



## Stakeholder Advisory Committee (SHAC)

March 15, 2022, 9:00 a.m. to 12:00 p.m.

Location: Online Meeting Only Via Zoom

This meeting is being conducted via teleconference in accordance with Executive Order N-25-20 and N-29-20. Members of the public may virtually attend the meeting remotely using the ZOOM platform.

### ACCESSING THE ONLINE MEETING

The public may listen to and/or participate in the Vina Stakeholder Advisory Committee (SHAC) Meetings via landline or mobile telephone or via computer, with both video and audio enabled or audio only. Here are two methods for joining the meeting:

**1) Easiest Option: One-Click to Join:**

<https://us02web.zoom.us/j/82598978298>

**2) ... or call in by phone:** One-Tap Mobile 16699006833,,82598978298#

Or

Manually Dial: then enter Meeting ID

Phone: +1 669 900 6833

Meeting ID: 825 9897 8298

A member of the public may indicate their intent to speak by raising their hand any time after the item number has been called. Speakers will be called in the order they appear on the host's screen.

1. If attending by Zoom application click the raise hand button.
2. If attending by telephone dial \*9 to raise your hand. \*6 to mute/unmute yourself.

Comments are limited to one comment, per item, per attendee and are to be no more than three (3) minutes in length.



## Stakeholder Advisory Committee (SHAC)

March 15, 2022, 9:00 a.m. to 12:00 p.m.

Location: Online Meeting Only Via Zoom

### MEETING AGENDA

1. **ROLL CALL**
2. **BUSINESS FROM THE FLOOR**

The public and SHAC members will have an opportunity to comment on items not on the agenda and that are relevant to the SHAC. Committee members and Management Committee staff are not required to respond to any issues raised during the public comment period. Commenters are asked to respect differing perspectives and to keep remarks within three minutes.
3. **APPROVAL OF MEETING SUMMARY FOR THE 11/04/21 SHAC MEETING**
4. **REVIEW OF THE 2021 WATER YEAR ANNUAL REPORT FOR THE VINA SUBBASIN**  
(Christina Buck, Water and Resource Conservation).
5. **REVIEW OF THE SHAC PROCESSES AND PROVIDE RECOMMENDATIONS TO THE VINA GSA BOARD** (Kelly Peterson, Management Committee)
6. **MANAGEMENT COMMITTEE UPDATE** (Verbal Report - Kamie Loeser, Vina GSA Administrator)
  - a. Future discussion with Board on GSP Implementation and SGMA Implementation grant.
  - b. Lawsuit/Complaint filed against the Vina GSA Board
7. **CONSIDERATION OF 2022 SHAC MEETING SCHEDULE** (Linda Herman, Management Committee)
8. **ADJOURNMENT**

The Committee will adjourn to their next meeting in April 2022 at a date and time to be determined at this meeting.



1 **Meeting Brief**

- 2 ➤ The Vina Stakeholder Advisory Committee (SHAC) met virtually on November 4, 2021 [[Access](#)
- 3 [Recording Here](#)].
- 4 ➤ **Consideration of Alternate Measurable Objective (MO) for Declining Groundwater Levels**
- 5 The Management Committee presented updated hydrographs corresponding with
- 6 alternative MO. The SHAC discussed and voted to make a recommendation to the Board on
- 7 whether to maintain the MO in the draft GSP or to replace it with the alternative. [[Access](#)
- 8 [Updated Hydrographs](#)].
- 9 ➤ **Consideration of Interim Milestone Action Plan (IMAP) Management Action**
- 10 The Management Committee presented language on IMAP as new management action for
- 11 inclusion in the Groundwater Sustainability Plan (GSP). The SHAC discussed and voted to
- 12 make a recommendation to the Board on the proposed management action. [[Access](#) [IMAP](#)
- 13 [Memo](#)].
- 14 ➤ **Discussion and Recommendations on Draft Groundwater Sustainability Plan (GSP)**
- 15 The Management Committee presented public comments received during draft GSP
- 16 comment period. SHAC discussed input from public and heard additional reflections from
- 17 members of the public present. [[Access](#) [Public Comment Tracking Sheet](#)].
- 18 ➤ **Next Meeting:** The SHAC will meet again on February 15, 2022.

19 **Action Items**

Item	Lead	Completion
• Make minor revisions to the October 19, 2021 SHAC meeting summary and post final draft on Vina GSA website	CBI & Management Committee	
• Edit GSP and present final version to GSA board.	Management Committee & technical consultant	
• Post SHAC meeting recording on the website.	CBI & Management Committee	[ <a href="#">Access Here</a> ]
• Integrate SHAC comments in updated Communications and Engagement Plan and prepare draft for inclusion in the final GSP	CBI & Management Committee	
• Prepare November 4, 2021 meeting summary and send to SHAC for review	CBI & Management Committee	

20 **Summary**

21 The Vina SHAC met on November 4, 2021, via video conference, because of COVID-19.

22 Participants included Vina SHAC members, GSA member agency staff, technical consultants,

23 representatives from the CA Department of Water Resources (DWR), and members of the public.

24 Below is a detailed summary of key themes and next steps discussed at the meeting. This

25 document is not intended to be a meeting transcript. Rather, it focuses on the main points

26 covered during the group’s discussions.



1

## 2 1. Introductions &amp; Agenda Review (0:00:00)

3 The facilitator gave a brief overview of the agenda.

4

## 5 2. Public Comment for Items Not on the Agenda (0:05:56)

6 *Public Comments:*7 • T. Greene (CSU Chico) wished to place on record that not enough time was given to review  
8 the data before the meeting, and that this felt too rushed.9 • A. Raymond (member of public) identified one well where the Minimum Threshold (MT)  
10 level was set 10 feet below the depth of that water level, and she requested that the MT  
11 level be altered. She noted that another well MT is set at 10% empty by the time that well  
12 would hit its MT level and stated this deserves scrutiny.13 • D. Lucero (member of public) wondered if public comments could be posted as soon as they  
14 were received. K. Loeser (Butte County) responded that the delay was not due to a  
15 procedural choice, but simply about the time it takes to organize comments and that it  
16 could potentially be adjusted.17 • J. Brobeck (Environmental Rep) asked about contingency plans if the GSP were deemed  
18 inadequate by local stakeholders or by state agencies once submitted. T. Carlone (CBI)  
19 responded that the State has 2 years to review adequacy of plan. She stated that one way  
20 forward could be for the State to identify information gaps, make those requests of the  
21 subbasin, subbasin would respond with the missing information, and then it would be  
22 deemed adequate. The other possibility, if the plan were deemed inadequate, would be  
23 that the GSP would be referred to the State Water Resources Control Board (SWRCB). K.  
24 Loeser (Butte County) added that this plan is a living document that will be updated and  
25 revised as information is obtained over the life of the document. Especially as DWR starts to  
26 respond to the critically over-drafted basins GSPs and their adequacy, she noted that would  
27 lead to more information. She hoped to take an adaptive management approach and hoped  
28 the GSAs would continue to do that over time. She reiterated that the initial goal is to get  
29 the GSP adopted in December and to address data gaps and observe changes desired in the  
30 document over time.

31

## 32 Meeting Notes (00:15:28)

33 The Vina SHAC reviewed and voted on the approval of the 10/19/21 meeting notes. The  
34 meeting notes were approved pending minor changes.35 ➤ T. Greene (CSU Chico) wished to correct a mistaken quote attributed to him about  
36 there being no useful well screen information in the Chico Management Area and  
37 clarified that this is not true because two wells are useful, but the other four are not.  
38 He suggested it read that there isn't sufficient screen information, not that there isn't  
39 any at all.40 ➤ A. Wallace (Rock Creek Reclamation District Attorney) asked for his affiliation to be  
41 corrected, as he was incorrectly identified as Vina GSA's attorney, when in actuality he  
42 is the attorney for the Rock Creek Reclamation District.



- 1       ➤ S. Lewis (Agricultural Rep) requested that the SHAC receive the meeting notes via email  
 2 before they are conveyed to the Vina GSA board. C. Buck (Butte County) responded  
 3 that this would probably not be possible this time around because the turn-around  
 4 would need to occur so quickly.  
 5

Yes	G. Sohnrey (Agricultural Rep), S. Lewis (Agricultural Rep), A. Dawson (Domestic Well User), J. Brobeck (Environmental Rep), B. Smith (Business Rep), E. Markey (Cal Water), T. Greene (CSU Chico)
Abstain	S. Goepf (Domestic well User)

6  
 7 3. Alternative Measurable Objective Presentation (0:21:23)  
 8 C. Buck (Butte County) gave a presentation providing an overview of a possible MO alternative  
 9 for the SHAC’s consideration. The alternative MO is based on an average of the 2010-2020  
 10 measured groundwater levels at each RMS well, which was shown on hydrographs. The MO  
 11 based on projected levels to 2040, was also shown on the graphs for comparison. If the  
 12 alternative MO were selected, staff recommended keeping the 2027 and 2032 interim milestones  
 13 (IM); however, the 2037 IM would be set roughly halfway between the 2032 IM and the  
 14 alternative MO. Spring levels would be compared against the MO and IM for evaluation. [Access  
 15 [Updated Hydrographs](#)].

16 *SHAC Discussion (25:16)*

- 17 • B. Smith (Business Rep) noted that four of the wells have little information about the  
 18 screened intervals which is important. He stated that a high percentage of the wells were  
 19 missing the information needed, so the quality of the conversation was poor, at best.
- 20 • J. Brobeck (Environmental Rep) appreciated that the Management Committee decided to  
 21 raise the MOs; however, he did not believe it was sufficient. He stated that the MOs are  
 22 based on the lower aquifer readings rather than the upper aquifers, which means the  
 23 management objective is significantly lower than the springtime levels. He reflected that  
 24 this is an MO that indicates a willingness to allow for extreme declines in the aquifer. Also,  
 25 the IMs do not attempt to hit the MOs. They provide a long timeline to get anywhere near  
 26 the MOs that this alternate MO seems to be just an effort to calm the public’s concern  
 27 rather than a sincere effort. He said that he would not be happy if a springtime level is this  
 28 low and requested feedback. C. Buck (Butte County) responded that she understood his  
 29 comment and his concern, and noted that the alternate MO is the average of all measured  
 30 data, including the spring, summer, and fall. This year’s spring measurement is essentially  
 31 what the MO is. J. Brobeck (Environmental Rep) responded that means the MO is set at  
 32 historical lows, which he asserted does not meet the California water code, which states  
 33 that a target which improves water conditions can be selected and would not be deemed  
 34 deficient. He emphasized there is no reason not to set at a higher MO. He continued that  
 35 this is a very pessimistic forecast, to set the springtime MO at that level. If this were a June  
 36 reading, it might make more sense. He reiterated that it is alarming to set an MO at so far  
 37 below usual springtime levels.



- 1 • T. Greene (CSU Chico) stated that one of the big things missing is the potential  
2 consequences of operating in this zone. If it's just a number, it doesn't provide a sense of  
3 reality of how the system is going to respond. He encouraged discussion of the  
4 consequences of bringing the water level down this low. He said that the alternative MOs  
5 were still a great improvement from the original MOs, and so he would still support them as  
6 opposed to the original.
- 7 • G. Sohnrey (Agricultural Rep) registered confusion about J. Brobeck's (Environmental Rep)  
8 prior comment about being glad the management had changed the MOs, and asked if the  
9 Management Committee had in fact changed the MOs between the last meeting and this  
10 one. He explained that the reason the MO was put a little lower is that otherwise, almost  
11 every well would have been below the MO prompting the need for immediate action. He  
12 explained that they did not want to begin by having to take implement PMAs right away. C.  
13 Buck (Butte County) clarified that no change had been made to the MO, and that the Vina  
14 GSA and Rock Creek boards would determine whether to change the MO. She confirmed  
15 that G. Sohnrey (Agricultural Rep) was correct in identifying the trade-offs for setting the  
16 MO at a lower level. She added that the MO is the goal for operating, but the law describes  
17 an operational range, and that during drought years water levels would be expected to drop  
18 below the MO, but once out of drought years, levels would likely rebound.
- 19 • B. Smith (Business Rep) suggested for the future that it would have been nice to have a map  
20 with an aerial view of where the wells are located, to ascertain if there is a water resource  
21 next to the wells, like creeks. This ties into why it's important to know where the screens  
22 are. He reiterated what T. Greene (CSU Chico) had said earlier, that receiving public  
23 comments so close to the meeting meant that he did not have time to research the more  
24 interesting comments.

25  
26  
27 Roll Call if the group supports existing 2030 MO in the draft GSP (00:15:28)

Yes	G. Sohnrey (Agricultural Rep), S. Lewis (Agricultural Rep), J. Parsley, S. Goepf (Domestic well user), E. Markey (Cal Water),
No, Prefer Alternative 1	J. Brobeck (Environmental Rep) (with reservation), B. Smith (Business Rep), T. Greene (CSU Chico), A. Dawson (Domestic well user)

28 Public Comment:

- 29 • P. Stoesser (member of public) registered her disappointment in hearing an advisory  
30 committee state that it is acceptable to enter worse conditions before trying to 'save  
31 ourselves,' especially after hearing so many members of the public raise concerns. She  
32 asked how the public comments are being taken into consideration?
- 33 • D. Lucero (member of public) echoed that this process has felt slanted for some time,  
34 and that the MOs and MTs are serious. She added that when statistical engineers are  
35 saying that one of the MTs is 10 ft below where the well is, it's disappointing. She  
36 appreciated that this has been a lot of work for the staff and people involved,  
37 volunteers, but it appears that we're okay with urban forests dying off, domestic  
38 wells going dry, and worsening conditions. She reminded the group that everything is  
pointing toward extreme climate change.



- 1       • A. Raymond echoed what B. Smith (Business Rep) had stated about selection of wells.  
 2       She relayed that she had done an independent analysis of the data, and that data from  
 3       1960 to today show the drop off in water levels began to occur in 1990. She explained  
 4       that the MOs are the way of saying, "Is our process in control?" Work needs to happen,  
 5       and the process needs to be taken back into control. For that reason, she articulated  
 6       support for the alternative MO. She relayed to the group that they should not fear  
 7       having an MO that gets back to the 1990 level where water ran as it should in creeks  
 8       and fish could swim as they should.
- 9       • T. Greene (CSU Chico) wanted to add that maybe there should be a dissenting opinion  
 10       that is organized point by point, rather than the board having to go through all the  
 11       comments and hundreds of opinions. T. Carlone (CBI) responded that the board will see  
 12       the vote and see the discussion. She reiterated that this is not a majority rule body. The  
 13       charter states that they will seek consensus, and if consensus cannot be achieved, they  
 14       will detail the individual preferences expressed. SHAC makes recommendations about  
 15       its charter but ultimately the Vina GSA is the decisionmakers. She told SHAC that if they  
 16       wished to change the charter, that could be discussed in the future.
- 17       • R. Harriman (member of public) noted that there is no Brown Act prohibition for SHAC  
 18       members to convene and prepare a dissenting report to show to the board members.  
 19       SHAC members are not elected, can participate in this process, and can submit a  
 20       minority report. He also noted that in hearing the presentation on the evidence-based  
 21       materials, he is perplexed because he did not hear a scientific basis for why not set the  
 22       MO at a safer level. He addressed G. Sohnrey's (Agricultural Rep) point about 'why start  
 23       something now when you can delay it?' He wished to turn it around and say, 'why delay  
 24       something that you know you'll need to do while you are continuing to dig yourself  
 25       deeper into the hole?'

27   4. Presentation on Proposed Interim Milestone (IM) Action Plan (IMAP) and Discussion  
 28   (0:55:15)

29   K. Loeser (Butte County) explained that the IMs are target values that represent measurable  
 30   groundwater conditions, in increments of five years. IMs are set for each representative  
 31   monitoring site so that the GSAs can monitor their progress towards maintaining or achieving  
 32   the MOs. The IMAP would identify quantitative and qualitative triggers for corrective action  
 33   implementation if negative trends are occurring, the timing for implementation of GSP PMAs,  
 34   and specific corrective actions that may be taken by the GSAs to address downward trending  
 35   conditions. The IMAP would be developed at different levels to evaluate and document what  
 36   actions will be taken if targets are not met. The IMAP would also outline the decision-making  
 37   process around whether and which PMAs would be implemented. K. Loeser provided the  
 38   proposed language to add to section 5.3 that would constitute the IMAP, which would be  
 39   section 5.3.8. [Access [IMAP Memo](#)].

