Public Utilities

San Pasqual Valley Groundwater Sustainability Plan
Advisory Committee #7
Teleconference Meeting Agenda

Date: Thursday February 18, 2021 from 2:00 to 4:00 pm

Location: NEW INFO:
Teleconference Dial-In: +1 (646) 749-3122, Access Code: **493-028-013#**
GoToMeeting Link: https://global.gotomeeting.com/join/493028013

Handouts: https://www.sandiegocounty.gov/content/sdc/pds/SGMA/san-pasqual-valley.html

Attendees:		
	Advisory Committee (AC) • Carole Burkhard (CB) • Frank Konyn (FK) • Lisa Peterson • Matt Witman (MWit) • Rikki Schroeder (RS) • Trish Boaz (TB) • Eric Larson (EL) • Dave Toler	**City of San Diego (City)** • Sandra Carlson • Karina Danek (KD) • Niki McGinnis • Mike Bolouri • Keli Balo • Surraya Rashid • Lourdes Bernhard **County of San Diego (County)** • Leanne Crow • Jim Bennett • Nancy Karas
	Public • Anita Regmi, Dept of Water Resources • Raj Brown, San Diego Safari Park • Charlie de la Rosa, San Diego Safari Park • Chris Brzezicki, San Diego Safari Park • Robyn Badger, San Diego Safari Park • Hank Rupp, Rancho Guejito (RG) • Lani Lutar, Responsible Solutions, RG • Andre Monette, Best Best & Krieger (BBK), RG • Pat McTigue, San Diego Safari Park • Greg Porter, San Diego Safari Park, Browse Team • Brad Blaes, The Pinery • Peter Quinlan, for RG • Mike Obermiller, City of Poway • Joe, Unknown	**Consultant Team** • John Ayres (JA), Woodard & Curran • Rosalyn Prickett (RP), Woodard & Curran • Nicole Poletto, Woodard & Curran • Heidi Gantwerk, HG Consulting

Roll Call and Introductions

Rosalyn Prickett, Consultant Team, greeted participants as they signed onto GoToMeeting and reviewed basic instructions for GoToMeeting user tools. Rosalyn reviewed when and how members of the public can provide input.

Review

Heidi Gantwerk, Consultant Team, reviewed the meeting agenda and meeting objectives. She directed participants to Handout 1 with the last meeting summary. Heidi reminded the group that comments need to be provided directly via email to Karina Danek and that no other addresses should be cc'd in the emails.

GSP Content Review

John Ayres, Consultant Team, provided an overview of the Sustainable Groundwater Management Act (SGMA) and reviewed the GSP schedule. No AC members had comments or questions.

Sustainable Management Criteria

John reviewed the definitions of the terms in the Sustainable Management Criteria:

- *Undesirable Results (UR)* – Help us understand what conditions to avoid
- *Sustainability Goal* – statement that provides the overarching goal of the GSP
- *Monitoring Networks* – how we will monitor things to see if they are becoming or are undesirable
- *Minimum Threshold (MT)* – Point or limit that indicates the basin may be experiencing an undesirable result
- *Measurable Objective (MO)* – This is where the basin sets its goals to be
- *Margin of Operational Flexibility (MoOF)* – This is the amount of storage the Basin would like to have above the minimum threshold for use during droughts
- *Planning Threshold (PT)* - Point or limit that indicates the basin may be nearing an undesirable result and planning for additional management shall begin

John displayed the Sustainability Indicators and informed attendants that there have been no changes for the Sustainability Indicators since first presented to the group in the previous meeting.

John then introduced the proposed tiers for the projects and management actions – Tier 0 which may be implemented by the Groundwater Sustainability Agency (GSA) anytime after GSP adoption; Tier 1 which will be implemented after the planning thresholds are exceeded; and Tier 2 which will be implemented after the minimum thresholds for groundwater levels are reached to prevent undesirable results.

- AC Member (RS): Can someone please address what the comment related to raising adaptive management threshold (AMT) threshold was?
    - JA: An AC member requested that we raise the AMT threshold. We have considered this comment and made some suggested changes to the thresholds (including changing the AMT to "Planning Threshold") – we'll talk about those changes today.

