



## Meeting Brief

- The Vina Stakeholder Advisory Committee (SHAC) met virtually (6/16/2020) to discuss initial Basin Setting results, review the SHAC Charter, discuss the level of desired detail for meeting documentation, and to revisit the discussion on artificial recharge implications.
- SHAC members reviewed previous meeting summaries to reflect on the preferred level of detail and when to include attribution. After thorough discussion, the SHAC agreed to specify the type of participant when comments are made (e.g., a member of the SHAC, staff, facilitator, a member of the public) throughout the meeting and include attribution of SHAC members when decision-making and voting occurs.
- Butte County staff and technical consultants gave an overview presentation of the Basin Setting results for GSP development and received SHAC feedback. The [presentation](#) covered preliminary Basin Setting results (The Hydrogeological Conceptual Model, Groundwater Conditions, and Water Budgets), the public review process, and next steps.
- Basin Setting Chapters will be posted for a 30-day public review period mid-summer. The process will provide a foundation for review, input, and feedback. These chapters will come back to the SHAC for discussion and formal recommendations.
- The SHAC made modifications to the Charter to reflect the new post-Covid-19 reality, including added language about virtual meetings, meeting summaries, and decision-making.
- The SHAC will continue to meet virtually for the time being, due to the ongoing Covid-19 epidemic. The next meeting will be held on **August 18<sup>th</sup>, 2020**. The July meeting is canceled.

## Action Items

Item	Lead	Completion
<b>Meeting Materials:</b> <ul style="list-style-type: none"> <li>• Make suggested revision to the Meeting Summary (5-19-2020).</li> <li>• Send meeting summary to SHAC members for review in advance of the next meeting.</li> <li>• Make agendas more realistic to the online context, include numbers and suggested action to each agenda item, and add a standing item for suggested relevant agenda topics for future meetings.</li> </ul>	CBI and Vina GSA Management Committee	Before next meeting (8/18/2020)
<b>Basin Setting Chapters:</b> <ul style="list-style-type: none"> <li>• Follow-up with Jim Brobeck on boundary flows.</li> </ul>	Christina Buck	Upon completion
<b>SHAC Charter:</b> <ul style="list-style-type: none"> <li>• Incorporate feedback on virtual meetings, meeting summaries, and decision-making process.</li> <li>• Send new draft to SHAC for review and approval at August meeting.</li> </ul>	CBI	Before next meeting
<b>Identifying and Managing the Legal Implications of Artificial Recharge:</b> <ul style="list-style-type: none"> <li>• Resend the document (with red line) provided for SHAC's comment and input.</li> </ul>	CBI and Vina GSA	By next SHAC meeting.



<ul style="list-style-type: none"> <li>Revisit the document in future meetings (earlier in the agenda).</li> </ul>	Management Committee	
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## Summary

The Vina SHAC met on June 16, 2020 via video conference, as a result of COVID-19. In total, 25 participants attended, including Vina SHAC members, GSA Member Agency Staff, a technical consultant, state agency representatives, and members of the public.

### Meeting Materials

[Agenda | 01 Zoom Guidance | 02 SUMMARY VINA SHAC 2-18-20 | 03 SUMMARY VINA SHAC-5-19-2020 | 04 Vina SHAC Water Budgets 200616.pdf | 05 Advisory Committee Charter Vina 2-18-20\(Discussion Draft 6-10-20\).pdf | 06 Vina Recharge Evaluation Process 5-19-20.pdf](#)

### Introductions & Agenda Review

The SHAC members, facilitator, and staff introduced themselves. The facilitator gave a brief overview of the [agenda](#). A SHAC member suggested adding numbers to the agenda items to aid participants in following along during the meeting and expressed surprise that more members of the public were not participating in subbasin advisory meetings. Kelly Peterson, Butte County, stated all members of the public could contact her to be included on the Vina Subbasin interested parties list at [kpeterson@buttecounty.net](mailto:kpeterson@buttecounty.net).

### Public Comment

There was no business from the floor.

### Groundwater Sustainability Plan (GSP) Basin Setting Chapters

Christina Buck (Butte County) and Byron Clark (Davids Engineering) gave a brief overview of the Basin Setting process for GSP development and received SHAC feedback on the information presented. The [presentation](#) covered preliminary Basin Setting results, a description of the public review process for chapters, and next steps in GSP development. The Basin Setting Overview represents the foundation for the Groundwater Sustainability Plan (GSP) and has four primary components: The Hydrogeological Conceptual Model, Groundwater Conditions, Water Budget, and Management Areas. This information will become the backdrop for the next phase of GSP completion.