40  
 41   SHAC Discussion (1:05:38)



- 1 • G. Sohnrey (Agricultural Rep) suggested that adding this IMAP would be repetitive, given that  
2 the GSP does this anyway. He asked what 'qualitative' means. He expressed concern that the  
3 IMAP would simply 'muddy the waters.' T. Carlone (CBI) responded that including the IMAP  
4 as a management action would not mean that it needs to be developed now. K. Loeser  
5 responded that the IMAP provides something currently missing in the GSP, which is  
6 identifying when actions would be triggered. C. Buck (Butte County) added that the IMAP is  
7 an opportunity to provide more quantitative responses around, 'when these conditions  
8 occur, we will take these actions.' She also made the distinction between 'quantitative,' which  
9 she defined as, 'using numbers to describe a phenomenon,' and 'qualitative,' which is 'using  
10 words to describe a phenomenon.'
- 11 • S. Lewis (Agricultural Rep) asked about the last sentence in the first paragraph that refers to  
12 "other corrective actions," and asked, "what could 'other corrective actions' be?" She wished  
13 to know why these other management actions that could exist weren't already included in  
14 the plan? K. Loeser explained that the impetus for adding the IMAP is that in chapter 33A,  
15 warning stages are delineated, and the thought is that the IMAP could act to provide some  
16 more detail around what additional corrective action could be. S. Lewis requested  
17 confirmation that the IMAP would commence in 2022 and would take more than one year to  
18 develop, given the diversity of opinions in the county. She expressed concern that the IMAP  
19 might prevent the group from focusing on addressing the legal ramifications of projects and  
20 getting them off the ground. K. Loeser agreed that the IMAP would be initiated in 2022 and  
21 that it would take time to prepare.
- 22 • E. Markey (Cal Water) asked a clarifying question based on the graphic on the IMAP, which  
23 to him suggested that the goal is bringing the MO closer to the alternative objective over the  
24 course of the next 25 years. K. Loeser answered that the graphic was used as an example. C.  
25 Buck confirmed that if the original MO remains, the graphic would look slightly different; it  
26 would not have the upward trend of the IMs.
- 27 • T. Greene (CSU Chico) stated that he thinks the IMAP and what SGMA already supplies can  
28 work together. It's not 'muddying the waters.' The IMAPs provide true quantitative  
29 milestones, and without these, 'you would be floating freely between the MOs and MTs while  
30 trying to implement plans.' He noted that the operational range is wide, so the IMAP and  
31 what is provided by SGMA can work together to provide a little bit more security and  
32 foundation to the plans, rather than leaving a huge operational range in place without clear  
33 direction.
- 34 • S. Lewis (Agricultural Rep) reminded the group that there isn't a lot of money. While she  
35 applauded the group for thinking big, she thinks it is important to focus the efforts where  
36 they need to be to correct the downward trend.
- 37 • Roll Call to determine if the group supports a recommendation to the Vina GSA Board to  
38 include the IMAP management action in the GSP (01:19:00)



Yes	T. Greene (CSU Chico), E. Markey (Cal Water), B. Smith (Business Rep), J. Brobeck (Environmental Rep) with reservation (supports if SHAC has more input on designating IMs), A. Dawson (Domestic Well User)
No	J. Parsley, S. Lewis (Agricultural Rep), G. Sohnrey (Agricultural Rep) (because he does not know who is paying, what the time frame is, and who is providing the info; too many questions remaining), S. Goepp (Domestic Well User)

1

2 • P. Stoesser (member of public) named that she is finding these comments hard to believe.  
 3 She asked, ‘how could anyone not do everything they could possibly do to protect our  
 4 aquifer?’ She recalled how in the prior meeting, there had been an issue with how the  
 5 paragraph was written about the MT, that it was about when ‘undesirable effects would begin  
 6 to happen,’ which was simply untrue because undesirable effects are already occurring. She  
 7 recalled that the discussion about interim milestones had begun at that juncture to try to  
 8 ameliorate that issue.

9 • A. Raymond wanted to address S. Lewis (Agricultural Rep) and her concern around additional  
 10 costs. She stated that in her experience, IMAPs tended to be a resource saver because they  
 11 require anticipating responses to a problem before it occurs. She stated that it would help  
 12 prioritize which PMA actions would work best in each circumstance and help quantify and  
 13 know that one is working on the issue in the right order.

14 • A. Dawson (Domestic Well User) thought it shortsighted not to plan for how to respond. The  
 15 IMAP enables the plan to be more nimble, in that the problem would have already been  
 16 reviewed and strategies would already be in place. She believed it to be in agriculture’s  
 17 interest to have this IMAP in place because if the subbasin were in trouble, since conservation  
 18 efforts have been exhausted, the only thing left would be demand reduction. Agriculture will  
 19 be the ones most affected by that. She reflected that it would be “like a hospital saying, ‘we  
 20 won’t plan for COVID until it gets here.’”

21 • S. Lewis (Agricultural Rep) responded to say that she was considering all of this, and that the  
 22 word ‘plan’ is in the name of the plan itself, ‘Groundwater Sustainability Plan.’ She noted that  
 23 there are no-brainer type conservation projects that need to get off the ground. She also  
 24 reminded the group that there are a lot of data gaps. She believed that trying to add another  
 25 plan at this point is shortsighted. She stated that she is not against an IMAP and in fact  
 26 believes it’s a good idea, but that it should be done in five years after conservation measures  
 27 have been implemented, 90% of which are on the backs of agriculture, as well as once the  
 28 data gaps have been filled.

29 • J. Parsley (Agricultural Rep) echoed S. Lewis (Agricultural Rep) that she is not against the IMAP  
 30 per se but that she feels the same sense of urgency. In her experience working for the State,  
 31 where there are so many layers of paper, she believes there needs to be more shortcuts to  
 32 do what you need to do, instead of adding constraints. That’s why she voted no.



- 1 • S. Goepf (Domestic Well User) stated that he was encouraged by J. Parsley (Agricultural Rep)  
2 and therefore would vote no.

3

4 5. Overview of Public Comments Received (1:33:26)

5 K. Loeser (Butte County) presented on the public comments received during the 40-day public  
6 review period that occurred September 10- October 19. She relayed that there had been an in-  
7 person workshop on October 4<sup>th</sup> and a virtual workshop on October 13<sup>th</sup>, and that both were  
8 very well attended. Approximately 200 comments were submitted, and commenters used  
9 tracking sheets or submitted letters. Primary themes were around MOs and the MTs being too  
10 low, the Groundwater Dependent Ecosystems (GDEs), needing additional RMS wells, flood  
11 water storage, surface water recharge, groundwater and interbasin connection/sub-surface  
12 flows, triggers for response to negative conditions/schedule when action occurs,  
13 implementation schedule of PMAs, data gaps, domestic wells going dry, sustainable yield  
14 estimates and calculations, changes or elimination to some of the suggested PMAs, water  
15 conservation, agricultural efficiency, currently experiencing undesirable results within the  
16 basin. She informed the group that the staff and consultant team would review all comments  
17 received and that any that would result in changes to the GSP, would be documented in track  
18 changes. Comments not specific to the GSP would be noted in the comment tracking table,  
19 which will be included as an appendix to the GSP. She also showed the comment tracking table.  
20 [Access [Comment Tracking Table](#)].

21

22 *SHAC Discussion (1:42:05)*

- 23 • G. Sohnrey (Agricultural Rep) requested clarification on what was being asked of the group,  
24 as each one of the comments would take several meetings to go over. T. Carlone (CBI)  
25 responded now that the group has had the chance to see the public comments, the idea is to  
26 hear whether the SHAC has any thoughts or observations based on these public comments.
- 27 • T. Greene (CSU Chico) stated that reading the letters brought out a lot of insufficiency related  
28 to Groundwater Dependent Ecosystems (GDEs). He noted that the GDE methodology was  
29 likely problematic, and that it appeared that polygons were removed when they should have  
30 been left in, there was a lack of species lists, and there was a lack of information on root  
31 depth on many of these species. T. Greene stated that his recommendation would be to show  
32 the maps of the original NCCAG dataset to show GDEs and then reevaluate what the GSP calls  
33 'not likely a GDE,' especially in that 150-foot away from irrigated lands. He noted that there  
34 seemed to be a lot of concern from multiple agencies about that. There were also many  
35 concerns about what were termed as 'beneficial users,' in that the environmental uses of  
36 groundwater should have been included as beneficial users because the environment is a  
37 beneficial user, not just people and entities. In sum, the GSP was inadequate in its GDEs and  
38 did not bring in environmental users nearly enough as a beneficial use.



- 1 • S. Goepf (Domestic well User) noted that since the comments were being directed towards  
 2 consultants, who were being given a fee to provide a service, he wished to know what their  
 3 thoughts were on the comments on the plan. C. Buck (Butte County) stated that the  
 4 Management Committee was teaming up with the consultants to coordinate with them  
 5 around these comments. She noted that there are a lot of big topics and there is work to be  
 6 done. She reiterated that the overall goal should be to meet the compliance deadline and get  
 7 the plan adopted, and that there were certain comments that were much bigger than what  
 8 could be accomplished to get the plan done it time. She added, however, that there were  
 9 types of changes that could be made in time, such as language changes that may have policy  
 10 implications. She said that it would be helpful to have the SHAC weigh in on those.
- 11 • S. Lewis (Agricultural Rep) thanked everyone who took the time to submit public comments.  
 12 She mentioned that one comment that resonated with her was Eric Lundberg's comment, "it  
 13 is the responsibility of the well owner for the maintenance of its well, not the GSA.
- 14 • J. Brobeck (Environmental Rep) stated that the absence of undesirable results indicators for  
 15 dry water years means beneficial users of groundwater and interconnected surface water  
 16 may experience significant and unreasonable effects throughout the duration of dry or  
 17 critical water years before the undesirable results are 'identified' and managed. This leaves  
 18 no groundwater management accountability during the most challenging of years for water  
 19 resource managers and fish and wildlife beneficial users alike. Moreover, the frequency and  
 20 intensity of dry water year types is expected to increase in California (Mann & Gleick, 2015),  
 21 meaning if accepted as is, this GSP would have no groundwater management accountability  
 22 during increasingly prevalent and challenging periods of dryness without the certainty of  
 23 subsequent wet periods. The Vina GSP must revise MTs that would better protect  
 24 environmental uses and users of groundwater, rather than enabling immense declines in  
 25 groundwater over the implementation period. The GSP needs to include additional  
 26 information related to how environmental beneficial users of groundwater may experience  
 27 the effects of undesirable results. For instance, the GSP should explicitly discuss  
 28 the impacts of lowering groundwater levels below historic lows on GDEs. The GSP should  
 29 also identify undesirable results indicators for dry and critically dry water years for all  
 30 sustainability indicators. For environmental users of groundwater, including GDE triggers  
 31 should include not only groundwater levels but also physical indicators such as the  
 32 Normalized Difference Vegetation Index to identify Groundwater Dependent vegetation  
 33 health. The GSP primarily considered domestic well protection when establishing SMCs for  
 34 groundwater levels and selecting representative monitoring sites. The selected  
 35 groundwater level monitoring wells admittedly are deficient in protecting GDEs that include  
 36 rooting depths of nearby GDE communities. Groundwater monitoring wells should be  
 37 installed to capture groundwater trends that would affect priority GDEs. The shallow  
 38 aquifer monitoring network should be completed prior to the first 5-year plan update so  
 39 that management criteria can be effectively established to protect environmental users of



- 1 groundwater and interconnected surface waters throughout the implementation period.  
2 The environmental community recommends that the Vina Subbasin GSAs address the above  
3 comments before GSP submission to DWR to best prepare for the regulatory criteria for  
4 plan evaluation. J. Brobeck added that he urged participants to study the letter submitted  
5 by the California Department of Fish and Wildlife.
- 6 • A. Dawson (Domestic Well User) stated that she did not appreciate Mr. Lundberg's comments  
7 on domestic wells. She said that it was grossly unfair that the 1900 well users in the Vina GSA  
8 region are the only ones being asked to pay for the effects of lowering groundwater levels.  
9 She noted that these domestic well users were the ones who are going to run out of water,  
10 must go buy water, trek it home, get it into the house, and use it for landscaping. She said  
11 that it would be extremely challenging not to have a well and that these users only use 4% of  
12 the water, so why were they paying 100% of the costs? She called it an injustice, and she  
13 registered her disagreement with S. Lewis and E. Lundberg. She believed the cost of the plan  
14 needs to be spread across all stakeholders.
  - 15 • T. Greene (CSU Chico) noted that some of the comments raised the question of the legal  
16 ramifications of who owns the recharged groundwater. He recalled that Valerie Kincaid had  
17 been clear in that whoever recharges it, owns that water. He noted that the GSP does not  
18 address that and asked if they should be considering when these PMAs that involve recharge,  
19 perhaps they should add language affirming that those people who recharge it, own that  
20 water, or should they have language that says that those who recharge it should abandon  
21 their rights so that it can be native and common waters. He added that the legal question is  
22 'still right there rearing its ugly head.' Seeing the letter from Valerie Kincaid reminded him  
23 that yes, those people who recharge do own it.
  - 24 • A. Wallace (Rock Creek Reclamation District Attorney) commented that recharge is  
25 considered in the SGMA regulations, so he would not be recommending to the Rock Creek  
26 Reclamation District to exclude consideration of recharge from the projects and management  
27 actions. As far as trying to limit what the law says about recharge, he stated that he did not  
28 think it was within the purview of the GSA to do that at this stage because that would have  
29 to be considered in the courts or addressed by state legislation. The GSP cannot address the  
30 legal implications of who owns recharge.
  - 31 • S. Lewis (Agricultural Rep) directed A. Wallace (Rock Creek Reclamation District Attorney) to  
32 the comments made by Joe Connell and asked if he agreed with that comment. A. Wallace  
33 (Rock Creek Reclamation District Attorney) said that he agreed with the portion of the  
34 comment that said that these legal issues need to be addressed elsewhere. However, he said  
35 that SGMA regulations do want GSAs to include considerations of recharge, such as  
36 responding to changing conditions in the subbasin.
  - 37 • B. Smith (Business Rep) was reading about the farmer going out on his alfalfa feed, and that  
38 reminded him of how at a water commission meeting years ago, there had been talk about  
39 the Colorado River pumps being shut off, and no one thought it would happen, but at the



1 following water commission meeting, those pumps had been turned off. He recalled the  
 2 feeling at that meeting had been like watching deer in the headlights. He also remembered  
 3 reading a comment with concern about interconnected surface water, and he could  
 4 understand that perspective. He added that GDEs, interconnected surface water, and water  
 5 quality which ties into Cal Water, these are the main things he's looking at. He emphasized  
 6 that whether it will be the Tuscan Water District or GCID, there will be a demand on water,  
 7 and that 'if it gets wet, we're not going to care,' but if it continues declining, 'we are right  
 8 where that water commission was about 15 years ago, where we don't think it's going to  
 9 happen, but it is.' He expressed the need to all get together and talk, and continue to talk.

- 10 • J. Brobeck (Environmental Rep) weighed in on legal consequences, as he has studied the  
 11 document and spoken with lawyers, and he is aware that county ordinances can be overruled  
 12 by legislature. Recharge of common groundwater aquifer is not considered a beneficial use  
 13 of diverted water under state water law while water banking and subsequent recovery and  
 14 pumping of the recharged water into the state water supply, whether local, regional, or state,  
 15 is considered beneficial. So, these assurances that we can deal with this through a county  
 16 ordinance is not true. He added that the Kincaid document discusses that. He stated that as  
 17 they consider PMAs in the future, after the survey is done, this needs to be considered. He  
 18 believed it to be a deficit that it is still absent from the GSP, especially given how much the  
 19 group has discussed this. He encouraged the group to have these discussions between  
 20 themselves and not leave it up to others who are part of the rapidly growing water market in  
 21 this area.

22 *Public Comments (2:08:20)*

- 23 • D. Lucero (member of public) noted that there is no mention of water allocations in the GSP.  
 24 She participated in recent water commission workshop on water market trading, and based  
 25 on what she learned, she wondered why that was not included in the GSP. C. Buck responded  
 26 that this kind of management action was considered by the GSA boards, but she couldn't  
 27 recall whether it was decided to be included or removed. There were trade-offs. K. Peterson  
 28 (Butte County) weighed in to confirm that it had been included as a management action. It  
 29 involves allocating on a per acre basis some volume of water that folks have available to use  
 30 on their land. C. Buck added that this becomes baseline for who can trade what in a market  
 31 situation, and that water allocation as a management action is included in the draft GSP in  
 32 item 5.3.7 on p. 160, line 4990.
- 33 • A. Dawson (Domestic Well User) added that according to her recollection, this was put in at  
 34 Valerie Kincaid's suggestion.
- 35 • D. Lucero (member of public) asked a follow-up question, noting that it was included as a 'last  
 36 resort' if milestones are not achieved, and she asked if other basins had that water allocation  
 37 management action in their GSP. K. Peterson responded that in Wyandotte Creek they voted  
 38 to remove it, and she didn't believe it was in the Butte GSP either. L. Herman (City of Chico)



- 1 reminded that DWR would not accept the GSP if there were not some language about water  
2 allocations. A. Wallace (Rock Creek Reclamation District Attorney) seconded L. Herman (City  
3 of Chico)'s comment.
- 4 • P. Stoesser (member of public) noted that as a member of the public and as someone who  
5 has been trying hard to educate herself on the water issues by attending as many meetings  
6 as possible, she felt as though the public was being patronized. She said that it seemed not  
7 to matter what they felt or said, but that the people put in leadership already had their minds  
8 made up and would decide what to do regardless of the public's wishes.
  - 9 • P. Hanford (member of public) stated that it is critically important that allocations be  
10 considered because there is nothing in CA law that regulates groundwater unless it is an  
11 adjudicated basin. She added that should the recharge issue come up, and it will, there should  
12 be the beginning glimmer of some regulation in procedure under chapter 33. Then,  
13 depending on the actions of the local boards, the SHACs and the GSAs, there could be the  
14 application of CEQA to any program, either required or requested. She added that there must  
15 be a complete environmental review for what the implications will be of the recharge and  
16 who would be able to use the water, for what purpose, and who would pay for it. Also, she  
17 noted that the data gathering and the science is critical to this, and she encouraged the  
18 Management Committee to continue to do what they are doing but to remember that this  
19 issue must be directly addressed. K. Loeser added in response that all projects are subject to  
20 CEQA, even if it's a beneficial impact.
  - 21 • R. Harriman (member of public) thanked the comments from A. Dawson (Domestic Well User)  
22 and P. Hanford. He noted that regarding CEQA, the wild card is that the state legislature can  
23 adopt actions to waive CEQA, and that this had been done for eight cities previously. While  
24 he shared the concerns of agriculture and wanted to reach out to G. Sohnrey and S. Geopp,  
25 in that he understood why it was important to them to not expend great amounts of money,  
26 he wished to adopt A. Raymond's comment that if one waits too long, it will actually cost  
27 more to resolve the issues down the road. He agreed that it is important to address the  
28 allocation issue and the legal issues that were raised and partially addressed by the Kincaid  
29 legal memo. He emphasized that it would be a disservice not to include them in the GSP. He  
30 added that he agrees with G. Sohnrey (Agricultural Rep) on one thing for sure, which is that  
31 regardless of who prevails, there will be litigation. All that means is someone will pay lawyers  
32 a lot of money for a lot of time, that may not be in the public's interest in the long run.  
33 Therefore, he believed it would be better to deal with the issues now rather than kick them  
34 down the road. He agreed with the comments of B. Smith (Business Rep) and T. Greene (CSU  
35 Chico).
  - 36 • J. Brobeck (Environmental Rep) said in response to the comment that any projects would  
37 undergo CEQA analysis, that people should look at the 2020 State of California water plan as  
38 it directs agencies to streamline CEQA analysis of water diversions, flood flows, recharge  
39 projects, and groundwater substitution transfers. The governor has allowed for big water



1 extraction projects to go through without CEQA analysis. Therefore, he cautioned that the  
 2 group could not depend on CEQA analysis. He emphasized that the subbasin is in an area of  
 3 origin and must protect itself.

