



Vina Groundwater Sustainability Agency
308 Nelson Avenue, Oroville, California 95965
(530) 552-3592 • VinaGSA@gmail.com

CORRESPONDENCE

VINA STAKEHOLDER ADVISORY COMMITTEE

Begin forwarded message:

-----Original Message-----

From: Buck, Christina

Sent: Monday, January 25, 2021 4:49 PM

To: 'jimb@aqualliance.net' <jimb@aqualliance.net>

Subject: RE: hydrograph request

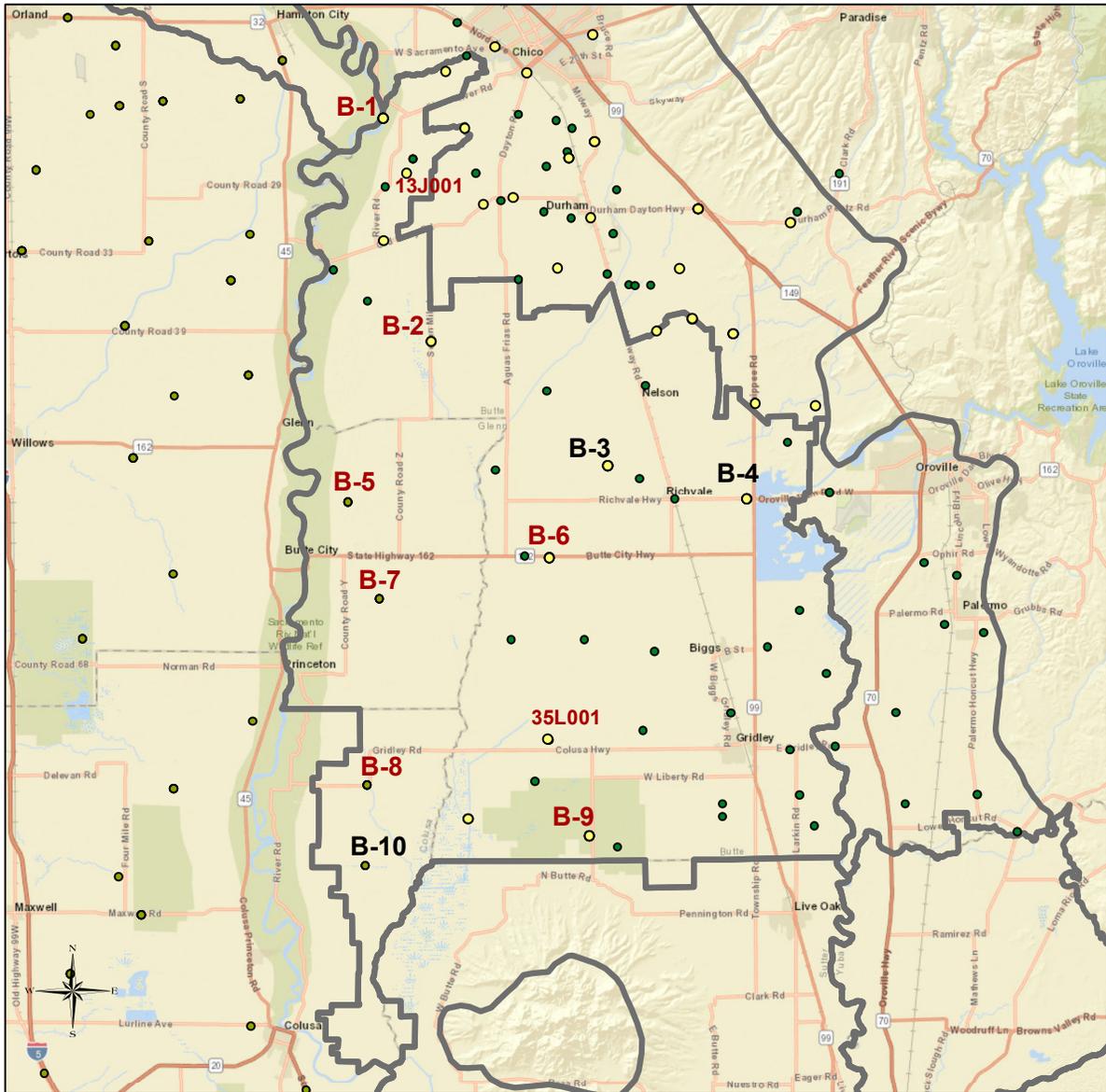
Hi Jim,

I've attached a presentation (and accompanying maps) I gave to the Butte County TAC about a year ago related to the discussion of defining principal aquifers in the Vina and Butte subbasins. These are the hydrographs I have available for multi-completion wells in the Vina and Butte subbasins. Wyandotte Creek does not have any multi-completion wells (yet!). I do not have hydrographs on hand for adjacent subbasins to the west. Perhaps their draft Basin Setting materials will include them. Or you can find any of this groundwater level data on the SGMA Data Viewer (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>) or the Water Data Library (<https://wdl.water.ca.gov/>).