John explained the proposed triggers for the revised thresholds and tiers. No changes are proposed for the MTs. MoOF is estimated as 5 years of storage. MO is set to provide an estimated 5 years of storage during drought periods above the MT. Tier 1 Trigger (uses Planning Threshold [PT]) is set to provide an estimated 18 months of time for planning prior to reaching the MT. Tier 2 Trigger (uses MT) is set to provide at least 24 months to avoid reaching an UR. John provided a hydrograph example of how the

MT was calculated. Changes in tiers occurs when at least five wells fall below a specified level/meet criterion for a pre-determined amount of time, i.e. five wells below the threshold for at least 2 years.

- AC Member (MWit): On the 5 well criteria, is that Basin-wide or does the criteria differ between the east and west portions of the Basin?
    - JA: Yes, Basin-wide. Our key well network is 15 wells, and the MT trigger is 30% = 5 wells for 24 months. Our objective is that we react to undesired results early and avoid State intervention, which will be more costly.
- AC Member (EL): Is this MT approach acceptable across the state for GSPs?
    - JA: Yes, this is an approach that falls within the range of approaches used in the 2020 GSPs. W&C used this exact methodology in other regions.

John provided a hydrograph example of how the MO was calculated and how the MoOF is applied in the calculation, followed by an explanation of how the PT was calculated.

- AC Member (MWit): Are you saying that the western part of the basin holds that same water per foot as the eastern part of the basin?
    - JA: No, we're using the historical trend line because we're hoping that the way the GWL responded during the last drought is indicative of how it will respond in the next drought.
- AC Member (MWit): The basin is a V-shaped vessel. Won't the amount of water in the lower part of the basin will be less than the same foot depth at higher elevations?
    - JA: Interesting question. We did not see a steeper slope at lower levels in the historical record. Surely, if basin was dewatered, that might be an affect. We do not fully understand the interaction between the alluvium, residuum, and bedrock, and knowing if the bedrock is going to contribute more if we dewater the basin. Our modeling team tried to better understand and model this. What you are suggesting might be plausible, but we don't have a good way to estimate it. We did not see a steeper slope at deeper levels anywhere. It was almost always a straight line.
- AC Member (FK): Looking at a USGS hydrograph, the well behind Matt Wittman's office, 2011-current trend line did seem to get steeper in later years. Matt has a good point – we have to assume that this basin isn't a straight down, square bottom pool of water. We need to recognize that pumping at a certain rate will go down faster at lower levels. Continue to look at this more.
    - JA: We will take a closer look. Thank you.

John presented slide 25, which provided a summary of the threshold approaches, with calculation, trigger, and actions. John provided an example of one hydrograph from the west side of the Basin and one from the east side of the Basin. Hydrographs for all fifteen representative wells are shown in Handout #2.

There were no additional questions from the AC.

Water Budgets

John explained the general approach taken to the numeric modeling and development of water budgets. The model is used to help us make decisions and provides one line of analysis being used to help the GSA develop its GSP; monitoring data and our SMCs will determine whether the basin is being managed sustainably. The model used consumptive use for Projection Simulations, based on CalETA data and calculations (see slide 32), to project anticipated water use by the farms/vegetation in the basin. Precipitation was projected in accordance with climate change projections (slide 33).

- AC Member (FK): Is this graph for calendar year or water year?
    - JA: I'm not sure. According to my staff, we have used water year.

John continued by presenting the Projected Water Budgets and explained that SGMA regulations require we evaluate water budgets for 3 different systems: surface water, land systems, and groundwater. Surface water flows into and out of the basin in relatively equal amounts. There is a direct correlation with the wetter weather and surface water flow; this is typical. The groundwater system water budget shows historical cumulative change in storage, along with projected cumulative change in groundwater storage (slide 36). Although the cumulative change in storage is slightly low (-3%), this is within the margin of error for numerical models. Basins that are critically over drafted can have -60% change in storage. The water budget appears to mirror what we have seen in the east side of the Basin – there has been a drop in groundwater levels over the drought and the levels have come up, but not all the way. We will have the opportunity to update the GSP every five years in order to address any changes in groundwater storage. What is most important is the diagnostic provided by the Historical Cumulative Change on the right side of the chart (slide 36).

- AC Member (FK): Do all of the state-wide GSAs use this same weather projections, or is there variability in how weather projections are applied?
    - JA: Not sure, though DWR did provide climate change conditions for use by the GSAs at the watershed scale.
- AC Member (FK): The forecast water budget is only off 2.3%, but when we're off 2.8%historically, we can see those effects on the eastern side of the basin. That is most fertile agricultural lands and should be considered. I would like to ensure we don't overlook the eastern side of the Basin, especially considering its economic impact on the Basin.
    - JA: Yes, we set PT and MTs with that consideration. We do not have an issue currently, but if there is an increase in water use due to growth in the Basin, there may be a need to respond to lowering groundwater levels. This is why we've set PTs so that we can respond as needed.