4 Updated Draft Communications & Engagement Plan (2:29:22)

5 T. Carlone (CBI) briefly noted that the plan had been updated with an eye toward  
 6 implementation and requested SHAC input prior to bringing to board for their consideration.  
 7 [\[Access Plan\]](#).

8

9 *SHAC Discussion*

- 10 • S. Lewis (Agricultural Rep) noted that on page 4, where it discusses the draft plan being  
 11 available or 60-day review, that this had been shortened to 40-day review. This is also on  
 12 page 5. T. Carlone (CBI) confirmed that this should be changed for accuracy. S. Lewis also  
 13 noted that on page 8, the Groundwater Pumpers Advisory Committee (GPAC) had been  
 14 decommissioned, so they would not be able to partner with them. C. Buck stated that this  
 15 group is not active but has not officially been disbanded yet. T. Carlone (CBI) noted that it  
 16 had been left there because there is a possibility that it could be reactivated. C. Buck stated  
 17 that the Management Committee would circle back on that and possibly make the  
 18 correction.
- 19 • J. Brobeck (Environmental Rep) wished to make comments on Inter -Basin Coordination and  
 20 issue-resolution process. State and federal agencies have long viewed the Northern  
 21 Sacramento Valley as a source of so-called “surplus” water that will one day serve the  
 22 accelerating water market through conjunctive-use and water banking. The Plan as  
 23 proposed will degrade the groundwater basin and harm groundwater users who are not  
 24 involved in conjunctive use or water banking but are reliant on the same groundwater  
 25 basin. The GSAs have internal and external points of potential conflict. Questions regarding  
 26 aquifer ownership, streamlined legal and regulatory timelines, a lack of existing precedents,  
 27 and the need to represent agency and constituent interests will likely exacerbate regional  
 28 conflicts under SGMA. In some cases, where authoritative interpretations of legal authority  
 29 and truly sustainable limits have not been established yet, litigation may be  
 30 necessary and warranted. He asserted that the public and SGMA governing bodies and  
 31 committees have been excluded from inter-basin discussions. When participants in the Vina  
 32 Stakeholder Advisory Committee asked staff if discrepancies in inter-basin flow  
 33 volumes/direction that are estimated in the adjacent GSA Basin Settings had been resolved  
 34 within the Inter-Basin Coordinating Committee, they answered that they were too busy, but  
 35 might model the issue after the GSPs are submitted in 2022. This does not inspire  
 36 confidence in the basin setting foundation of the Vina GSP.
- 37 • B. Smith (Business Rep) noted that regardless of where anyone stands, the better everyone  
 38 understands the hydrology and how it’s connected the better off everyone will be. He  
 39 appreciated having Stanford, the AEM study, Chico state, T. Greene (CSU Chico), and access  
 40 to well logs because access to that information would be crucial to understanding the  
 41 aquifer as well as possible. He emphasized the need for truly good science.



- 1 • S. Goepp (Domestic well User) expressed that the development community should be  
2 involved in this because of his concerns about development on land that was never irrigated,  
3 areas that were dry-land farmed, and now would be turned into subdivisions. Providing water  
4 there would be a big drain on the aquifer, so it would be wise to address that.  
5

6 *Public Comments*

- 7 • D. Lucero (member of public) observed that Butte County is not listed in there as a partner  
8 and should be, as land use will be very important when it comes to water use. She noted that  
9 Cal Water should be listed as well.  
10

11 *Management Committee Updates*

- 12 • K. Peterson (Butte County) announced that the Next Vina Board meeting will be November  
13 15 at 5:30 PM. This will be a joint public hearing with the RCRD GSA with both in-person and  
14 online options. SHAC and public may provide comment at the meeting or before the meeting  
15 by written comment. She added that the 11/4/21 draft meeting summary will be presented  
16 to the Board; however unfortunately, due to timing constraints there won't be adequate time  
17 to distribute it to the SHAC and incorporate their comments into it before the Board mtg.  
18 packet is sent out. She let SHAC members know that if there were suggestions for changes  
19 to the meeting summary, everyone should feel free state them via written comments to the  
20 email address listed on the agenda or in person at the meeting.  
21 • T. Carlone (CBI) affirmed that the meeting summary would be turned around as quickly as  
22 possible to the SHAC. She announced that the SHAC would not meet again until February 15,  
23 2022, when the SHAC will look at first annual report due to DWR on April 1<sup>st</sup> and determine  
24 the 2022 meeting schedule and priorities. T. Carlone (CBI) added that she will not be sending  
25 out a meeting invitation because she will no longer be under contract, so the Management  
26 Committee will do that.  
27 • K. Peterson thanked members of the SHAC and public for all of their participation and added  
28 that it had not gone unnoticed.  
29 • C. Buck thanked T. Carlone (CBI) for her participation in the process, as well as everyone else  
30 and their contributions. She added that there were many differing opinions but this group  
31 has gotten very far despite the differences. She reminded SHAC that this is just the first step,  
32 getting the GSP adopted and submitted. She believed the varied opinions had made the  
33 document and work even stronger.  
34 • D. Lucero (member of the public) also thanked T. Carlone (CBI) for her work and  
35 professionalism, and she thanked the public and especially the SHAC members for donating  
36 their time.  
37 • P. Hanford (member of public) applauded T. Carlone (CBI) for the masterful way she  
38 facilitated these very complex and conflictual meetings. She added a congratulations to all  
39 for their hard work.  
40

41 *Next Steps*



- 1 The SHAC will meet again February 15, 2022.

DRAFT



1 Participants

Participant	Representation/Affiliation	Present
<b>Vina Stakeholder Advisory Committee (SHAC) Members</b>		
Anne Dawson	Domestic well user	Y
Bruce Smith	Business representative	Y
Christopher Madden	Butte College	N
Evan Markey	California Water Service	Y
Greg Sohnrey	Agricultural well user	Y
James Brobeck	Environmental representative	Y
Joanne Parsley	Agricultural well user	Y
Sam Goepf	Domestic well user	Y
Samantha Lewis	Agricultural well user	Y
Todd Greene	CSU Chico	Y
<b>Groundwater Sustainability Agency (GSA) Member Agency Representatives</b>		
Christina Buck	Butte County	Y
Kelly Peterson	Butte County	Y
Kamie Loeser	Butte County	Y
Linda Herman	City of Chico	Y
Erik Gustafson	City of Chico	N
Jeff Carter	Durham Irrigation District	N
Colin Klinesteker	Mechoopda Indian Tribe	Y
Darren Rice	Rock Creek Reclamation District GSA	N
<b>Technical Consultants</b>		
Joe Turner	Geosyntec	Y
<b>Other Representatives</b>		
Pat Vellines	CA Department of Water Resources	N
Aidan Wallace	Rock Creek Reclamation District Attorney	Y
<b>Facilitator</b>		
Tania Carlone	Consensus Building Institute	Y
Dorit Price-Levine	Consensus Building Institute	Y

2 Approximately 11 members of the public attended the meeting.

### Groundwater Sustainability Plan Annual Report Elements Guide

Basin Name	Vina Subbasin		
GSP Local ID			
<b>California Code of Regulations - GSP Regulation Sections</b>	<b>Groundwater Sustainability Plan Elements</b>	<b>Document page number(s) that address the applicable GSP element.</b>	<b>Notes: Briefly describe the GSP element does not apply.</b>
<b>Article 5</b>	<b>Plan Contents</b>		
<b>Subarticle 4</b>	<b>Monitoring Networks</b>		
<b>§ 354.40</b>	<b>Reporting Monitoring Data to the Department</b>		
	Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.	13	
	Note: Authority cited: Section 10733.2, Water Code. Reference: Sections 10728, 10728.2, 10733.2 and 10733.8, Water Code.		
<b>Article 7</b>	<b>Annual Reports and Periodic Evaluations by the Agency</b>		
<b>§ 356.2</b>	<b>Annual Reports</b>		
	Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:		
	(a) General information, including an executive summary and a location map depicting the basin covered by the report.	1:9	
	(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:		
	(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:		
	(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.	14:15	
	(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.	Appendix A	
	(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.	16:18	
	(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.	18	
	(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.	18:19	
	(5) Change in groundwater in storage shall include the following:		

<b>California Code of Regulations - GSP Regulation Sections</b>	<b>Groundwater Sustainability Plan Elements</b>	<b>Document page number(s) that address the applicable GSP element.</b>	<b>Notes: Briefly describe the GSP element does not apply.</b>
	(A) Change in groundwater in storage maps for each principal aquifer in the basin.	20	
	(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.	21	
	(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.	21:26	



# 2021 WATER YEAR ANNUAL REPORT

Vina Groundwater Subbasin

March 2022

Prepared for the Vina and Rock Creek Reclamation District Groundwater Sustainability Agencies and submitted to the California Department of Water Resources to meet the requirements of the Sustainable Groundwater Management Act  
Document version: March 3, 2022

Prepared by  
Butte County Department of Water and Resource Conservation  
With technical support provided by Davids Engineering, Inc. and Luhdorff & Scalmanini  
Consulting Engineers

## Table of Contents

Executive Summary.....	1
Vina Subbasin Annual Report .....	6
1. Plan Area and Background.....	6
1.1. 2021 Water Year Hydrologic Conditions.....	8
2. Groundwater Conditions .....	10
2.1. Groundwater Elevations .....	10
2.2. Water Use Estimates.....	16
2.3. Change in Groundwater Storage.....	19
3. Groundwater Sustainability Plan Implementation Progress.....	21
3.1. Interim Milestone Achievement Progress .....	21
3.2. GSP Project Implementation Progress.....	22
3.3. GSP Management Actions Implementation Progress.....	25
3.4. Other Relevant Efforts .....	25
3.5. Conclusion.....	26
4. References .....	26

## List of Figures

Figure 1. Vina Subbasin showing Groundwater Sustainability Agency Boundaries and Defined Management Areas (Figure ES-2 from Vina GSP) .....	7
Figure 2. Northern Sierra Precipitation 8-Station Index for Selected Water Years .....	9
Figure 3. Spring 2021 Groundwater Elevation Contours for the Principal Aquifer .....	14
Figure 4. Fall 2021 Groundwater Elevation Contours for the Principal Aquifer .....	15
Figure 5. General Location (based on Butte Basin Groundwater Model subregions) and Volume of Groundwater Extraction shown as a Rate (acre-feet per acre) for 2021 WY .....	17
Figure 6. Change in Groundwater Storage from Spring 2020 to Spring 2021 using Groundwater Elevations from RMS wells and Storage Coefficient of 0.1.....	20
Figure 7. Change in Groundwater Storage (Cumulative and Annual Change) and Groundwater Extraction by Water Year Type.....	21

## List of Tables

Table 1. Summary Table of Spring and Fall 2021 Groundwater Elevations in Comparison to 2020 Groundwater Elevations and the Minimum Threshold and Measurable Objective.....	13
Table 2. 2021 Water Year Groundwater Extraction by Water Use Sector .....	16
Table 3. Summary of 2021 Surface Water Deliveries by Source and Sector .....	18
Table 4. 2021 Water Year Total Water Available by Water Use Sector and Water Source Type.....	19

## List of Appendices

Appendix A- Characteristics and Hydrographs of Representative Monitoring Site (RMS) Wells	
Appendix B- Explanation of Sustainable Management Criteria	

## Executive Summary

### Plan Area and Background

The Vina Subbasin (5-021.57), as defined by the Department of Water Resources (DWR) Bulletin 118 subbasin boundaries (2018 Update), is located in Butte County within the Sacramento Valley, as shown in Section 1, Figure 1. The Vina Subbasin lies in the eastern central portion of the Sacramento Valley Groundwater Basin (5-021). The Subbasin is managed by two Groundwater Sustainability Agencies (GSA), the Vina GSA and the Rock Creek Reclamation District GSA. The two GSAs worked cooperatively to develop, adopt, and submit a single Groundwater Sustainability Plan (GSP) for the Vina Subbasin by the regulatory deadline of January 31, 2022. The Subbasin has three defined Management Areas (MA): Vina North, Vina Chico, and Vina South.

The 2021 Water Year (2021 WY), defined as October 1, 2020 to September 30, 2021, started out with moderate precipitation in mid-November, leading to a very dry January, and moderate precipitation in the early spring. The 2021 WY ended as the second driest year on record based on statewide runoff. Overall, the 2021 WY had below average rainfall, snow pack, and runoff conditions. Water supply conditions led to a 5% allocation for State Water Project contractors statewide and curtailment of other local surface water supplies. This included about a 50% reduction in Feather River diversions by the Joint District Board (includes Richvale Irrigation District, Butte Water District and Biggs-West Gridley Water District within Butte County) and Western Canal Water District in the Butte Subbasin.

This Annual Report coincides with one of the most severe and extensive droughts that has ever impacted the western United States. In December 2021 as the final GSP was being assembled, drought conditions throughout most of California, including in this Subbasin, were classified as “exceptional.” This is the most extreme classification defined by the U.S. Drought Monitor. Historically, observed impacts during exceptional drought generally include: widespread water supply shortages, depleted surface water supplies, extremely low federal and state surface water deliveries, curtailment of water rights, extremely high surface water prices, increased groundwater pumping to satisfy water demands, dry groundwater wells, increased well drilling and deepening, increased pumping costs, wildfire, decreased recreational opportunities, and poor water quality, among other potential impacts reported by the U.S. Drought Monitor. All of these conditions were experienced to some degree across California in 2021, and some were experienced within the Subbasin.

### Groundwater Conditions

Currently 78 wells are monitored as part of a Broad Network for groundwater levels in the Vina Subbasin and 17 are Representative Monitoring Site (RMS) wells with assigned Sustainable Management Criteria. RMS wells are measured (at a minimum) in the spring and fall each year for compliance with the Sustainable Groundwater Management Act (SGMA). Appendix A includes a map of the approximate locations of groundwater level RMS wells and each of their hydrographs showing measured groundwater levels for each well’s period of record. Appendix B provides an explanation of the terms and concepts comprised by the Sustainable Management Criteria as defined in Section 3 of the GSP (ex. Minimum Threshold, Measurable Objective).

Spring and fall 2021 levels were above the Measurable Objective, with only one exception: the fall groundwater elevation in well 20N01E10C002M was approximately three feet below the Measurable Objective. All measured groundwater levels remained within the Subbasin’s Margin of Operational

Flexibility and well above the Minimum Threshold of each RMS well. Generally, 2021 groundwater levels were similar to spring 2014-2015 drought conditions with some new historical lows reached in a few wells.

The contour maps (Figure 3 and Figure 4) show groundwater elevations that are higher in the northern portion of the Vina Subbasin than in the south and higher levels on the eastern side of the Subbasin compared to the western edge. This indicates groundwater flow is generally north to south in the Vina North MA, predominantly east to west in the Vina Chico MA, and northeast to southwest in the Vina South MA. In areas dependent on groundwater supplies for irrigation, which is the majority of the Vina Subbasin, groundwater levels begin to decline when pumps turn on and groundwater extraction begins, typically in the spring, and continue declining as the irrigation season progresses through the summer months. Of note is the groundwater depression west of Durham. During critically dry years such as 2021, increased groundwater extraction to meet irrigation demand compensates for reduced rainfall. In addition, reduced recharge from Butte Creek and other local drainages likely occurs due to reduced streamflows. These factors may contribute to the depression indicated by the contours. Fall contours also indicate lower groundwater levels relative to spring conditions throughout the Subbasin, as expected.

The majority of the Vina Subbasin is dependent on groundwater as the only available water source for agricultural irrigation. In addition, the City of Chico, the largest city in the Subbasin is solely reliant on groundwater as a municipal water supply. The Durham Irrigation District also provides municipal water to households in the Durham area through groundwater extraction from three district wells, and private domestic wells provide for rural residential water needs throughout the Subbasin.

Total estimated groundwater extraction in the 2021 WY was approximately 268,000 AF. This is about 25,000 AF greater than the 2000-2018 average annual groundwater extraction of 243,000 AF for the Vina Subbasin reported in the GSP. During dry and critically dry years, agricultural groundwater extraction increases relative to long-term average demand due to less rainfall, and therefore reduced soil moisture, and increased evapotranspiration associated with hotter, drier conditions. In contrast, municipal water use during drought years may decrease relative to long-term averages due to urban conservation efforts. This was observed in reported groundwater extractions for the City of Chico during the 2013-2015 drought period. The City of Chico saw a decrease of approximately 2.5% in municipal pumping volumes from 2020 to 2021.

Surface water provided about 4% of the agricultural water demand in the Vina Subbasin in 2021. Surface water is only used by the agricultural sector in the Subbasin and is sourced from Butte Creek and Mud Creek. An estimated 9,700 AF of surface water was delivered in 2021.

Long-term fluctuations in groundwater levels and groundwater in storage occur when there is an imbalance between the volume of water recharged into the aquifer and the volume of water removed from the aquifer, either by extraction or natural discharge to surface water bodies. If, over a period of years, the amount of water recharged to the aquifer exceeds the amount of water removed from the aquifer, then groundwater levels will increase and groundwater storage correspondingly increases (i.e. positive change in storage). Conversely, if, over time, the amount of water removed from the aquifer exceeds the amount of water recharged then groundwater levels decline. These long-term changes can

be linked to various factors including increased or decreased groundwater extraction or variations in recharge associated with wet or dry hydrologic cycles.

Lower groundwater levels in spring 2021 compared to spring 2020 resulted from higher than average groundwater extraction in 2020 (previous irrigation season) and reduced natural recharge due to dry climate conditions and decreased streamflows. This amounted to an estimated reduction of groundwater in storage of about 93,400 AF for this time period. Figure ES-1 shows annual and cumulative change in groundwater storage over time, 2000-2021, relative to annual groundwater extraction and water year type. Change in groundwater storage was estimated based on change in measured spring to spring groundwater levels multiplied by the area of the Thiessen polygon associated with the RMS well and a representative storage coefficient of 0.1. Groundwater extractions for 2000-2018 are shown as reported in the GSP based on Butte Basin Groundwater Model results, 2019 and 2020 are estimated by matching to similar water year types, and 2021 extractions are estimated as described in Section 2.2. Values are reported in thousands of acre-feet (TAF).