I apologize these are not the most friendly graphs, but depending on what you're interested in, they are informative. Let me know if you have questions about the labeling etc. on any of this content.

Best,
Christina

Butte Subbasin Principal Aquifer Evaluation Jan. 14, 2020

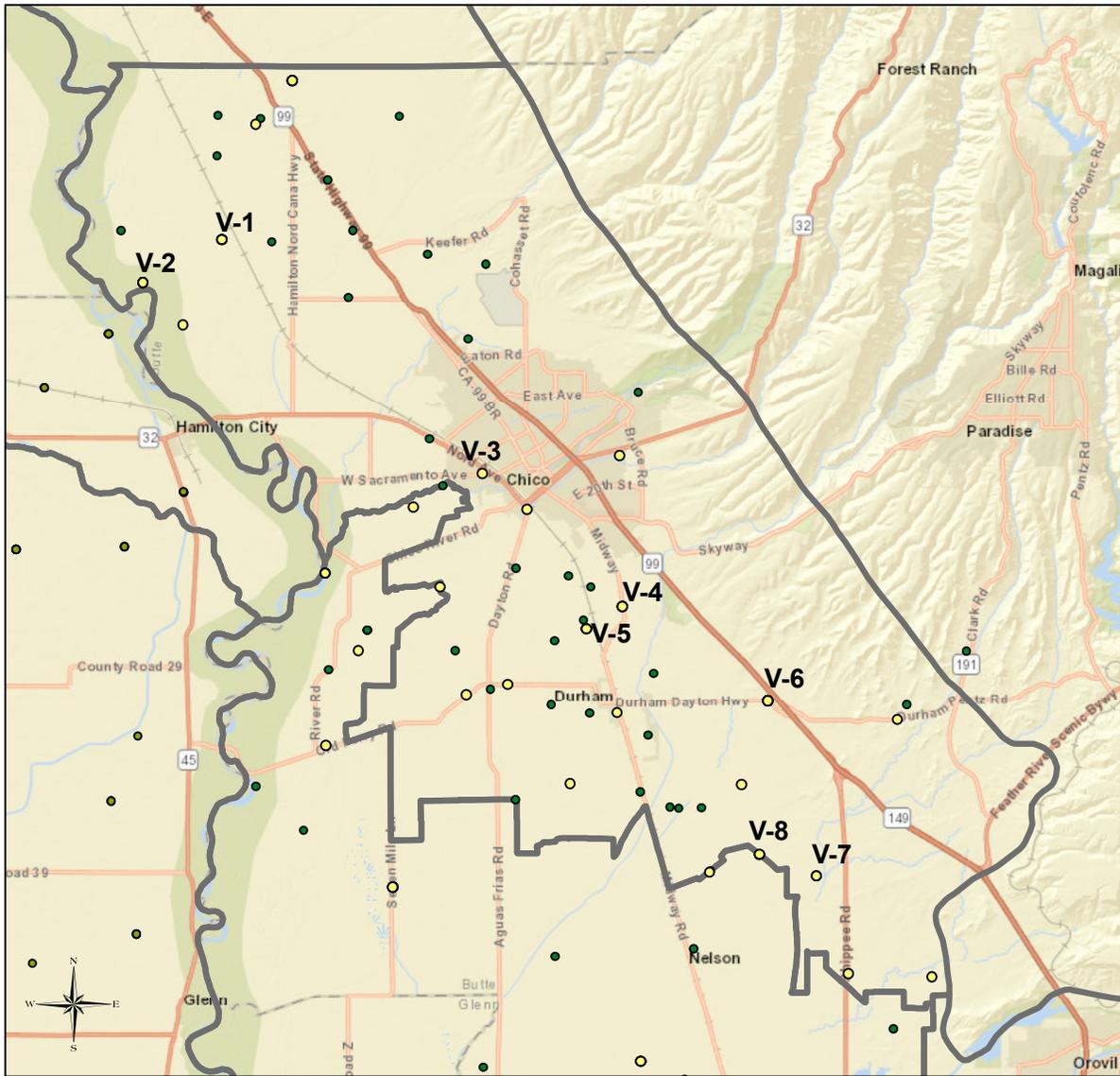


Legend

- Groundwater Level Recorded Hourly
- Monitoring Wells
- Groundwater Subbasins (2018)