#### *Hydrogeological Conceptual Model (HCM) – Slide 3*

The Hydrogeological Conceptual Model (HCM) shows the general physical characteristics of each basin (regional hydrology, land use, geology, principal aquifers, and water quality) and provides the basics to estimate water budgets. The Vina Subbasin HCM was based on previous and ongoing work (e.g. 2016 Water Inventory & Analysis Update).

#### *Water Budgets – Slides 4-17*

A Water Budget is an accounting process that quantifies or estimates inflows, outflows, and change of storage. The Sustainable Groundwater Management Act (SGMA) requires three components for water



budgets: historic (2000-2018), current, and projected. Butte County used the Butte Basin Groundwater Model (BBGM), an integrated water resources model that represents land surface, surface water, and groundwater systems. The primary water budget drivers include land use, precipitation, evapotranspiration, surface water supplies, groundwater pumping, percolation, surface-groundwater interactions, and inter-basin flows. Main Water Budget takeaways (Slide 17):

- Recent declines in groundwater levels and storage are largely due to drought.
- Potential for modest long-term decline in storage and increased stream leakage.
- Boundary flows (inter-basin surface flows and surface water-ground water interactions) need to be better understood, particularly at the western boundary (border with Corning and with the Sacramento River).
- These estimates provide a solid foundation for future phases of groundwater sustainability plan development.
- Vina Groundwater Sustainability Agency (GSA) plans to continue engaging in inter-basin coordination efforts in the Northern Sacramento Valley.

Discussion:

- A SHAC member expressed concern about focusing solely on central tendency climate change scenarios, considering the real threats of mega-drought. He alluded to the recently published study from University of California Berkeley ([Williams et al. 2020](#)) that discusses the pre-historic climatologic record and indicates the potential for a more extreme trend toward megadrought as climate change continues. In response, Butte County staff requested the SHAC's input on the range of climatic extremes they would like to explore. Further, the BBGM model has a tool to evaluate long-term drought (e.g., what if the 2000-2018 period repeats three times in a row).
- Another SHAC member suggested that relying on 50-year hydrologic information may be misleading. Using the 2000-2018 period will probably show a steeper decline in groundwater levels, particularly during critical years. Consecutive wet years in the past have allowed groundwater levels to recover, but for the past two decades, California has only seen single wet years which are insufficient for recovery. Butte County staff replied that time periods have a big influence on the conclusions reached, the basin setting process' main goal is to understand major drivers and dynamics to inform better decision-making. The good news is that groundwater conditions are still tied to hydrology (relationship between annual precipitation and deep percolation) and the Vina subbasin is not witnessing a steep decline due to increased pumping.
- A SHAC member was surprised at the resiliency of the system, even with increased pumping. It might be interesting to see changes in groundwater storage in the past 50 years overlaid with groundwater pumping over time to understand the system's resiliency better.
- The SHAC asked for clarification on the difference between boundary and inter-basin flows (Slide 16). Boundary flows estimate both interbasin subsurface flows and stream-aquifer interactions (Sacramento River). Butte County and Davids Engineering staff explained there is still a high degree of uncertainty along the western boundary due to the model's inherent limitations. Overall, at a valley scale, groundwater generally flows northeast to southwest, but inter-basin flows vary depending on specific local conditions, highlighting the importance of inter-basin coordination. Other subbasins are using regional models that could help fill some of the information gaps.



### Outcomes & Next Steps | GSP Basin Setting Chapters

- Butte County (Christina) would like the SHAC and Vina GSA board to provide input on what range of climate risk they would like to explore.
- Christina to follow up with Jim Brobeck on boundary flows.
- The Basin Setting Chapters will be posted for a 30-day public review period in mid-summer. The process will provide a foundation for review, input, and feedback. These chapters will come back to the SHAC for discussion and formal recommendations, as warranted.

## Vina SHAC Internal Structure

### Meeting Summary Review & Considerations

The SHAC reviewed and approved the previous two SHAC meeting summaries (2/18/20 and 5/19/20).

- **February 18<sup>th</sup> Summary:** CBI implemented the SHAC's suggested changes and circulated a revised meeting summary. All members approved the modified content.
- **May 19<sup>th</sup> Summary:** CBI addressed the SHAC's previous suggestion to add greater detail to the meeting summaries and properly reflect discussion nuances to capture differing perspectives and asked for the SHAC members' feedback on the latest meeting summary.