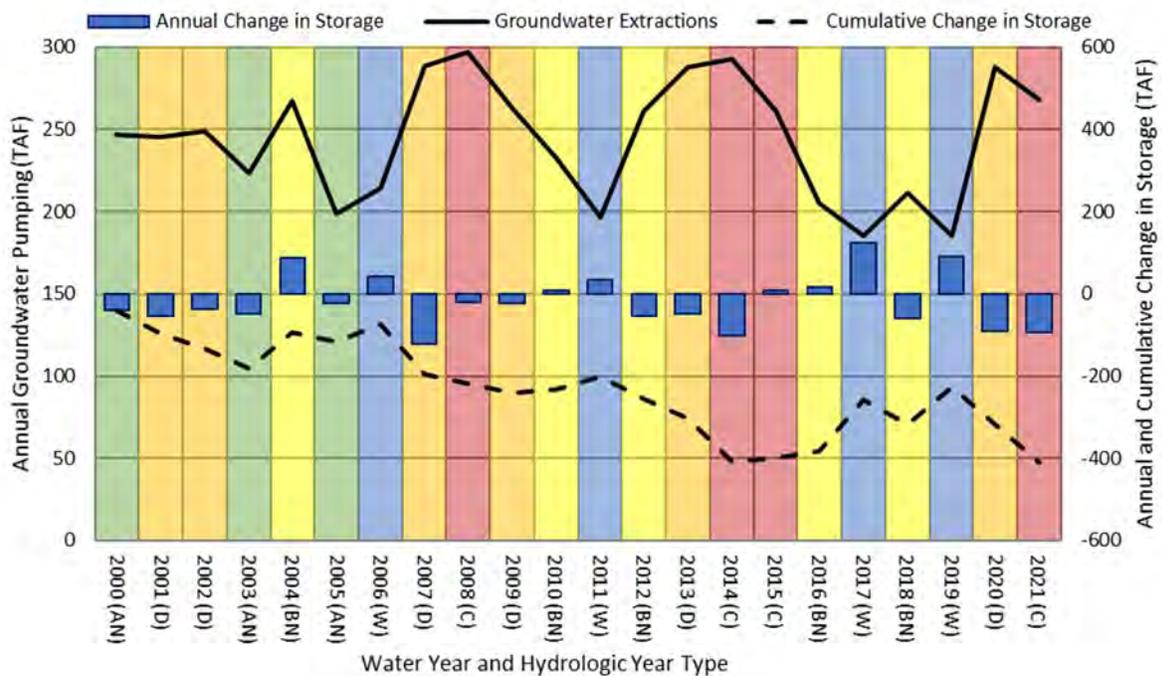


Figure ES-1. Change in Groundwater Storage (Cumulative and Annual Change) and Groundwater Extraction by Water Year Type.

Note: Values calculated spring to spring for each water year. Water year types: AN-above normal, D-dry, BN-below normal, W-wet, C-critical. Groundwater Extraction 2000-2018 are shown as reported in the Vina GSP based on Butte Basin Groundwater Model results, 2019 and 2020 estimated by matching to similar water year types, and 2021 estimated as described in Section 2.2. Groundwater Change in Storage estimated based on change in measured spring to spring groundwater levels multiplied by the area of Thiessen polygon associated with the monitoring well and the Storage Coefficient of 0.1.

### Groundwater Sustainability Plan Implementation Progress

The GSP for the Vina Subbasin was adopted by the GSAs in December 2021 and submitted to DWR in January 2022. This is the first annual report to be prepared since the GSP was submitted. The GSP

implementation progress reported in this report covers ongoing work during GSP development since late 2021.

Progress has been made on the following projects and management actions (described in greater detail in Section 3):

- **Residential Water Conservation Project** - The California Water Service Company, a municipal water provider in the Subbasin is currently implementing water conservation practices in accordance with their 2020 Urban Water Management Plan.
- **Agricultural Irrigation Efficiency Project** - A survey of agricultural irrigators in the Vina Subbasin was conducted and the results were analyzed in December of 2021. A summary report is expected to be available in spring of 2022.
- **Fuels Management for Watershed Health Project** - Funding is secured and fuels reduction treatment has begun on 150 acres in the area above Musty Buck Ridge. In addition, work is in progress to finalize a Vegetation Management Plan for an additional 4,000 acres in the upper watershed upslope of the Vina Subbasin.
- **Paradise Irrigation District (PID) / California Water Service Intertie Project** – The feasibility of this project, as an option that would assist PID in meeting its goals for water supply and resiliency, is currently being evaluated in the Town of Paradise Options Study.
- **Streamflow Augmentation Project** - Progress has been made on the Butte Creek Integrated Stream Flow Enhancement Planning Project. An application was submitted by the Friends of Butte Creek to the Wildlife Conservation Board’s Stream Flow Enhancement Program in January 2022 to fund this project.
- **Rangeland Management and Water Retention Project** - California State University Chico and Chico State Enterprises is initiating a study of adaptive/ regenerative grazing practices on 2,000 or more acres in the region.
- **Surface Water Supply and Recharge Project** - Progress has been made on the Rock and Sand Creek Flood Mitigation Project.
- **General Plan Updates** - Suggested revisions to the Water Resources Element and applicable General Plan Goals, Policies, and Actions have been made by staff and the Butte County Water Commission as part of Butte County’s General Plan Update process.

GSA’s in the Vina Subbasin are preparing to continue to engage stakeholders in the Subbasin as they coordinate to develop a work plan for 2022 and discuss implementation priorities.

In addition, Butte County funded and contracted with a consultant to conduct a Drought Impact Analysis Study (expected completion May 2022) to characterize the conditions and economic impacts of drought that occurred in 2021. It will provide recommendations for County response and readiness in 2022 if dry conditions and drought impacts persist. The study is expected to provide information that may be useful to GSA’s as well.

Finally, ongoing activities include monitoring and reporting, updating and maintaining the Subbasin’s Data Management System, outreach to stakeholders, intra- and inter-basin coordination, and coordination with other efforts to improve characterization of the Subbasin (such as DWR’s Airborne Electromagnetic Survey Program expected to collect data in the Subbasin in May 2022).

Recent progress made on all of the above mentioned activities (and described in detail in Section 3) since late 2021 demonstrates the commitment of the GSAs to implement the GSP by allocating the necessary time and resources to achieve long-term sustainable management of the groundwater resources in the Subbasin.

# Vina Subbasin Annual Report

## 1. Plan Area and Background

The Vina Subbasin (5-021.57), as defined by the Department of Water Resources (DWR) Bulletin 118 subbasin boundaries (2018 Update), is in Butte County within the Sacramento Valley (Figure 1). The Vina Subbasin lies in the eastern central portion of the Sacramento Valley Groundwater Basin (5-021). The northern boundary is the Butte-Tehama County line; the western boundary is the Butte-Glenn County line; the southern boundary is a combination of the property boundaries owned by the M&T Ranch, the service area boundaries of Reclamation District 2106 and Western Canal Water District; and the eastern boundary is the edge of the alluvium as defined by DWR Bulletin 118 Update 2003. The Sacramento River borders the Vina Subbasin on its western side and flows from north to south. The larger surface water features in the Subbasin generally flow from east to west towards the Sacramento River and include Big Chico Creek and Butte Creek.

The Subbasin is managed by two Groundwater Sustainability Agencies (GSA), the Vina GSA and the Rock Creek Reclamation District GSA. The GSAs have assumed all SGMA authorities and entered into a Cooperation Agreement for the purpose of developing and implementing a single Groundwater Sustainability Plan (GSP) for the Vina Subbasin. The two GSAs worked cooperatively to develop, adopt, and submit a single GSP for the Vina Subbasin by the regulatory deadline of January 31, 2022.

The GSP defines three management areas (MAs) in the Vina Subbasin: Vina North, Vina Chico, and Vina South. Although all stakeholders have a shared interest in sustainable management of groundwater in this predominantly groundwater dependent subbasin, the landscape of beneficial users varies between MAs. Vina North is dominated by irrigated agriculture dependent on wells with sparsely distributed rural residential domestic well users and the small community of Nord. The Vina Chico MA is predominantly an urban area with California Water Service, Chico (Cal Water) providing groundwater supplies for residential and municipal use. To a very limited extent, private domestic wells provide the primary source of water to households or in some cases provide a secondary supply for outdoor water use. The Vina South MA is dominated by irrigated agriculture dependent on groundwater and to a lesser extent, surface water diversions primarily from Butte Creek. In and around the community of Durham, significant numbers of rural residents and ranchettes depend on groundwater typically from relatively shallow domestic wells interspersed with agricultural land uses.

The GSP outlines the need to address overdraft and related conditions and has identified 15 projects for potential development that either replace groundwater use (offset) or supplement groundwater supplies (recharge) to meet current and future water demands. In addition, the GSP also identifies seven management actions that can be implemented to focus on reduction of groundwater demand or avoidance of Undesirable Results. The estimated sustainable yield, or the amount of groundwater that can be withdrawn without causing Undesirable Results, for the Subbasin is estimated at 233,000 acre-feet per year (AFY). This estimate is based on average annual historical groundwater pumping of 243,000 AFY and an annual decrease in storage of 10,000 AFY. As such, groundwater pumping offsets and/or recharge on the order of 10,000 AFY may be required to achieve sustainability, although additional efforts are needed to confirm these estimates.

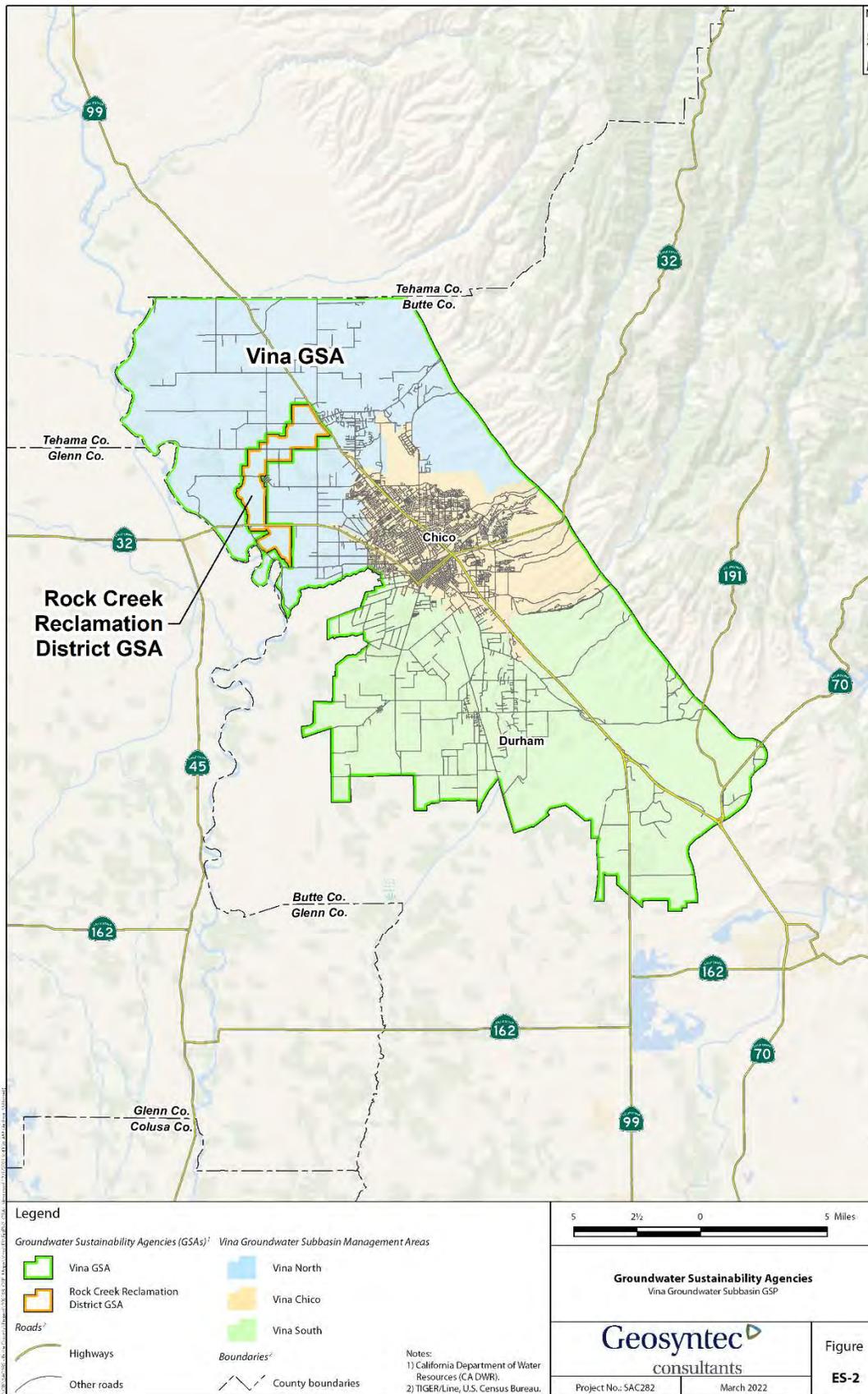


Figure 1. Vina Subbasin showing Groundwater Sustainability Agency Boundaries and Defined Management Areas (Figure ES-2 from Vina GSP)

### 1.1. 2021 Water Year Hydrologic Conditions

A number of data sources and indices are available to characterize and compare hydrologic conditions within or between particular years. The data sources typically report hydrologic data on a water year basis, or the 12-month period from October through September. The 2021 Water Year (2021 WY) began on October 1, 2020 and ended September 30, 2021. The 2021 WY was classified as a *Critical* year for the Sacramento Hydrologic Region. Water year types are based on the Sacramento Valley Water Year Index identified as wet, above normal, below normal, dry, or critical. At the end of the 2021 WY on September 30, 2021, statewide hydrologic conditions were as follows: precipitation was 49% of average; runoff was 33% of average; and reservoir storage, 58% of average. Sacramento River Region unimpaired runoff observed through September 30, 2021 was about 6.4 million acre-feet, which is about 36% of average.

The Northern Sierra 8-Station Precipitation Index (Figure 2) serves as a precipitation index for the Sacramento River hydrologic region by averaging measurements taken at the following precipitation stations: Blue Canyon, Brush Creek Ranger Station, Mineral, Mount Shasta City, Pacific House, Quincy Ranger Station, Shasta Dam, and Sierraville Ranger Station. This index provides a representative sample of the region's major watersheds: the upper Sacramento, Feather, Yuba, and American Rivers, which produce inflow to some of California's largest reservoirs - the source of much of the state's surface water supplies. The 2021 WY ended with 24.0 cumulative inches of precipitation, which is 45% of the long term (1991 - 2020) average of 53.2 inches.

The 2021 WY started out with moderate precipitation in mid-November, leading to a very dry January, and moderate precipitation in the early spring. Total precipitation was insufficient to reach average hydrologic conditions in Northern California. The 2021 WY ended as the second driest year on record based on statewide runoff. Overall, the 2021 WY had below average rainfall, snow pack, and runoff conditions. Water supply conditions led to a 5% allocation for State Water Project contractors statewide and curtailment of other local surface water supplies. This included about a 50% reduction in Feather River diversions by Western Canal Water District and the Joint District Board (i.e. Richvale Irrigation District, Butte Water District and Biggs-West Gridley Water District within Butte County) in the Butte Subbasin.

This Annual Report coincides with one of the most severe and extensive droughts that has ever impacted the western United States. In December 2021, as the final GSP was being assembled, drought conditions throughout most of California, including in this Subbasin, were classified as "exceptional." This is the most extreme classification defined by the U.S. Drought Monitor. Historically, observed impacts during exceptional drought generally include: widespread water shortages, depleted surface water supplies, extremely low federal and state surface water deliveries, curtailment of water rights, extremely high surface water prices, increased groundwater pumping to satisfy water demands, dry groundwater wells, increased well drilling and deepening, increased pumping costs, wildfire, decreased recreational opportunities, and poor water quality, among other potential impacts reported by the U.S. Drought Monitor. All of these conditions were experienced to some degree across California in 2021 and some were experienced within the Subbasin.

Locally, widespread drought impacts have been observed throughout the Subbasin as well. The extent of the impacts and programs to help residents, continues to be discussed by the Butte County Board of Supervisors, Water Commission, and Drought Task Force. Since the summer of 2020, 45 reports were made to DWR's Household Water Supply Shortage Reporting System in Butte County alone and another

approximately 20 residents reported household dry well issues by calling the Butte County Department of Water and Resource Conservation Department. While a number of the reported dry wells are in the foothills outside of the Subbasin, about one-quarter lie within the Vina Subbasin. Most of the reported dry wells are used for domestic water supply. Of the reports in which the depth of the well was indicated, almost all were 200 feet deep or shallower. Counts of dry wells are likely to be low because some landowners choose not to report well problems. Butte and the surrounding counties have provided access to drinking water through water filling stations for those residents experiencing water issues while they work towards a long-term solution.

Over the long-term as the GSP is implemented, the Subbasin will be better positioned to manage and mitigate drought conditions and impacts may be less severe and/or costly.

