on their own property to promote more infiltration. Such efforts may not result in huge changes to the groundwater table, but might be a way to potentially offset the impact of climate change by capturing some of the available stormwater run-off up in the hills and getting it into the ground instead running off. No real plans yet, no targets for how much water it might involve.

But this would be included in the GSP?

- Yes.

Regarding the potable water reuse facility Soquel is considering, the total volume of wastewater effluent potential available for reuse is something like 7 or 8 million gallons a day. What is the potential amount of effluent that would be used for the Pure Water Soquel Project if it were built?

- The Pure Water Soquel Project is being sized to deliver about 1500 acre feet of water per year to the Mid-County aquifer, or an average of about 1.3 million gallons per day and thus would use only about 20% of the treat effluent now being discharged to the Monterey Bay Sanctuary.

#### **Advisory Committee and Public Questions/Comments:**

Requested clarification regarding the EIR. Alternative No. 2 comes close to describing the City of Santa Cruz's Water Supply Advisory Committee No. 1 recommendation for interagency water transfers. Are these alternatives, or "all of the above", to be done in conjunction with each other, both the Pure Water Soquel and the water exchanges? Also in description, City and District would guarantee that water would be available during drought and non-drought conditions. Sounds like a rigid condition. Any agreement

between the City and the District will likely need adaptability and flexibility based on conditions.

- These are important comments that should be submitted through the EIR process. EIR has specific guidelines that requires comparing apples to apples. Please look at the EIR community guidelines online and submit any comments through the appropriate process.

Is there any information on the rate of being able to recharge in an area?

- The problem in most of this region is that there is pancake layer of geology. In general, water infiltrates downward through a sand layer, but once it hits an impermeable clay layer, the water tends to move horizontally rather downward. Because of the clay layers, it is hard to get water into the Purisima aquifer. In the Aromas aquifer, the geological layers tend to have more sand, and so those are some of the recharge areas we are looking at.

There may be more recharge areas up in the hills.

Response by member of the public Jerry Paul to City staff's comments regarding the increased fish flows. On the graph with the yellow strip across it, that is 1% of the top of the graph and so the fish flows doesn't affect the amount available for transfer. When she said that the water transfers didn't look like they would satisfy the City demand, she was not quoting Loquifer specs but quoting several "crippled fire hoses". Wants computation model with actual aquifer specs.

Member of the public Becky Steinbruner announced two upcoming study sessions hosted by members of the public to provide an opportunity for the public to discuss the District's draft EIR. Ms. Steinbruner also asked the remaining questions.

In recent modeling, did it include the effect of shutting off District wells?

- Not expecting to model shutting off all wells, but some close to Soquel Creek to see how that affects the stream flow.

Why are flows from Laguna Creek being excluded from the pilot study for water transfers?

- This is basically a question about where the 1 million gallon per day (mgd) volume (for 100 days) figure comes from. The 1 mgd volume was chosen because Liddell Springs reliably produces 1 mgd year round. The City has to be able to report to the state that whatever

volume of water it delivered to Soquel Creek Water District under the terms of the pilot water transfer agreement can be matched up to water available from one or more of the City's pre-1914 North Coast water rights.

The City chose to use the volume of water reliably produced by Liddell Springs because it makes accounting simple and provides a volume that is easily within the available hydraulic capacity of the O'Neill Ranch Intertie.

Will the District allow ratepayers and private well owners possibly impacted by injection wells the chance to vote as to whether they will accept the risk and the financial impact?

- That is Board decision. Community outreach and survey showed 77% support, which was a vote of confidence in that decision.

How will the District verify the required two-month holding time for injected water?

- The District utilizes a state-approved monitoring method with chemical tracers to verify the modeling estimates and see the flow and travel times.

## **9. Future Agenda Items**

Request for a brief presentation for Board and Advisory Committee members on organizing personal records related to MGA business to make it easier to comply with a Public Records Act request.

Request for a policy discussion on projects to provide guidance to the GSP Advisory Committee. Concerns raised that initial decisions about projects, and allocations among member agencies, is the heart of the GSP, that the Advisory Committee be allowed to do its work and report back to the Board.

Request for a discussion on the various concepts of possible fee structures, if they were to be levied, how they might be levied, for the next joint meeting of the Board and the GSP Advisory Committee in November.

Request for a presentation to the Board and the GSP Advisory Committee on water use in the basin from 1985 to present, projections for a certain term, and expected rainfall. A composite view, on the same scale, based on the information of each member agency as well as private pumping, agricultural use, population and temperature. While the model will address these issues, a request that all this information be in a publicly available document.

A recognition that the requests reflect the interests of individual Board members but is not direction from the Board; it is up to staff to determine how and to what extent these requests are incorporated into future meetings.

Next Board meeting is September 20, 2018, same location.

Next GSP Advisory Meeting is August 22, 2018, same location.

**10. Adjournment.**

The Chair adjourned the meeting at 9:13 p.m.

SUBMITTED BY:

APPROVED BY:

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Regional Water Management Foundation

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Secretary  
Santa Cruz Mid-County Groundwater Agency