0 2 4 8 12 16 Miles

Vina Subbasin Principal Aquifer Evaluation Jan. 14, 2020



Legend

- Groundwater Level Recorded Hourly
- Monitoring Wells
- Groundwater Subbasins (2018)

-----Original Message-----

From: jimb@aqualliance.net <jimb@aqualliance.net>
Sent: Sunday, January 24, 2021 1:16 PM
To: Buck, Christina <CBuck@buttecounty.net>
Subject: hydrograph request

.ATTENTION: This message originated from outside Butte County. Please exercise judgment before opening attachments, clicking on links, or replying..

Hi Christina,
Please email me the hydrograph record for the multi-completion wells in the Vina sub basin and the adjacent sub basins.
Thanks,
Jim Brobeck

Begin forwarded message:

From: Tania Carlone <tcarlone@cbi.org>
Subject: Re: SHAC interbasin comments
Date: February 16, 2021 at 8:29:03 AM PST
To: jimb@aqualliance.net
Cc: Mariana Rivera-Torres <mriveratorres@cbi.org>

Good Morning, Jim.

Thank you for taking the time to articulate these questions.

Best,

Tania

Tania Carlone
Consensus Building Institute
510/684.0504 (cell)
tcarlone@cbi.org | www.cbi.org
Watch our new video on CBI's work:<https://youtu.be/RniP-Q5fpPw>

On Feb 16, 2021, at 8:27 AM, jimb@aqualliance.net wrote:

FYI Here is my response on your request for questions you have related to inter-basin coordination.
Jim

We would like to hear from you on what are the most important questions you have related to inter-basin coordination?

1. What is the history of GW substitution transfers by participating agents?
2. What are the plans for future GW substitution transfers?
3. What are the GW flow patterns at different levels of the shared aquifer system?
4. Who/where are experimental recharge projects being proposed?
5. Will all GSAs using the deep aquifer contribute to upland watershed management in the Sierra/Cascade that naturally replenish the pressurized portion of the shared aquifer system?
6. Will Butte County ordinances that discourage GW Substitution transfers have any effect on butte basin

groundwater agency participants that are located outside of Butte County boundaries?

What do you think would be most valuable and important to discuss?

1. A clear agreed upon understanding of the hydrologic connections between the middle Sacramento Valley aquifer GSAs with a special focus on the pressurized portion of the aquifer and its recharge mechanism.
2. Are Staff and consultants from different GSAs continuing informal coordination meetings to discuss Basin Setting documents, MOs, MTs and PMAs?

-----Original Message-----

From: jimb@aqualliance.net <jimb@aqualliance.net>
Sent: Tuesday, February 16, 2021 9:54 AM
To: Peterson, Kelly <KPeterson@buttecounty.net>
Subject: Fwd: Re: Questions about GDEs

.ATTENTION: This message originated from outside Butte County. Please exercise judgment before opening attachments, clicking on links, or replying..

Kelly,

Please forward this message to our Geosyntec consultants to help us determine if the shallow aquifer under much of the Vina sub-basin is a "principal aquifer (defined under SGMA as "aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems".

Thanks,
Jim

----- Original Message -----

Subject: Re: Questions about GDEs
Date: 2021-02-04 12:03
From: Melissa Rohde <melissa.rohde@TNC.ORG>
To: "jimb@aqualliance.net" <jimb@aqualliance.net>, Sandi Matsumoto <smatsumoto@TNC.ORG>, "Peterson, Kelly" <KPeterson@buttecounty.net>

Hi Jim,

Valley oaks are certainly considered a phreatophytic species in California, and are mapped in the NC Dataset where data was available to identify them. If non-riparian valley oak woodlands are present in your basin, not included in the NC dataset, and connected to a principal aquifer (defined under SGMA as "aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems" 23 CCR §351(aa)), then they most certainly should be included in the basin's GDE map.

Perhaps a call would be easier to discuss?

Melissa

Melissa M. Rohde (she/her) | Groundwater Scientist | The Nature Conservancy | 415-281-0489
| GroundwaterResourceHub.org

From: jimb@aqualliance.net <jimb@aqualliance.net>
Date: Thursday, February 4, 2021 at 9:36 AM
To: Melissa Rohde <melissa.rohde@TNC.ORG>, Sandi Matsumoto <smatsumoto@TNC.ORG>, Peterson, Kelly <KPeterson@buttecounty.net>
Subject: Fwd: Questions about GDEs

Hello Melissa,

I serve on the Vina GSA Stakeholder Advisory Committee and have participated in the Butte County GDE panel. I have submitted information

that clearly indicates upland Valley Oak trees are the keystone species of a non-riparian GDE. Last year I contacted Ms Matsumoto about my observations and she explained you were the point person to contact. I have not seen a response but I continue to lobby my region to give these

iconic groves the protection they need to endure dry years. Are you able

to expand your GDE database to include these deep rooted GWD trees?