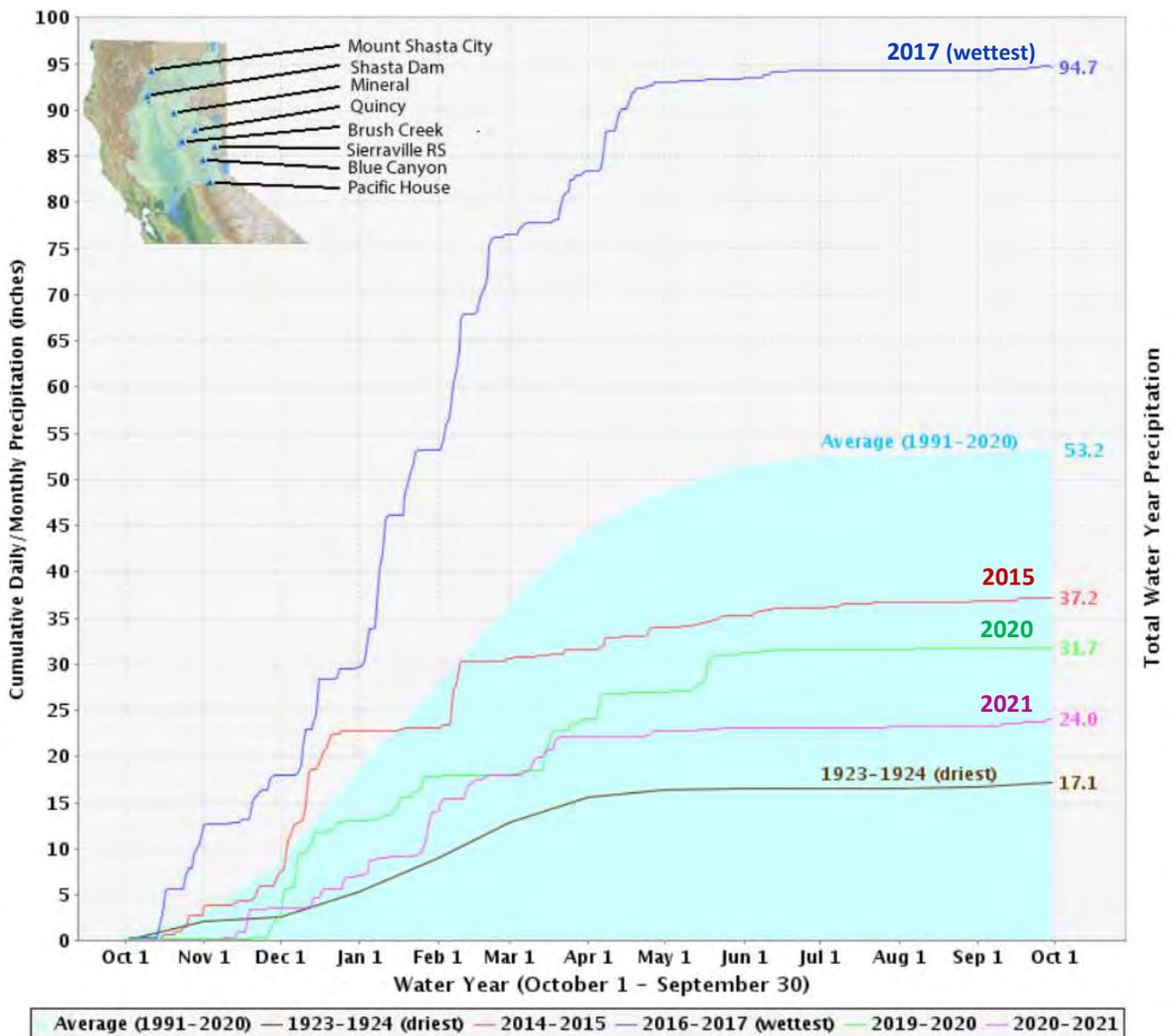


Figure 2. Northern Sierra Precipitation 8-Station Index for Selected Water Years

## 2. Groundwater Conditions

This section presents the change in groundwater conditions in the Vina Subbasin since the 2020 WY. Comparison of 2021 WY conditions to 2020 WY conditions characterizes the impact of the critically dry year on groundwater extraction, surface water availability, and groundwater conditions.

### 2.1. Groundwater Elevations

Groundwater levels typically fluctuate seasonally between and within water years. Seasonal fluctuations of groundwater levels occur in response to groundwater pumping and recovery, land and water use activities, recharge and natural discharge. Precipitation, applied irrigation water and local creeks and rivers are all sources of groundwater recharge in the Vina Subbasin. Groundwater pumping for irrigation typically occurs from April to September, although depending on the timing of rainfall it may shift earlier and/or later into the season. Consequently, groundwater levels are usually highest in the spring and lowest during the irrigation season in the summer months. Fall groundwater measurements (usually measured in October) provide an indication of groundwater conditions after the primary irrigation season.

Data from groundwater level monitoring is available from DWR's online SGMA Data Viewer tool (<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>). Summary data tables of groundwater surface elevations from spring and fall 2021 measurements for Representative Monitoring Site (RMS) wells are summarized in Table 1.

Currently 78 wells are monitored as part of a Broad Network for groundwater levels in the Vina Subbasin and 17 are RMS wells with assigned Sustainable Management Criteria. These wells consist of a mixture of domestic and irrigation wells, along with dedicated observation wells and California Water Service Company municipal supply wells in Chico. Approximately 33 of the Broad Network of monitoring wells measured by DWR and Butte County are equipped with data loggers (i.e. transducers) which continuously monitor and record hourly changes in groundwater levels. These and the remaining wells are measured by hand four times per-year, typically in March, July, August and October. From 2014 to 2016, groundwater levels were measured monthly from April through October due to severe drought conditions. Appendix A includes a map of the approximate locations of groundwater level RMS wells and each of their hydrographs showing measured groundwater levels for each well's period of record. The groundwater level monitoring methods are consistent with the protocols described in the Vina GSP.

Groundwater elevations are measured using a steel tape, electric sounder, pressure transducers, acoustic or sonar sounder or by airline measurements. The accuracy of the groundwater level measurement range is typically either 0.01 feet or 0.1 feet depending on the equipment used. In addition to the groundwater level monitoring conducted by Butte County and DWR, California Water Service Company measures monthly groundwater levels in approximately 60 municipal groundwater supply wells the Chico urban area. Seven of these wells are in the Broad Monitoring Network and four of these wells are included as RMS wells in the Vina GSP.

#### 2.1.1. Groundwater Elevation Hydrographs

Groundwater elevation hydrographs for each RMS well identified in the GSP are presented in Appendix A. Appendix B provides an explanation of the terms and concepts comprised by the Sustainable Management Criteria as defined in Section 3 of the GSP (ex. Minimum Threshold, Measurable Objective). The spring and fall 2021 water levels measured at each RMS well are presented in Table 1,

which also provides a comparison of spring and fall water levels to: (i) 2020 WY conditions, (ii) the established Minimum Threshold groundwater elevations, (iii) the established Measurable Objective groundwater elevations, and (iv) the Interim Milestone for 2027.

Spring and fall 2021 levels were above the Measurable Objective, with only one exception: the fall groundwater elevation in well 20N01E10C002M was approximately three feet below the Measurable Objective. All measured groundwater levels remained within the Subbasin's Margin of Operational Flexibility and well above the Minimum Threshold of each RMS well. Generally, 2021 groundwater levels were similar to spring 2014-2015 conditions with some new historical lows reached in a few wells.

### *2.1.2. Groundwater Elevation Contour Maps*

The contour maps (Figure 3 and Figure 4) show groundwater elevations that are higher in the northern portion of the Vina Subbasin than in the south and higher levels on the eastern side of the Subbasin compared to the western edge. This indicates groundwater flow is generally north to south in the Vina North MA, predominantly east to west in the Vina Chico MA and northeast to southwest in the Vina South MA. In areas dependent on groundwater supplies for irrigation, which is the majority of the Vina Subbasin, groundwater levels begin to decline when pumps turn on, typically in the spring, and continue declining as the irrigation season progresses through the summer months.

The contour maps illustrate several general features of the groundwater flow system in the Vina Subbasin, including:

- Overall westward/southwestward flow consistent with recharge from the north and along the eastern lower foothills
- Convergence of flow toward the Sacramento River in the Vina North MA.
- Flow in the Vina South MA converges toward pumping areas west of Butte Creek and near Durham
- The higher concentration of contours in the southeast portion of the Subbasin indicate a steeper gradient and could suggest higher groundwater flow. However, given the characteristics of aquifer materials on the eastern portion of the Subbasin, the steep gradient is likely evidence of lower transmissivity aquifer materials. Nonetheless, the contours are consistent with the understanding of recharge coming from the lower foothills. New sources of information and data may improve understanding of this area (i.e. such as DWR's Airborne Electromagnetic Survey Program).

Of note is the groundwater depression west of Durham. During critically dry years such as 2021, increased groundwater extraction to meet irrigation demands compensates for reduced rainfall. In addition, reduced recharge from Butte Creek (and other local drainages) likely occurs due to reduced streamflows. These factors may be contributors to the depression indicated by the contours. Fall contours also indicate lower groundwater levels relative to spring conditions throughout the Subbasin, as expected.

The Vina Subbasin aquifer system is described in the GSP as a single principal aquifer and therefore the maps shown in Figure 3 and Figure 4 do not distinguish between completion intervals of the wells. Therefore the contours represent an aggregate of groundwater elevations across all zones of the aquifer system. Groundwater elevation contours were developed by creating a continuous groundwater elevation surface based on available monitoring well data using the kriging interpolation method.

Questionable groundwater elevation measurements were excluded, and some additional minor adjustments to the contours were made based on expert judgement.

Table 1. Summary Table of Spring and Fall 2021 Groundwater Elevations in Comparison to 2020 Groundwater Elevations and the Minimum Threshold and Measurable Objective

State Well Number	Spring Groundwater Conditions			Fall Groundwater Conditions			Minimum Threshold (ft MSL)	Measurable Objective (ft MSL)	Interim Milestone 2027
	2021 Groundwater Elevation (ft MSL)	Change from 2020 to 2021 (ft)	Difference relative to MO (ft)	2021 Groundwater Elevation (ft MSL)	Change from 2020 to 2021 (ft)	Difference relative to MO (ft)			
Vina Subbasin – North Management Area									
23N02W25C001M	135.6	-2.4	5.6	131.8	-1.5	2	50	130	130
23N01W10E001M	150.6	-8.6	14.6	145.8	-0.6	10	80	136	137
23N01E07H001M	166.9	QM	30.9	162.4	QM	QM	72	136	140
22N01W05M001M	132.0	-1.8	17.0	119.6	-4.9	5	31	115	116
23N01W36P001M	127.1	-5.0	19.1	112.7	-5.7	5	45	108	110
23N01E33A001M	141.4	-4.1	16.4	134.4	-4.0	9	72	125	128
Vina Subbasin – Chico Management Area									
CWSCH01b	117.0	-6.0	11.0	140.0	31.0	34	85	106	107
CWSCH02	118.0	-8.0	13.0	108.0	2.0	3	85	105	108
CWSCH03	123.0	-3.0	15.0	109.0	-3.0	1	85	108	109
CWSCH07	113.0	-3.0	18.0	99.0	-7.0	4	85	95	97
22N01E28J003M	130.1	-7.5	19.1	115.5	9.5	5	85	111	113
Vina Subbasin – South Management Area									
21N01E21C001M	NM	NM	NM	80.8	QM	17	10	64	67
21N02E18C003M	150.1	-9.3	20.1	153.2	3.1	23	65	130	132
20N01E10C002M	112.4	8.4	20.4	88.8	-4.6	-3	20	92	93
20N02E24C001M	106.8	-2.4	29.8	92.7	-8.1	16	18	77	81
20N02E09L001M	115.9	QM	QM	NM	NM	NM	30	91	93

Note: red numbers indicate questionable measurements (QM). NM indicates no measurement was taken.

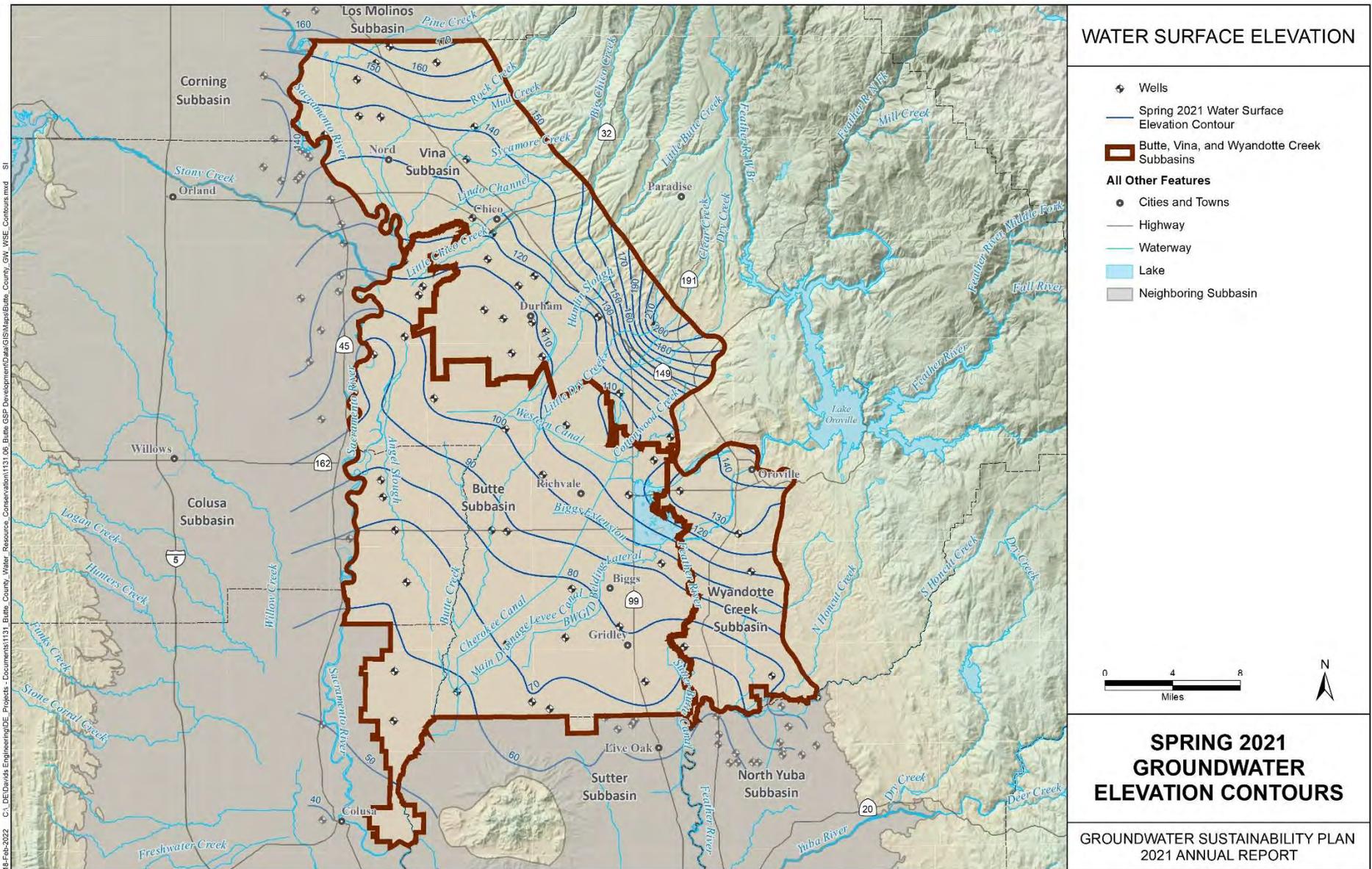


Figure 3. Spring 2021 Groundwater Elevation Contours for the Principal Aquifer

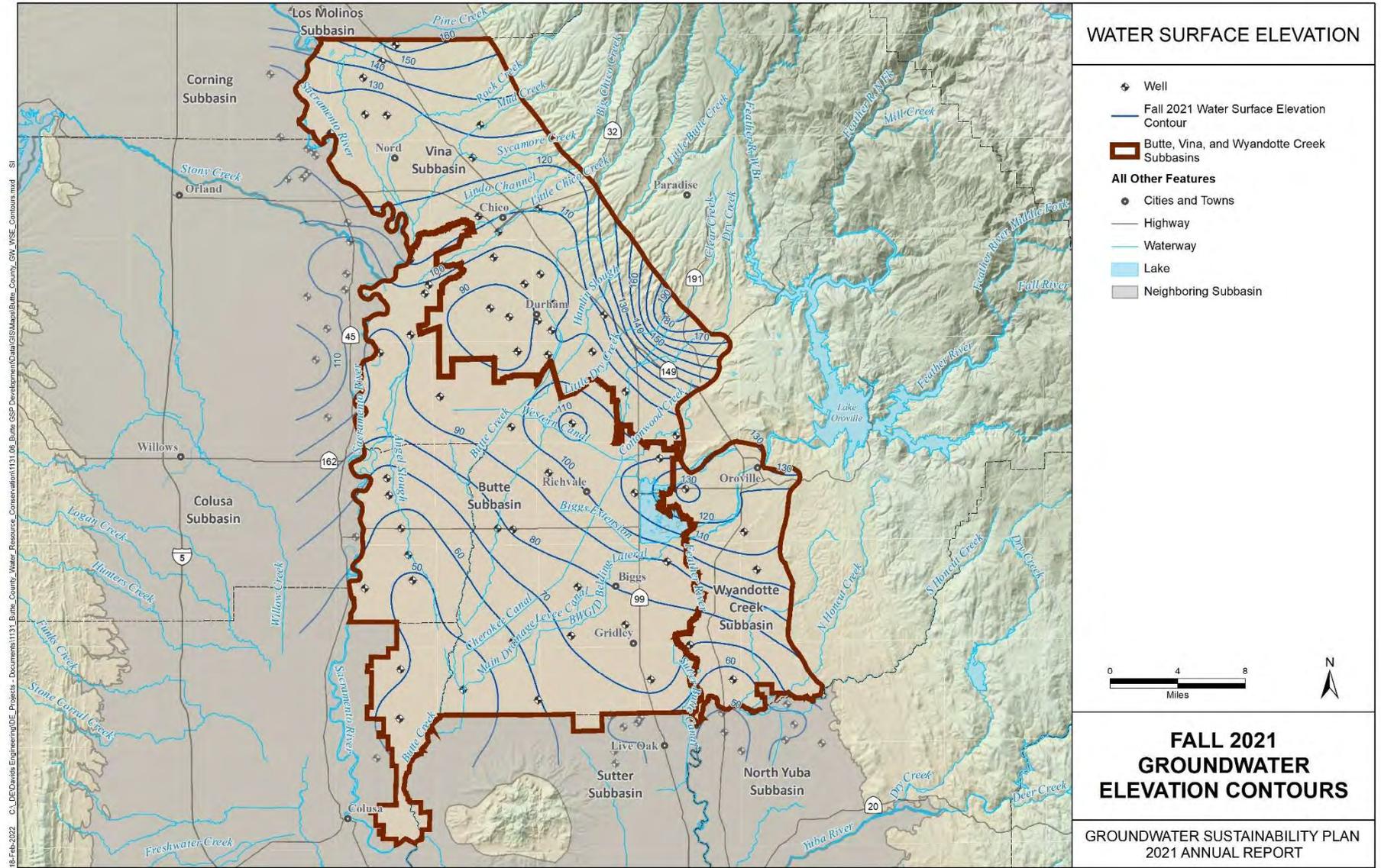


Figure 4. Fall 2021 Groundwater Elevation Contours for the Principal Aquifer

## 2.2 Water Use Estimates

The following section presents measured and estimated groundwater extraction and surface water delivered for the agricultural, municipal, and domestic sectors for the 2021 WY.