John continued to slide 37 and explained that the projected groundwater budget indicated potential for some depletion of groundwater storage, primarily in the eastern portion of the Basin. We're at a tipping point, which is why we're proposing monitoring and adaptive management. Future groundwater levels in the eastern portion of the basin could go down to the MTs; implementation of adaptive management actions may be necessary in future Plan implementation. John then reviewed the model's forecasted groundwater conditions (see hydrographs on slides 39 through 44) and how numeric models are tweaked and calibrated to match actual conditions as closely as possible.

- AC Member (FK): Historically, agriculture has made technological advances in conservation. We have to assume greater water conservation through mechanical applications will be made possible moving forward. Is technology-based conservation factored into this model, or does it rely strictly on climate forecasts?
    - JA: We did not include conservation assumptions in the forecast, so this is a conservative forecast.
- AC Member (MWit): Some of the key monitoring wells are suspect, so they need to be replaced.
    - JA: Yes, the well that you said was collapsed does bottom out at that level. That well will be replaced first as grant funding comes available. Monitoring well upkeep will be necessary in order to ensure the integrity of the monitoring network.
- AC Member (MWit): Yes, there are others that have collapsed as well.
    - JA: The GSA will likely pursue grant funds to allow installation of better monitoring facilities.

Projects and Management Actions

John reviewed the SGMA regulations for projects and management actions (slide 48), and the proposed adaptive management approach (slide 49). Tier 0 PMAs, which are less intense and onerous, include GSP implementation activities, as well as voluntary programs including education and outreach for TDS/nitrate loading, demand softening, and invasive species removal. Tier 1 includes planning and metering for well reductions. Tier 2 includes implementation of pumping restrictions, which would be the final step before the State becomes involved. PMAs by Tier are presented on slides 50 through 52.

- AC Member (MWit): In Tier 1, well inventory – consider revision: current pumping well inventory?
- AC Member (MWit): In Tier 1, Basin-wide metering program – consider revision: it applies to everyone in City. Move to Tier 0 since that is already mostly implemented and can contribute to basin conditions.
- AC Member (MWit): In Tier 0 – consider: temporary demand softening. Farmers need to be given credit for that reduction when evaluating pumping restrictions. Example: Matt took 30 acres of orchard out during last drought. This would offer incentive for voluntary restrictions and should not be included as a component of the GSP.
- AC Member (FK): Row crops – if there happens to be a year that we don't plant row crops (3-4 year cycle versus Matt's 30 year cycle) – need credit that helps to offset loss of income when voluntary demand softening occurs.

John reminded the group that a long list of capital projects was considered, but deemed infeasible – those will be included in an appendix to the Plan.

Heidi asked for any final AC comments. There were no additional AC comments.

Public Comments

Heidi invited members of the public to comment:

- AC Member (CB) – Thank you. I appreciate all the information.
- Andre Monet, BBK – I have a question on projects and management actions and how they were considered. I look forward to seeing the Appendix. Wondering if recharging the Basin through releases from Sutherland Reservoir was considered? Only a fraction of the reserves in Sutherland would fill any storage deficit. The City of San Diego owns and operates that reservoir and dam releases should be considered before asking farmers to cut back, considering how Sutherland Reservoir blocks recharge to the Basin.

Next Steps and Closing Remarks

Heidi went on to conclude the meeting and informed attendees of the next scheduled meeting and that the Public Draft of the GSP will be available in early May 2021 via the SPV website (slide 58). She also reminded attendees that all comments must be directed to Karina Danek.

GoToMeeting Chat Log from AC Meeting

Trish Boaz-SDRVC (to Everyone): 2:02 PM: Trish Boaz is in

Rikki (to Everyone): 2:18 PM: Slide 7 shows that a request was made to raise the adaptive management thresholds. This was skipped. Could someone please explain the request and why it was not discussed?

W&C-Heidi Gantwerk (to Everyone): 3:16 PM: As a reminder, if you wish to speak during public comment, please place your name and organization into the chat.

Andre - Best Best & Krieger LLP (for Rancho Guejito) (to Everyone): 3:28 PM: Hi, this is Andre, I have a comment