Thank you for a response,
Jim Brobeck, water policy analyst

----- Original Message -----

Subject: Questions about GDEs

Date: 2021-02-02 10:23

From: "Peterson, Kelly" <KPeterson@buttecounty.net>

To: "'jimb@aqualliance.net'" <jimb@aqualliance.net>

Hi Jim,

We can bring some of these topics back to the SHAC at some point to weigh in on as well.

Thank you,

Kelly

Hi Kelly,

I would like to see how the GDE maps for our region are shaping up. Draft maps are still being revised and will be presented to the SHAC once ready. Who is doing a census of Valley Oak Woodlands that are not riparian water dependent? We are not engaged in a census of VO woodlands. We are analyzing potential GDEs (iGDEs) from those provided in the TNC database available online. This dataset does include polygons dominated by Valley Oaks, however all of those identified in the TNC database in the Vina subbasin are near riparian corridors.

How large of a stand of Quercus Lobata (Valley Oak) is needed to be designated a Woodland? This may be a more appropriate question to direct to CDFW.

I also feel a lack of traction in my observation that the Chico Urban Forest is GD. The water in the shallow urban wells I monitor are 25-40' I will reach out to the Urban Forester to determine their understanding of the transpiration water source for Chico's summer shade trees.

Thanks,

Jim

Links:

[1]

[https://urldefense.com/v3/https://www.vinagsa.org/files/ccaca82da/02_SHAC*Packet*January*FINAL.pdf;Kysr!!KNMwiTCp4spf!TirwzrcFHZL98ioJGm73gHUyE0cL8HJ2uRYJw2q3S-tW7ms7gCNsR0x8eza3AiqFP96PHA\\$](https://urldefense.com/v3/https://www.vinagsa.org/files/ccaca82da/02_SHAC*Packet*January*FINAL.pdf;Kysr!!KNMwiTCp4spf!TirwzrcFHZL98ioJGm73gHUyE0cL8HJ2uRYJw2q3S-tW7ms7gCNsR0x8eza3AiqFP96PHA$)

[2]

<https://www.buttecounty.net/waterresourceconservation/Groundwater-Status-Reports/Current-Groundwater-Status-Report>

Begin forwarded message:

From: Mariana Rivera-Torres <mriveratorres@cbi.org>
Subject: Re: PMA submission form
Date: February 17, 2021 at 5:57:51 PM PST
To: Anne Dawson <aakdawson@aol.com>

Hi Anne,

Happy to! You can access the online form here: <https://forms.gle/XYDZVmm4LSXF9v7m8>

You can also find the Word document form attached.

Please let me know if you have any questions,

Mariana

Mariana Rivera-Torres
Consensus Building Institute
520/528.0498 (cell)
mriveratorres@cbi.org | www.cbi.org

On Feb 17, 2021, at 4:38 PM, Anne Dawson <aakdawson@aol.com> wrote:

Hi Mariana. I have been looking for the PMA submission form and I know I have seen it before but I cannot find it today. Would you please email me a link?

Thanks

Anne Dawson, Vina SHAC

[Sent from the all new Aol app for iOS](#)

From: Dooley, Michelle@DWR <Michelle.Dooley@water.ca.gov>
Sent: Friday, February 19, 2021 5:51 PM
To: Peterson, Kelly <KPeterson@buttecounty.net>; Gordon, Glen@DWR <Glen.Gordon@water.ca.gov>; Spangler, Debbie@DWR <Debbie.Spangler@water.ca.gov>; Vellines, Patricia@DWR <Patricia.Vellines@water.ca.gov>; Scholzen, April@DWR <April.Scholzen@water.ca.gov>
Subject: RE: Aquifer maps

ATTENTION: This message originated from outside **Butte County**. Please exercise judgment before opening attachments, clicking on links, or replying.

Hi Kelly,

Thank you for your inquiry. For many years now, our office creates groundwater level 'Change Maps' for the Northern Sacramento Valley groundwater basins, for Spring, Summer, and Fall.

At this time, these Change Maps represent the extent of groundwater mapping that our office can produce, with current staffing and funding resources.