### 2.2.1. Groundwater Extraction

The majority of the Vina Subbasin is dependent on groundwater as the only available water source for agricultural irrigation. In addition, the City of Chico, the largest city in the Subbasin is solely reliant on groundwater as a municipal water supply. Durham Irrigation District also provides municipal water to households in the Durham area through groundwater extraction from three district wells, and private domestic wells provide for rural residential water needs throughout the Subbasin. Figure 5 shows a map of the general areas and pumping rates where extraction occurs. The subregions shown are those established in the Butte Basin Groundwater Model (BCDWRC, 2021).

Total estimated groundwater extraction in the 2021 WY was approximately 268,000 AF. This is about 25,000 AF greater than the 2000-2018 average annual groundwater extraction of 243,000 AF for the Vina Subbasin reported in the GSP. During dry and critically dry years, agricultural groundwater extraction increases relative to long-term average demand due to less rainfall and therefore reduced soil moisture, and increased evapotranspiration associated with hotter, drier conditions. In contrast, municipal water use during drought years may decrease relative to long-term averages due to urban conservation efforts. This was observed in reported groundwater extractions for the City of Chico during the 2013-2015 drought period. The City of Chico saw a decrease of approximately 2.5% of municipal pumping volumes from 2020 to 2021.

Table 2. 2021 Water Year Groundwater Extraction by Water Use Sector

Sector	Extraction (AF)	Method
<b>Agricultural</b>		
Vina Subbasin	242,400	Estimate
<b>Municipal</b>		
City of Chico	22,640	Measured
Durham Irrigation District	640	Measured
<b>Subtotal</b>	23,280	
<b>Domestic</b>		
Rural Residential	2,300	Estimate
<b>Total</b>	<b>268,000</b>	

Note: Agricultural sector includes water for managed wetlands.

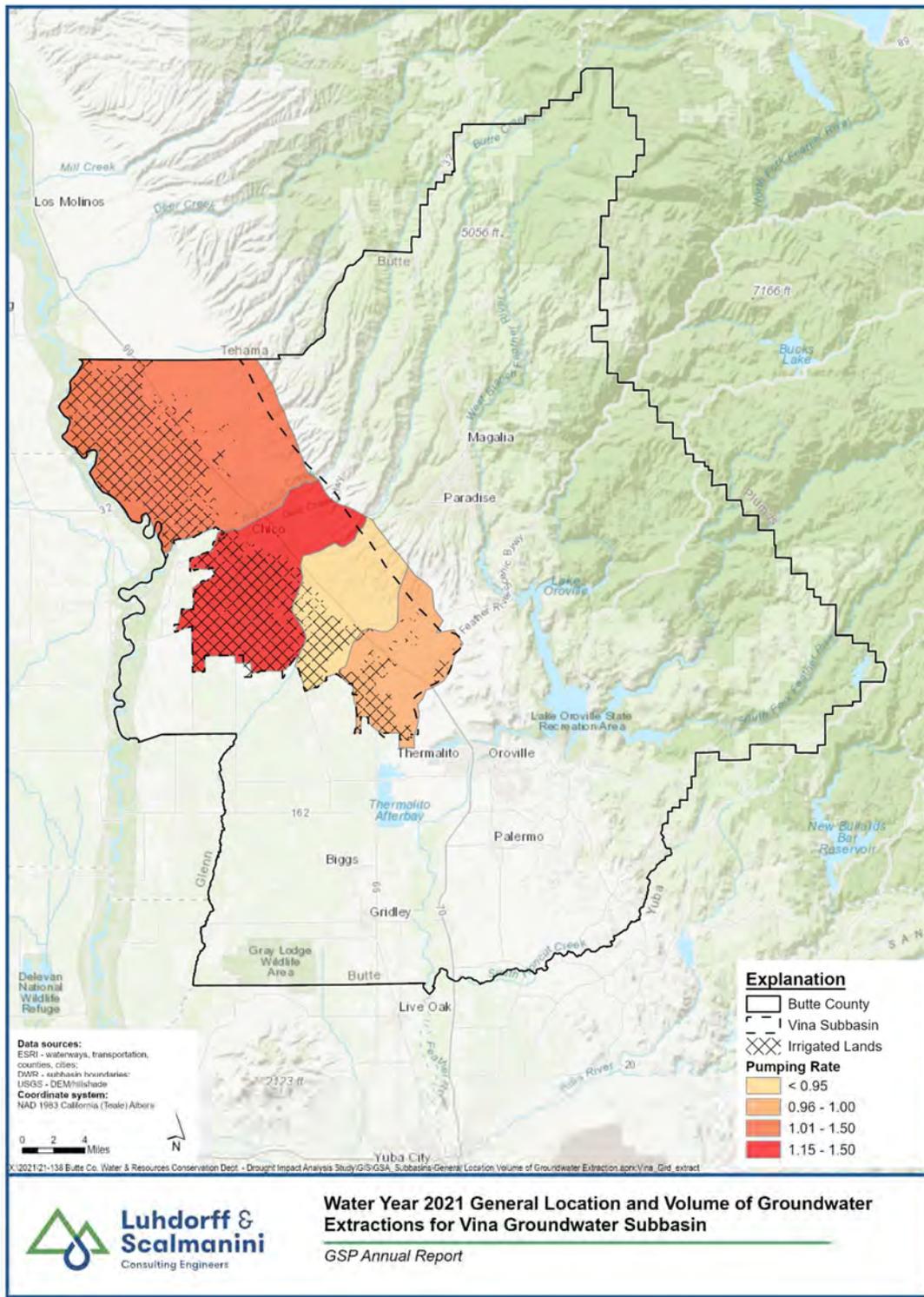


Figure 5. General Location (based on Butte Basin Groundwater Model subregions) and Volume of Groundwater Extraction shown as a Rate (acre-feet per acre) for 2021 WY

Agricultural groundwater extraction is estimated based on estimated agricultural water demand using 2021 land use (acreage for 17 different crops), climate conditions (i.e. precipitation and evapotranspiration), and crop coefficients consistent with those used in the Butte Basin Groundwater Model (used to develop water budgets for the Vina GSP). This includes estimated groundwater extractions for irrigating managed wetlands. It should be noted that although the fundamental approach is similar to that used to estimate groundwater extraction in the GSP, the Butte Basin Groundwater Model was not updated with 2021 data and was not used to provide these estimates. Therefore, future updates and use of the Model may result in different estimates for 2021 groundwater extraction. The approach to estimate groundwater extractions is considered reasonable and cost effective for the purposes of the Annual Report. Coincident with the development of this Annual Report, Butte County is funding a Drought Impact Analysis Study to characterize conditions and economic impacts of the drought in 2021. Technical work for the Study provided water budget estimates for this Annual Report. The final report for the Study is expected to be released in May 2022.

Rural residential groundwater extraction is estimated based on the California Water Service Company’s 2020 Urban Water Management Plan’s 2020 usage of an average per capita water use of 184 gallons per capita per day. Population data from the 2020 census was coupled with parcel data to identify total population not serviced by municipal supplies. Municipal water supplies are measured and were provided by the utility.

*2.2.2. Surface Water Supply*

Surface water provided about 4% of the agricultural water demand in the Vina Subbasin in 2021. Diversions from Butte Creek and Mud Creek are estimated based on historic State Water Resource Control Board eWRIMS (Electronic Water Rights Information Management System) data for total diversions. Surface water delivery estimates are based on historic deliveries in the area that have occurred in dry and critical years.

*Table 3. Summary of 2021 Surface Water Deliveries by Source and Sector*

Sector	Source	Surface Water (AF)	Method
<b>Agricultural</b>			
	Butte Creek & Mud Creek	9,700	Estimate
<b>Total</b>		<b>9,700</b>	

Note: Agricultural sector includes water for managed wetlands.

*2.2.3. Total Water Available*

Total water available for use in the Vina Subbasin was tabulated from reported groundwater extraction shown in Table 2 and the surface water supply reported in Table 3. Total water available is summarized in Table 4 for the 2021 WY. The results are either based on measured data or estimates as described in the previous two sections.

Table 4. 2021 Water Year Total Water Available by Water Use Sector and Water Source Type

Sector	Groundwater Extraction (AF)	Surface Water (AF)	Method	Total (AF)
<b>Agricultural</b>	242,400	9,700	<b>Estimate</b>	<b>252,100</b>
<b>Municipal</b>	23,280	Not Applicable	<b>Measured</b>	<b>23,280</b>
<b>Domestic</b>	2,300	Not Applicable	<b>Estimate</b>	<b>2,300</b>
<b>Total</b>	<b>268,000</b>	<b>9,700</b>		<b>277,700</b>

Note: Agricultural sector includes water for managed wetlands.

### 2.3 Change in Groundwater Storage

Long-term fluctuations in groundwater levels and groundwater in storage occur when there is an imbalance between the volume of water moving into the aquifer (i.e. recharged) and the volume of water removed from the aquifer, either by extraction or natural discharge to surface water bodies. If, over a period of years, the amount of water recharged to the aquifer exceeds the amount of water removed from the aquifer, then groundwater levels increase and groundwater storage correspondingly increases (i.e. positive change in storage). Conversely, if the amount of water removed from the aquifer over time exceeds the amount of water recharged, then groundwater levels decline. These long-term changes can be linked to various factors including increased or decreased groundwater extraction or variations in recharge associated with wet or dry hydrologic cycles.

Lower groundwater levels in spring 2021 compared to spring 2020 resulted from higher than average groundwater extraction in 2020 (previous irrigation season) and reduced natural recharge due to dry climate conditions and decreased streamflows. Declines in groundwater levels amounted to an estimated reduction of groundwater in storage of about 93,400 AF for this time period. Figure 6 shows estimated change in storage using groundwater level conditions in RMS wells and a representative storage coefficient of 0.1, with Thiessen polygons defining a representative area for each RMS well. The representative storage coefficient was established by roughly calibrating estimated change in storage based on changes in observed water levels (i.e. calculated using water level data, representative area, and storage coefficient parameter) with estimated change in storage outputs from the Butte Basin Groundwater Model as reported in the GSP to aggregate characteristics across all zones of the principal aquifer system. A total of 20 pairs of concurrent annual storage changes from both of these methods (i.e., (1) groundwater level change method used in this report and (2) modeled storage changes from the GSP) from 1999 through 2018 were used for calibration. Determination of a representative storage coefficient allows for estimating the change in volume of groundwater storage based on the measured change in groundwater levels and known representative area (i.e. Thiessen polygon) associated with each groundwater level measurement.

Figure 7 shows annual and cumulative change in groundwater storage over time, 2000-2021, relative to annual groundwater extraction and water year type. Water year types are based on the Sacramento Valley Water Year Index identified as wet (W, shaded blue), above normal (AN, shaded green), below normal (BN, shaded yellow), dry (D, shaded orange), or critical (C, shaded red).

Subbasin = VINA Subbasin; Aquifer = Primary; Year = 2021  
Total Storage Change in Primary Aquifer = -93400.0 AF; Number of Polygons = 14

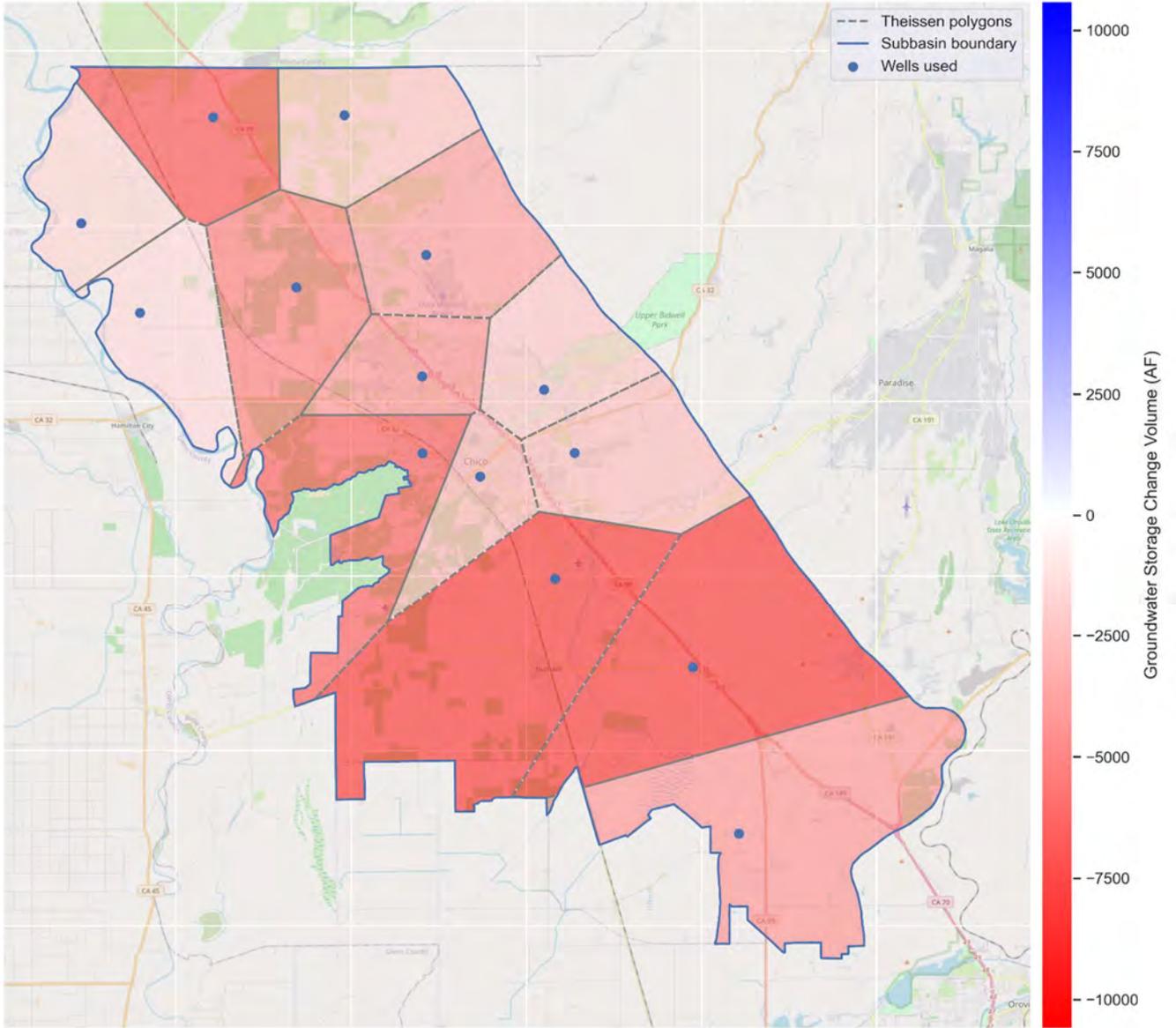


Figure 6. Change in Groundwater Storage from Spring 2020 to Spring 2021 using Groundwater Elevations from RMS wells and Storage Coefficient of 0.1.

Note: Spring measurements were computed as the average of all available groundwater level measurements from March and April of the respective year.

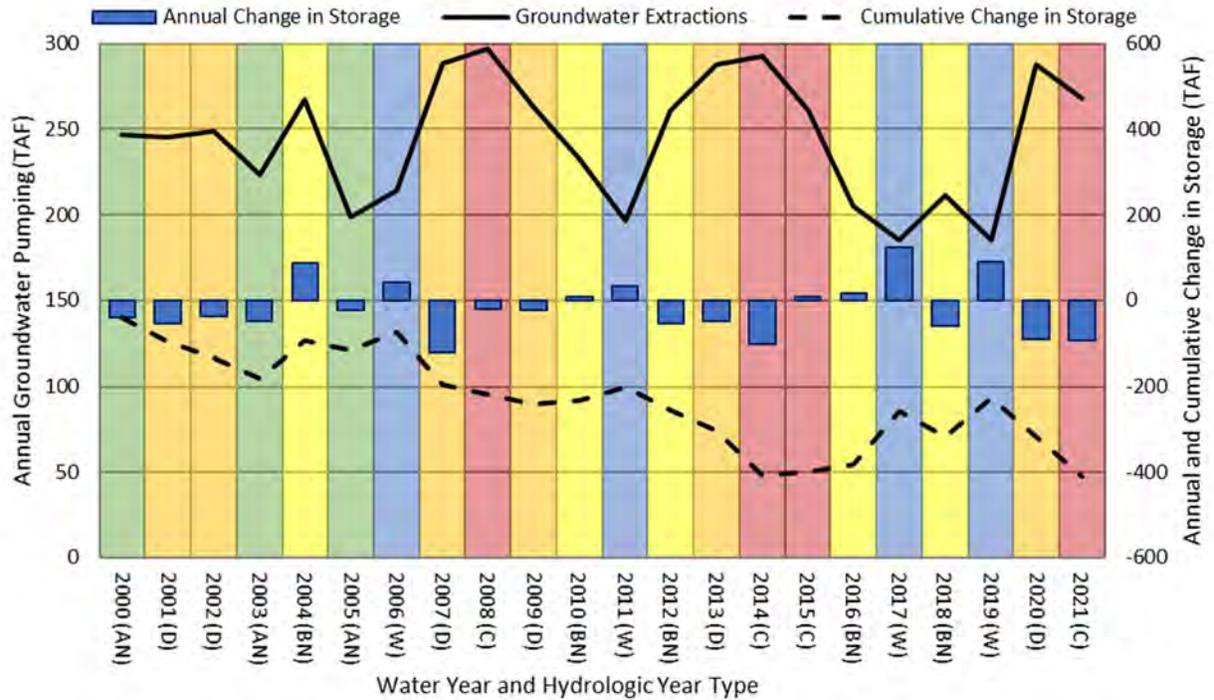


Figure 7. Change in Groundwater Storage (Cumulative and Annual Change) and Groundwater Extraction by Water Year Type.