### Discussion

- One SHAC member requested a more in-depth discussion of the current decision-making approach, specifically naming clarification of the consensus process. The facilitator indicated the SHAC would have the opportunity to review the Vina SHAC Charter during the meeting.
- For the May meeting summary, a SHAC member suggested changing the word "might" to "should" in the phrase, "might be good to have some smaller models to track and present well log data and cross-sections" (P.4).
- Another SHAC member complimented the extra level of detail included in the summary (5/19/20) and suggested adding attribution throughout. The group discussed various levels of attribution and used the Zoom non-verbal feedback buttons (Yes/No) to express their agreement or disagreement with the proposed changes.
- SHAC members held various perspectives regarding attribution throughout the summary. Some expressed a desire to maintain anonymity as much as possible, as they value their privacy, are concerned about being subject to public harassment, and feel that attribution might constrain SHAC members from speaking freely. Others pointed out that the meeting recordings are available to the public, so anonymity is already lost.
- Some suggestions included, (1) keeping attribution solely to SHAC members and maintaining public comments anonymous and (2) maintaining attribution solely when decisions are made when SHAC members are requested to vote on a given action or recommendation. In the end, the SHAC decided to include attribution when decision-making occurs, while making a clear and consistent distinction throughout the discussion pertaining to what type of participant is contributing (SHAC member, GSA staff, members of the public, etc.).

### Outcomes & Next Steps | Meeting Summaries



- After thorough discussion, the SHAC unanimously voted to clearly specify the type of participant during the discussion (e.g. SHAC member, GSA staff, public, etc.) and only to include attribution when decisions and formal recommendations are made.

#### Charter Review:

The facilitator described the process for the development of the SHAC charter thus far. The SHAC initially reviewed a draft at its first meeting and offered some suggested changes that were incorporated into the document for SHAC review at the February meeting. At that time, there were no further comments on the charter. However, in light of the impacts of the Covid-19 pandemic and the transition to on-line meetings, the SHAC voiced some concerns at the May 19<sup>th</sup> meeting which prompted the SHAC to revisit its charter.

The facilitator underscored that the SHAC's role is to advise the Vina GSA board. Any modifications to the charter would need to be consistent with the legal agreement that formed the Vina GSA ([Joint Powers Agreement](#)) and be approved by the Vina GSA board. The SHAC discussed questions and, in some cases, draft charter modifications as follows.

- **Virtual Meetings.** SHAC members suggested adding the following modified language to this section of the charter prompted by the impacts of Covid-19.
  - *Under extenuating circumstances that may preclude the SHAC from holding in-person meetings, the SHAC may consider offering a video-conferencing option. However, all attempts will be made to hold in-person meetings, particularly when substantive discussion and formal recommendations are under consideration by the SHAC.*
- **Agendas:** The facilitator suggested including a standing agenda item, where SHAC members can suggest additional topics to the next agenda for discussion related to GSP development. This item will not be specified in detail in the charter. All SHAC members approved this change unanimously. Further, in the agenda expectations and asks from the SHAC will be clearly stated.
- **Decision-making & Governing Board:** CBI added detail to this section of the charter, in relation to the meeting summary process. Meeting summaries will have greater detail, will be sent to the GSA managers for review first, and then sent to the SHAC for comments before the subsequent meeting. SHAC members approved the language added to the charter.

#### Discussion:

- One SHAC member expressed a concern that SHAC members do not have control over the advisory committee and that there has not been enough time to review the amount of information shared for the SHAC's input.
- Another SHAC member was concerned with the approach to distribution of summaries. Due to this member's experience in previous advisory groups, control of information is power. He emphasized the importance of maintaining sufficient details and potentially change the name from summary to minutes, notes, etc. Butte staff pointed out that the group will clearly specify moment in the process where the SHAC will be asked to vote on recommendations. When bringing those items to the board, the managers will use the summary so that the GSA board can see the discussion held and input received accompanying the votes. We want to provide as much information as possible to decision-making.



#### Outcomes & Next Steps | Charter Review

- The SHAC will continue to meet virtually for the time being.
- CBI will include modifications to the SHAC charter for review before the next meeting.
- The Facilitator and GSA Management Committee will take care to make the agendas more realistic for the on-line meeting format, will include suggested actions for each agenda item to clarify what type of input the SHAC is providing, and a standing item for suggested relevant discussion points for future meetings.