When I first read the Vina Subbasin Stakeholder Advisory Committee member's request that we create groundwater level contour maps based on aquifer layers (shallow, intermediate and deep) wells and also flow gradient maps, I immediately thought of the SGMA requirements for a GSP, specifically, § 354.16. Groundwater Conditions, where

Each Plan shall provide a description of current and historical groundwater conditions in the basin, including data from January 1, 2015, to current conditions, based on the best available information that includes the following:

(a) Groundwater elevation data demonstrating flow directions, lateral and vertical gradients, and regional pumping patterns, including:

(1) Groundwater elevation contour maps depicting the groundwater table or potentiometric surface associated with the current seasonal high and seasonal low for

each principal aquifer within the basin.

(2) Hydrographs depicting long-term groundwater elevations, historical highs and lows,

and hydraulic gradients between principal aquifers.

As you can see, GSAs are now responsible for developing these types of maps for their basin/subbasin's GSP.

So while we would likely enjoy and are capable of developing these types of maps, the funding and resources for this work has been devoted to the GSAs.

Thanks again for your inquiry, have a great weekend,

Michelle

Michelle Dooley PG

Supervising Engineering Geologist – Regional Planning Branch

Northern Region Office | Division of Regional Assistance

CA Department of Water Resources

2440 Main Street Red Bluff, CA 96080
(530) 529-7380 | Michelle.Dooley@water.ca.gov

From: Peterson, Kelly <KPeterson@buttecounty.net>
Sent: Tuesday, February 16, 2021 3:33 PM
To: Spangler, Debbie@DWR <Debbie.Spangler@water.ca.gov>
Subject: Aquifer maps

Hi Debbie,

We had a request today from a member of the Vina Subbasin Stakeholder Advisory Committee about DWR's ability to create groundwater level contour maps based on aquifer layers (shallow, intermediate and deep) wells. Is this something the DWR NRO can provide based on the information available? We also had a question regarding whether or not DWR produces or is able to produce vertical flow maps for our subbasins. Thank you for your response so we can let the group know.

Best Regards,

Kelly Peterson, Water Resources Scientist
Butte County Department of Water and Resource Conservation
308 Nelson Avenue
Oroville, CA 95965
Office: (530) 552-3595
<https://www.buttecounty.net/waterresourceconservation/Home>

Please click [HERE](#) to sign up for regular email updates from our Department.
Begin forwarded message:

From: Mariana Rivera-Torres <mrivertorres@cbi.org>
Subject: Re: [For Review] February Vina SHAC Meeting Notes
Date: March 10, 2021 at 4:49:52 PM PST
To: Cheri L Chastain <cchastain@csuchico.edu>
Cc: Tania Carlone <tcarlone@cbi.org>

Sounds good. Thanks, Cheri!

Mariana Rivera-Torres
Consensus Building Institute
520/528.0498 (cell)
mrivertorres@cbi.org | www.cbi.org

On Mar 10, 2021, at 4:47 PM, Cheri L Chastain <cchastain@csuchico.edu> wrote:

I will abstain from comments as I was unable to attend the last meeting.

Thanks,

Cheri Chastain

Director of Energy and Sustainability
Facilities Management and Services
California State University, Chico
530-898-3875

<image001.png>

From: Mariana Rivera-Torres <mrivertorres@cbi.org>

Sent: Wednesday, March 10, 2021 4:39 PM

Cc: Tania Carlone <tcarlone@cbi.org>; Gosselin, Paul <pgosselin@buttecounty.net>; Peterson, Kelly <kpeterson@buttecounty.net>; Linda Herman <linda.herman@chicoca.gov>; Erik Gustafson <erik.gustafson@chicoca.gov>; Kamie Loeser <kamie@kamieloeser.com>; Jeff Carter <jeff@jjcarterlaw.com>; Colin Klinesteker <cklinesteker@mechoopda-nsn.gov>; Buck, Christina <cbuck@buttecounty.net>; Jon Lavy <jonlavy@comcast.net>; Darren Rice <almondfarmer@msn.com>; Joe Turner <JTurner@Geosyntec.com>; Bob Anderson <BAAnderson@Geosyntec.com>

Subject: [For Review] February Vina SHAC Meeting Notes

Dear Vina SHAC,

Please find attached the draft meeting notes from our February SHAC meeting (2/16/21) for your review and input. We welcome your written comments by Monday, March 15th. You will also have the opportunity to provide verbal feedback during the meeting next Tuesday.

Thank you in advance for your review,

Mariana
Mariana Rivera-Torres
Consensus Building Institute
520/528.0498 (cell)
mrivertorres@cbi.org | www.cbi.org

<image002.png>