Note: Values calculated spring to spring for each water year. Water year types: AN-above normal, D-dry, BN-below normal, W-wet, C-critical. Groundwater Extraction for 2000-2018 is shown as reported in the Vina GSP based on Butte Basin Groundwater Model results, 2019 and 2020 estimated by matching to similar water year types, and 2021 estimated as described in Section 2.2. Groundwater Change in Storage estimated based on change in measured spring to spring groundwater levels multiplied by the area of Thiessen polygon associated with the monitoring well and the Storage Coefficient of 0.1.

### 3. Groundwater Sustainability Plan Implementation Progress

The GSP for the Vina Subbasin was adopted by the Vina and Rock Creek Reclamation District GSAs in December 2021 and submitted to DWR in January 2022. This is the first Annual Report to be prepared since the GSP was submitted. The GSP implementation progress reported herein covers ongoing work during GSP development since late 2021.

#### 3.1 Interim Milestone Achievement Progress

As shown in Table 1, 2021 groundwater level conditions are equal to or higher than the first 5-year 2027 interim milestone for the RMS wells in the Vina Subbasin, with only one exception. While a few of the hydrographs indicate groundwater level measurements in recent years below the 2027 interim milestone, it is important to note that these measurements occurred in years experiencing dry hydrological conditions and/or drought conditions. Groundwater conditions below the Measurable Objective may occur during severe drought conditions but are expected to recover following the end of drought during wetter hydrological conditions. The GSAs are working to implement projects and management actions in the GSP to address the imbalance of inflows and outflows currently leading to a slight longer term downward trend in water levels.

### *Ongoing Stakeholder Engagement*

Since completing the GSP, the GSAs are continuing to plan stakeholder meetings with the first scheduled for March of 2022. Stakeholders participating in these meetings will review and discuss a suite of projects aimed at achieving sustainability in the Subbasin by 2042. Additional projects beyond those identified in the GSP may be included. Upon additional evaluation, the stakeholder group may recommend that the GSAs move a subset of the projects identified in the GSP ahead for further assessment, modeling or scoping. The GSAs' Board of Directors will continue to prioritize stakeholder feedback in the implementation phase of the GSP because of the vital role stakeholders play in identifying successful groundwater management approaches for the variety of beneficial uses and users of groundwater in the Subbasin.

### *3.2 GSP Project Implementation Progress*

Achieving sustainability in the Subbasin may require implementation of projects and management actions. The Subbasin will achieve sustainability by both identifying and increasing alternative sources of supply and reducing groundwater demand. Currently, no pumping restrictions have been proposed for the Subbasin; however, the GSAs maintain the flexibility to implement such demand-side management. The GSAs in the Vina Subbasin continue to evaluate implementation activities of the GSP and long-term funding strategies in upcoming meetings. The recent progress towards implementation of projects and management actions applicable to the Subbasin as described below demonstrates the GSAs' commitment to allocating the necessary time and resources to achieve long-term sustainable management of the groundwater resources in the Subbasin. Progress made by the GSAs or partners in the Vina Subbasin is described below.

#### *Residential Water Conservation Project*

The California Water Service Company, a municipal water provider in the Chico area, is currently implementing water conservation practices in accordance with their 2020 Urban Water Management Plan. Some of these conservation projects include the installation of low flow fixtures, toilet replacements, urinal valve and bowl replacements, clothes washer replacements, residential conservation kits, smart controllers, and high efficiency irrigation nozzles. Other projects include water waste prevention ordinances, household water audits, metering, conservation pricing, public education and outreach, programs to assess and manage distribution system real loss, water conservation program coordination and staffing support, and other demand management measures. These conservation projects will directly benefit groundwater levels and groundwater storage by reducing groundwater demand. Conservation efforts in the 2021 WY resulted in a 2.5% reduction in urban pumping compared to 2020 (amounting to almost 600 AF reduction).

#### *Agricultural Irrigation Efficiency Project*

Butte County, the Agricultural Groundwater Users of Butte County, and the Butte County Farm Bureau collaborated to conduct a survey of agricultural irrigators in the Vina Subbasin. The purpose of the survey was focused on evaluating current irrigation methods and practices, identifying opportunities and methods to improve irrigation efficiency, determining potential issues preventing the adoption of efficiency practices, and providing recommendations for increasing participation in these practices. The results of this survey were analyzed in December of 2021 and a summary report is expected to be available in spring of 2022. Recommendations from the survey will be made available to the local agricultural community and the public. Voluntary implementation of the recommended practices are expected to be initiated between 2024 and 2030 by local irrigators. The Vina GSA along with

participating partners will pursue grant funds to help implement these practices. The Agricultural Irrigation Efficiency project addresses declining water levels and the declining volume of groundwater stored in the aquifer by reducing groundwater demand. The main objective of the project is to improve groundwater levels and storage by modifying irrigation practices to reduce groundwater demand.

#### *Fuels Management for Watershed Health Project*

This project involves fuel management in the upper watershed of the Vina Subbasin. Funding has been secured and fuels reduction treatment has been started on 150 acres in the area above Musty Buck Ridge. Initiation of similar work on an additional 150 acres is currently pending funding and the treatment will begin once funding is secured. Additionally work is in progress to finalize a Vegetation Management Plan for an additional 4,000 acres in the upper watershed upslope of the Vina Subbasin. These projects will affect groundwater levels, storage, water quality and surface water depletions. By increasing the amount of open canopy in these forested areas and therefore the surface area of the soil for rain to fall on, more precipitation can seep into the soil and the groundwater system. Severe fires can increase soil bulk density, and reduce soil porosity. These projects will reduce the potential for catastrophic fires to occur which will maintain the soil structure and soil porosity allowing for percolation of precipitation into the groundwater system. Intense burns may induce water repellent layers in the soil, which can block water infiltration and contribute to runoff and erosion. The surface water quality of the riparian areas in the project area which eventually flow through and contribute to the groundwater supply in the Vina Subbasin downstream of the project area will also improve from these projects by preventing catastrophic fires. Fuel reduction in the upper watershed will also result in reduced water demand from vegetation growth, which depending on their proximity to the streams, may increase runoff into these surface waterways resulting in increased recharge from the creeks and streams.

#### *Paradise Irrigation District (PID) Intertie Project*

Paradise Irrigation District (PID) in coordination with the California State Water Resources Control Board is currently conducting the Town of Paradise Options Study to identify and evaluate long-term options for improvements to the PID water system infrastructure and finances to ensure the long-term sustainability and resiliency of the water system(s) as well as support redevelopment of the Town of Paradise. This study is also a mandated requirement to ensure that PID can obtain funding for its drinking water system improvements from the California State Legislature. The Options Study considers 23 project and financial options, based on evaluation of a variety of opportunities and constraints, that would assist PID in meeting their long-term water supply and resiliency goals. Consideration and analysis of the feasibility of a PID / California Water Service Company Intertie project is considered in the study. This project would allow PID to provide a surface water source to the City of Chico to help offset groundwater demand and benefit groundwater levels, as groundwater is currently the only source of water for residents in Chico. Stakeholder meetings regarding the progress of the Options Study, which includes this project, have been ongoing with the most recent meeting held in February 2022. The final version of the Options Study is anticipated to be available in late March 2022.

According to the draft document this infrastructure project would need additional detailed study to determine the impact on PID operations. In addition, the cost and schedule requirements to implement the project would not address PID's immediate goals. Given this information, no additional progress has been made on the Intertie Project.

### *Streamflow Augmentation Project*

These projects would transport excess untreated surface water from water right holders in the upper watershed to various parts of the Vina Subbasin through creeks and streams. The goal of the project would be to provide additional water sources to riparian water holders such as Durham Mutual, Rancho Esquon, M&T Ranch, and Gorrill Ranches. In addition, the project would increase streamflows as well as direct and in-lieu recharge.

There has been progress on one specific project, the Butte Creek Integrated Stream Flow Enhancement Planning Project. An application was submitted by the Friends of Butte Creek to the Wildlife Conservation Board's Stream Flow Enhancement Program in January 2022 to fund this project. The project would undertake a comprehensive analysis of all Butte Creek surface diversions, upstream storage, groundwater, and imported water with a goal of identifying six to ten water right acquisitions and/or implementation projects that will generate 5.0 or more cubic feet per second. A technical and legal analysis will support development of a plan to enhance stream flow above baseline conditions during critical migration and rearing seasons for threatened spring run Chinook Salmon and threatened Central Valley Steelhead on the middle and lower reaches of the canyon section of Butte Creek and in Little Butte Creek. The planning proposal will evaluate potential acquisition and implementation opportunities to acquire, exchange, or forbear water for dedication to stream flow enhancement and salmonids. There will be consideration of utilizing surplus stored water, water efficiencies in the conveyance and use of irrigation water from various diversions and longer-term monitoring of water flow and temperature. This project seeks to partner with irrigators to benefit both farms and fish along with the recharge of the Vina Subbasin aquifer. Increased flows from the project will increase recharge into the Subbasin from Butte Creek and reduce the need for groundwater pumping for some landowners, affecting groundwater levels, storage and surface water depletions.

### *Rangeland Management and Water Retention Project*

Under this project, California State University Chico (CSUC) and Chico State Enterprises is initiating a study of adaptive/ regenerative grazing practices on 2,000 or more acres in the region. The study is measuring soil compaction, erosion, groundwater retention, and biological diversity. If this study finds that water retention engineering projects would be feasible in the region, based on the collected data on local soil, then CSUC would create a master management plan and take necessary steps to complete the water retention projects. This project covers two locations within and upslope of the Subbasin across 3,850 acres of historical rangeland between Musty Buck Ridge and Cohasset Road. Currently, there is a contract in place to create a Management Plan for the land which includes long-term rangeland management research activities to describe current conditions of the land including soil conditions which will inform the feasibility to initiate water retention and recharge projects which would benefit groundwater levels, storage and surface water depletions.

### *Surface Water Supply and Recharge Project*

These projects will involve activities that increase the surface water supply to the Vina Subbasin through: 1) direct application of surface water to crops, application of surface water and/or flood water to land surface (i.e. existing orchards) for recharge purposes, surface water and/or flood water application to recharge basins and/or recharge ponds or other applications.

Progress has been made on one specific project, the Rock and Sand Creek Flood Mitigation Project. This project will address solutions to flooding, public safety and recharge of the aquifer by focusing on

potential floodwater detentions on Sand Creek, an undeveloped tributary basin that joins Rock Creek in the Vina Subbasin. The project will assess potential hydrologic benefits of alternative detention strategies, including creation of seasonal wetland habitats. The magnitude and timing of flood flows down Sand Creek and Rock Creek will be analyzed. A feasibility study will be developed that will lead to the capturing of stormwater and augmentation of the region's aquifer water supplies. The intended outcome of the project is to acquire data that will be used to develop potential mitigation measures for flooding in the Rock Creek Reclamation District area, while supporting increased recharge of the aquifer. A Decision Support Tool will determine future construction, scope and feasibility. Funding for this project has been secured through the Proposition 1 Integrated Regional Water Management Implementation Grant Program. A Request for Proposals from qualified contractors was drafted and published in early 2022 for this work.

### 3.3 GSP Management Actions Implementation Progress

The recent progress on management actions demonstrates the GSAs' commitment to allocating the necessary time and resources to achieve long-term sustainable management of the groundwater resources in the Subbasin. Progress by the GSAs on the management actions is described below.

#### *General Plan Updates*

Butte County staff, who serve as members of the Vina GSA Management Committee, have been cooperating with the Butte County Department of Development Services in the 2040 General Plan Update. Specifically, staff in concert with the Butte County Water Commission provided suggested revisions to the Water Resources Element and applicable General Plan Goals, Policies, and Actions. These updates will ensure that important components of the GSP are addressed by the General Plan.

### 3.4 Other Relevant Efforts

#### *Implementation Activities*

Additionally, activities in the Subbasin to implement SGMA and meet the commitments of the GSP include:

- Monitoring and recording of groundwater levels
- Maintaining and updating the Data Management System with newly collected data
- Annual reporting of Subbasin conditions and submission to DWR as required by SGMA
- Ongoing Intra- and Inter-basin Coordination

#### *Drought Impact Analysis Study*

The Butte County Drought Preparedness and Mitigation Plan (Drought Plan) was adopted in 2004 and was developed to protect the County from the effects of a drought. The Drought Plan includes: an overview of Butte County's drought background; an institutional framework to approach drought; a monitoring plan; a response and mitigation plan; and a discussion of water transfers during a drought. The purpose of the Drought Plan is to provide an efficient and systematic process for Butte County that results in a short- and long-term reduction in drought impacts to the citizens, economy, and environment.

In preparation for potentially continued drought conditions, Butte County funded and contracted with a consultant to conduct a Drought Impact Analysis Study to characterize the conditions and economic impacts of drought that occurred in 2021. The Study will provide recommendations for County response

and readiness in 2022 if dry conditions and drought impacts persist. This effort is expected to provide information that may be useful to GSAs as well.

### 3.5 Conclusion

Recent progress made on all of the above mentioned activities applicable to the GSAs since late 2021 demonstrates the commitment of the GSAs to implement the GSP by allocating the necessary time and resources to achieve long-term sustainable management of the groundwater resources in the Subbasin.

## 4. References

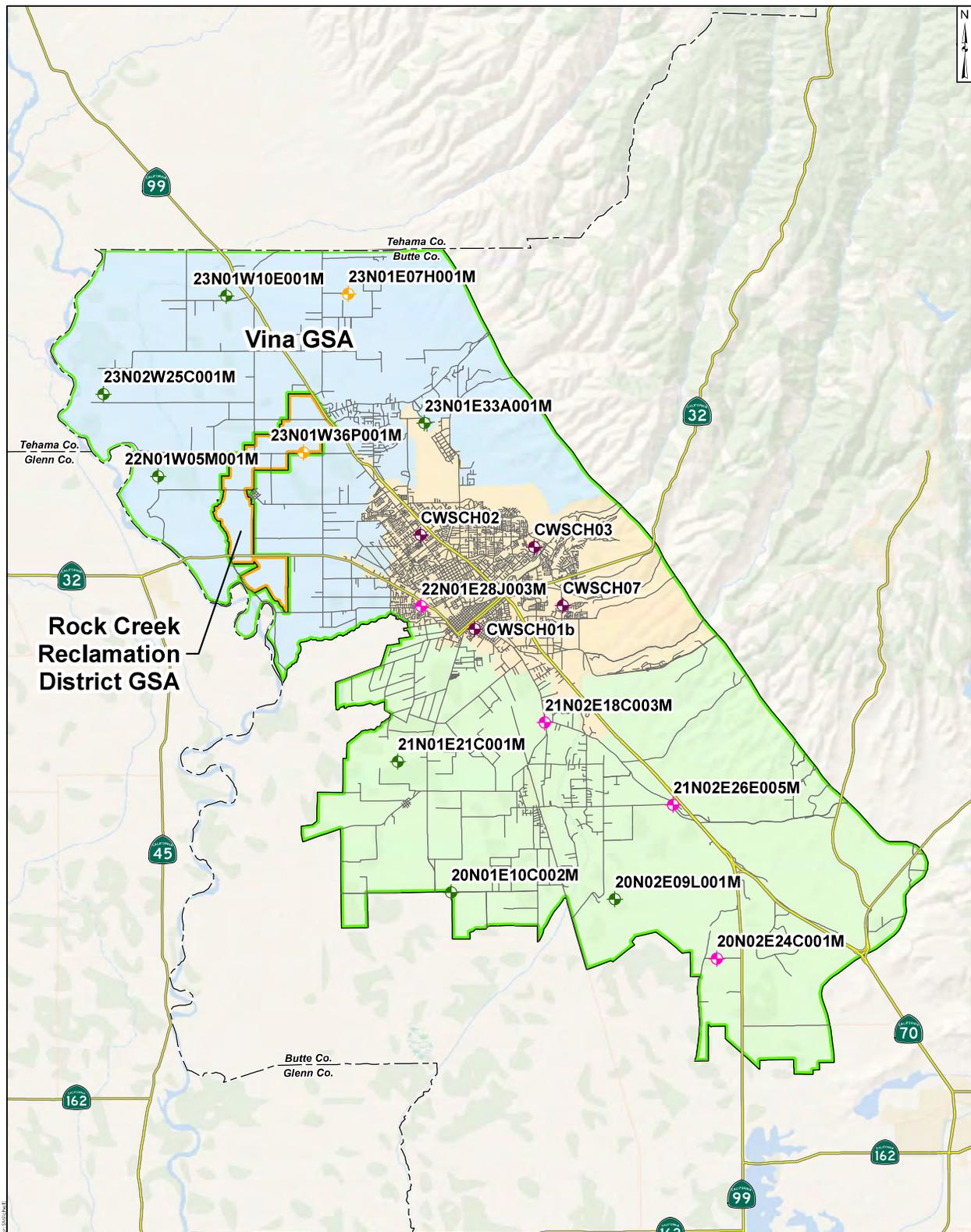
2021. Vina Groundwater Sustainability Plan. Available at: <https://sgma.water.ca.gov/portal/>

Butte County Department of Water and Resource Conservation. 2021. Model Documentation v 1.0. Butte Basin Groundwater Model. 30 November.