#### Identifying and Managing the Legal Implications of Artificial Recharge

Paul Gosselin (Butte County) described that in October 2019 the Vina GSA board directed the development of a rule to regulate any potential out-of-basin transfers to help understand the specific vulnerabilities the subbasin faces related to concerns about ownership of recharged water and the potential for it to be transferred out of the subbasin. The document entitled, "Identifying and Managing the Legal Implications of Artificial Recharge" was developed by Butte County staff with the Vina GSA Management Committee and with preliminary input from the Vina SHAC. The Management Committee had intended to start the process this past spring. However, a few issues arose. The effort was initially delayed by Covid-19. The other major issue that emerged was the loss of funding for the effort as a result of the impacts of the coronavirus pandemic. Therefore, the effort is going to have to be delayed until financial resources can be found to fund it. The delay in this project will not affect the development of a rule regulating out-of-basin transfers which will probably be developed within the next year.

To not lose the intent on this process, Paul Gosselin explained that the issues and concerns that are laid out on page two of the document can be used as a guide when evaluating specific projects and programs as they are developed as a part of the Projects and Management Actions section of the GSP. In the short term, that seems like a possible way to maintain the intent. Currently, there aren't any projects currently on the table.

#### Discussion:

- A SHAC member expressed concern about future projects that may come up involving the Tuscan Water District. Another SHAC member stated that the Tuscan Water District does not have any projects currently planned.
- Butte County clarified that the Tuscan Water District's application is before LAFCO and will be reviewed by staff and then brought to the SHAC for a recommendation to the Vina GSA Board for comments.
- Another SHAC member believed the SHAC would be supporting the drafting of a rule regulating transfers and inquired about timeframe and approval process. Butte Staff replied that they anticipate a 12-month timeframe.
- Given the timeframe, the facilitator suggested continuing this conversation at future meetings. The SHAC suggested keeping this item at the beginning of a future meeting, rather than at the end.
- Another SHAC member suggested changing the document title to include the word "consequences," as the new title implies that attaining sustainability will require transfers. This is of particular concern, due to the state's goal of increasing water availability to Southern California from Northern parts of the state, through managed recharge projects.



- A SHAC member provided Butte County staff with some input to the document and would like to share that input with the SHAC, as it outlines potential impacts of artificial recharge projects.

#### Outcomes & Next Steps | Identifying and Managing the Legal Implications of Artificial Recharge

- Incorporate this item into future meeting.
- CBI will send the document with feedback provided and ask the SHAC members for any additional comments. For the next meeting, CBI and the Management Committee will incorporate comments received and bring back the document for SHAC discussion.

#### Future Meeting Arrangements

Paul Gosselin, Butte County, responded to previous SHAC's request to transition towards hybrid virtual-in person meetings. Butte Staff could ensure there is adequate meeting setting, with safety guidelines in place for SHAC members. The public would have the opportunity to connect virtually via Zoom. However, after a series of SHAC members expressed concern with the risks involved in in-person meetings, the SHAC decided to continue meeting virtually for the time being. Some of the concerns related to meaningful public engagement (e.g. proper set up to be able to properly hear, observe, and participate).

#### Outcomes & Next Steps | Future Meeting Arrangements

- SHAC members would like the packet to be printed in color, with 1 or 2 slides per sheet.
- The SHAC will meet again, virtually, on August 18<sup>th</sup>, 2020. The July meeting is canceled.



Participants

Participant	Representation/Affiliation	Present
<b>Vina Stakeholder Advisory Committee (SHAC) Members</b>		
Anne Dawson	Domestic well user	Y
Bruce Smith	Business representative	Y
Cheri Chastain	CSU Chico	Y
Christopher Madden	Butte College	N
Gary Cole	Agriculture well user	Y
George Barber	California Water Service	Y
Greg Sohnrey	Agriculture well user	Y
James Brobeck	Environment representative	Y
Joshua Pierce	Domestic well user	Y
Samantha Lewis	Agriculture well user	Y
<b>Groundwater Sustainability Agency (GSA) Member Agency Staff</b>		
Christina Buck	Butte County	Y
Paul Gosselin	Butte County	Y
Kelly Peterson	Butte County	Y
Linda Herman	City of Chico	Y
Jeff Carter	Durham Irrigation District	Y
Kamie Loeser	Durham Irrigation District	Y
Colin Klinesteker	Mechoopda Indian Tribe	Y
<b>Technical Consultants</b>		
Byron Clark	Davids Engineering	Y
<b>Facilitator</b>		
Tania Carlone	Consensus Building Institute	Y
Mariana Rivera-Torres	Consensus Building Institute	Y

An additional six members of the public attended the meeting.