2021 Water Year Annual Report

# Appendix A

Characteristics and Hydrographs of Representative  
Monitoring Site (RMS) Wells

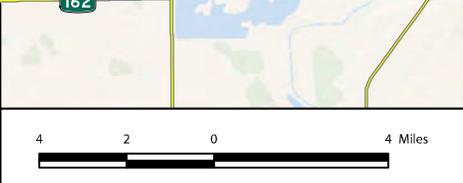


**Legend**

Groundwater Sustainability Agencies (GSAs)<sup>1</sup> Vina Groundwater Subbasin Management Areas

Vina GSA	Vina North
Rock Creek Reclamation District GSA	Vina Chico
Residential	Vina South
Irrigation	<b>Roads<sup>2</sup></b>
Observation	Highways
Municipal and Industrial	Other roads
	<b>Boundaries<sup>2</sup></b>
	County boundaries

Notes:  
1) California Department of Water Resources (CA DWR).  
2) TIGER/Line, U.S. Census Bureau.



**Groundwater Level RMS Wells**  
Vina Groundwater Subbasin GSP

**Geosyntec**  
consultants

Project No.: SAC282      December 2021

Figure  
**ES-10**

**Table 4-5: Groundwater Levels Representative Monitoring Site Well Construction Details**

RMS Well ID	State Well Number (Site Name)	Total Depth (feet bgs)	Screened Interval (feet bgs)	Reference Point Elevation <sup>1</sup> (feet)	Reference Point Description	Ground Surface Elevation <sup>1</sup> (feet)
Vina Subbasin – North Management Area						
25C001M	23N02W25C001M	243	N/A	161.2	Hole cut inside of casing	157.4
10E001M	23N01W10E001M	668	600-668	190.68	1-inch hole inside pump base	189.38
07H001M	23N01E07H001M	195	115-195	283	Top of casing, remove blue cap	282
05M001M	22N01W05M001M	200	N/A	153.28	Hole in pump south side	151.48
36P001M	23N01W36P001M	165	N/A	164.35	Top of casing crack in north side	162.75
33A001M	23N01E33A001M	506	53-506	252.34	1-inch hole in top of casing	252.34
Vina Subbasin – Chico Management Area						
CWSCH01b	CWSCH01b	>600	---	200	N/A	---
CWSCH02	CWSCH02	>600	---	183	N/A	---
CWSCH03	CWSCH03	>600	---	258	N/A	---
CWSCH07	CWSCH07	<600	---	270	N/A	---
28J003M	22N01E28J003M	279	200-279	179.79	Top of casing easterly 1-inch casing	178.89
Vina Subbasin – South Management Area						
21C001M	21N01E21C001M	565	240-300 448-508	133.64	Hole in pump base west side	133.34
18C003M	21N02E18C003M	240	130-140 160-170 190-200	191.15	Top of shortest PVC casing	189.07
10C002M	20N01E10C002M	210	20-120	128.35	Top of casing south side	127.35
24C001M	20N02E24C001M	155	124-134	159.65	Top of casing, northern-most piezo	157.75
09L001M	20N02E09L001M	710	460-710	143.83	Hole in pump base, southeast side	139.33
26E005M	21N02E26E005M	315	265-275 280-290	184.44	Top of next to shortest PVC casing	182.26

**Note:**

1 –NAVD88

N/A – Not available

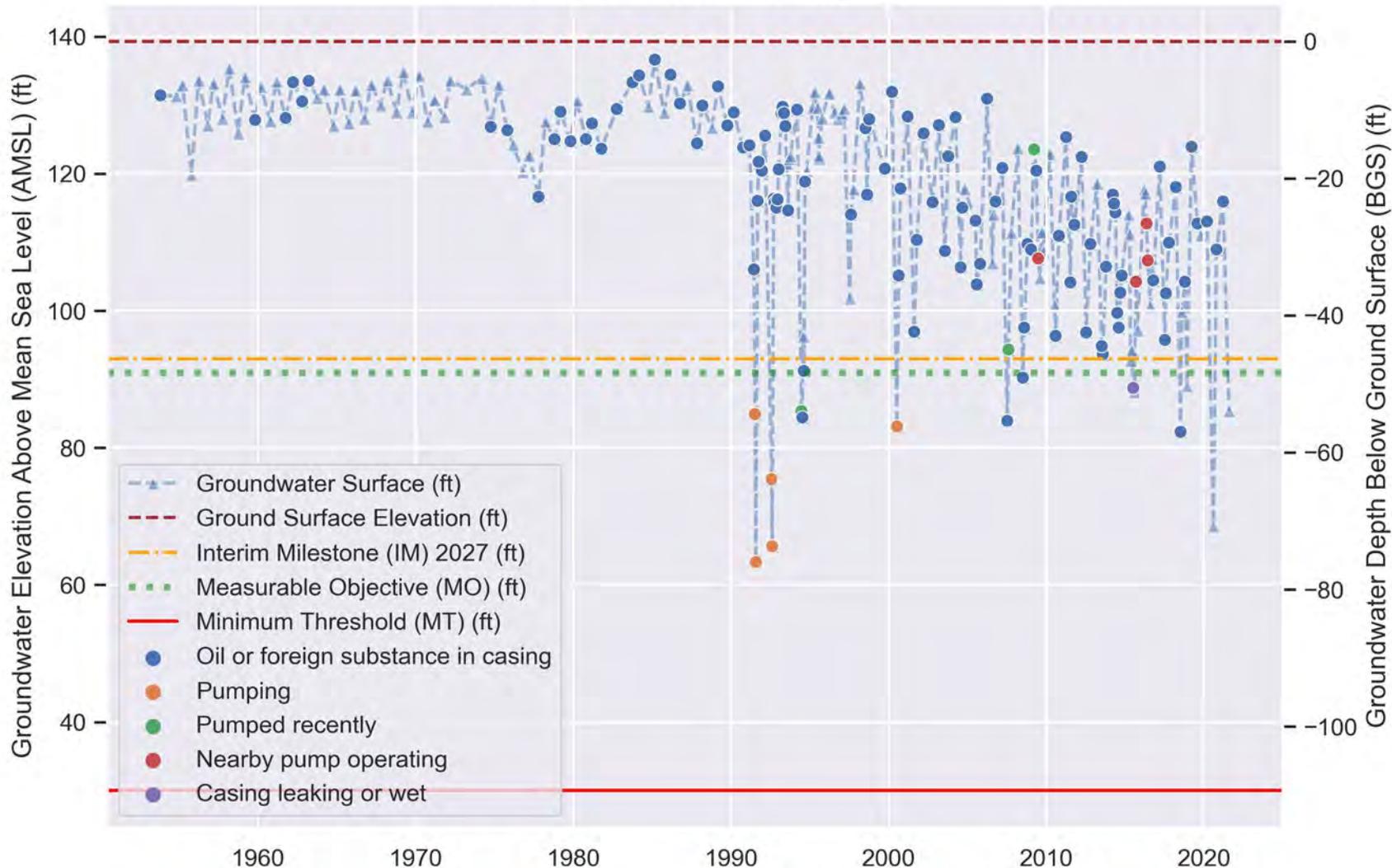
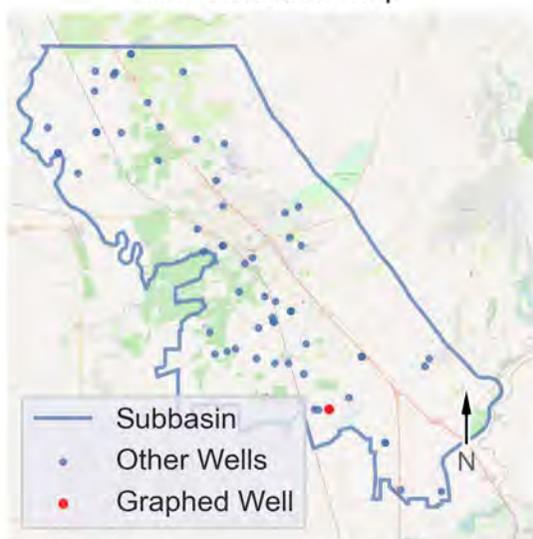
PVC – polyvinyl chloride

--- Details of public supply wells not disclosed

# VINA Subbasin - State Well Number (SWN): 20N02E09L001M

Perforation 1: 460.0 - 710.0 ft BGS

Well Location Map



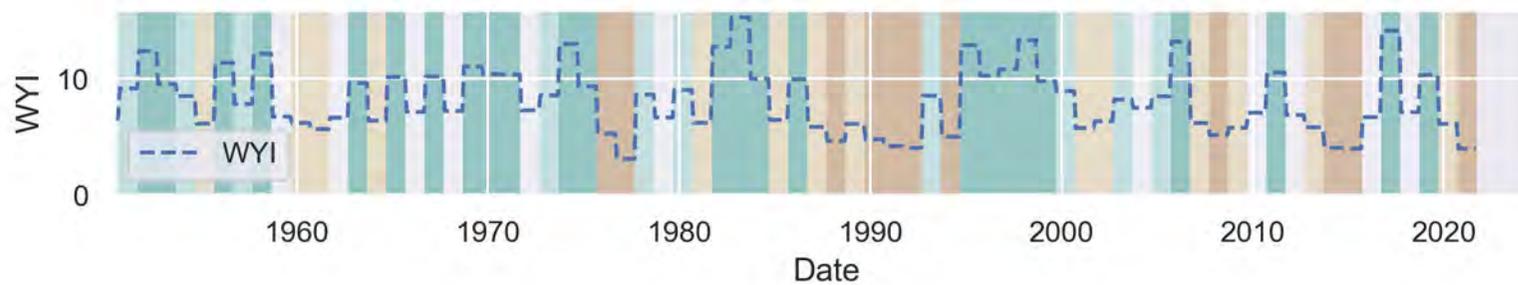
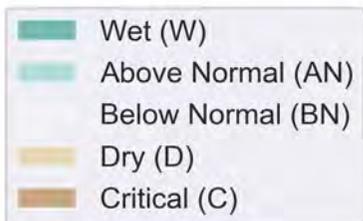
## Sustainable Management Criteria:

IM (2027) = 93.0 ft AMSL

MO = 91.0 ft AMSL

MT = 30.0 ft AMSL

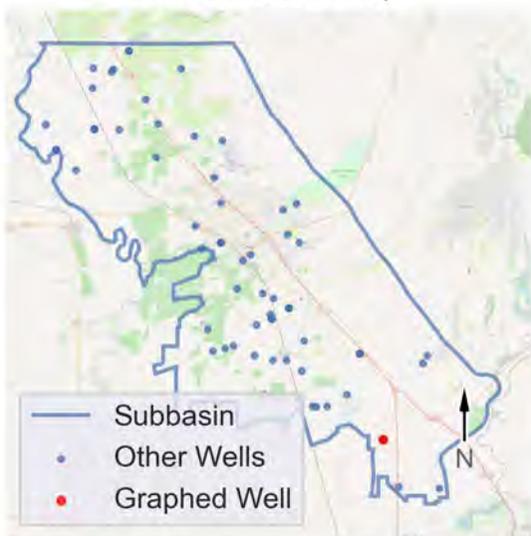
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): 20N02E24C001M

Perforation 1: 124.0 - 134.0 ft BGS

Well Location Map



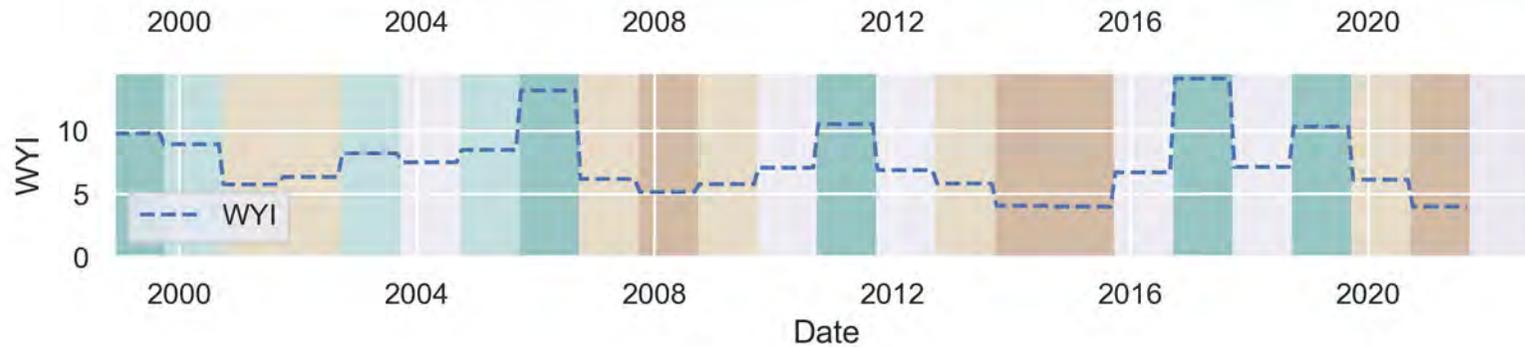
## Sustainable Management Criteria:

IM (2027) = 81.0 ft AMSL

MO = 77.0 ft AMSL

MT = 18.0 ft AMSL

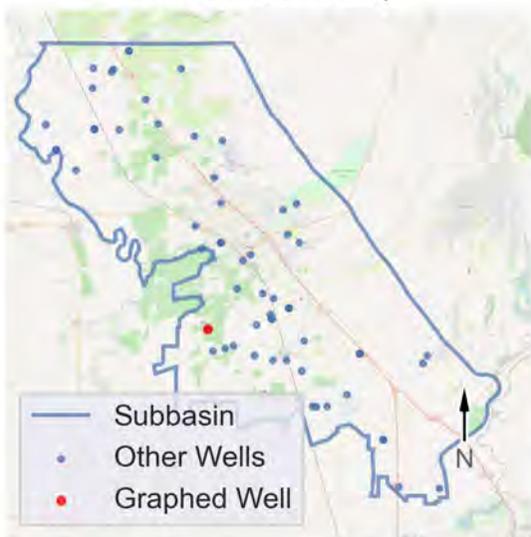
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



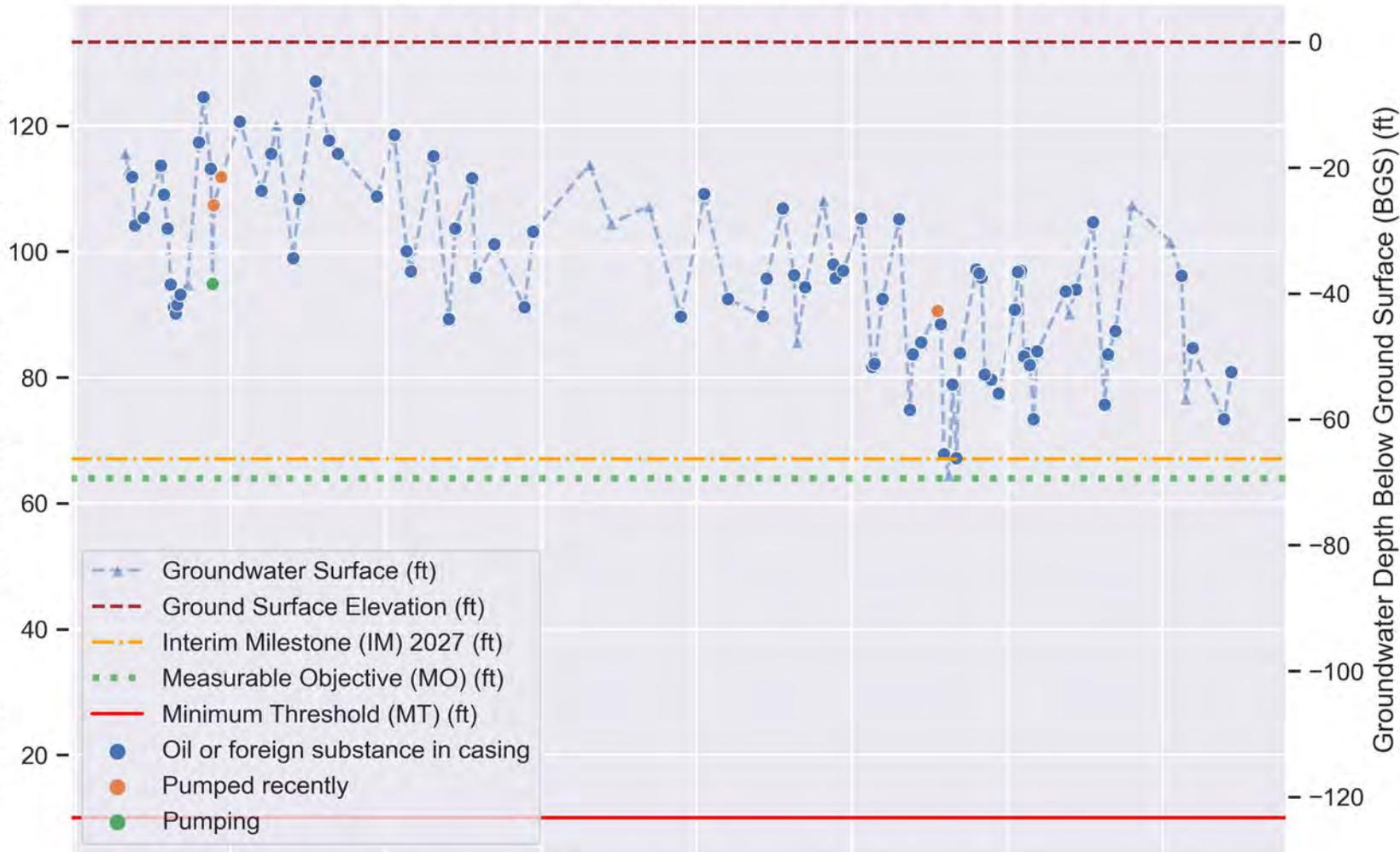
# VINA Subbasin - State Well Number (SWN): 21N01E21C001M

Perforation 1: 240.0 - 300.0 ft BGS; Perforation 2: 448.0 - 508.0 ft BGS

Well Location Map



Groundwater Elevation Above Mean Sea Level (AMSL) (ft)



Groundwater Depth Below Ground Surface (BGS) (ft)

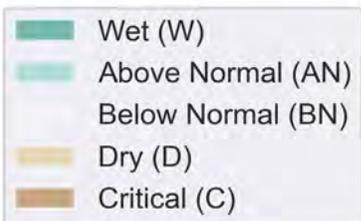
## Sustainable Management Criteria:

IM (2027) = 67.0 ft AMSL

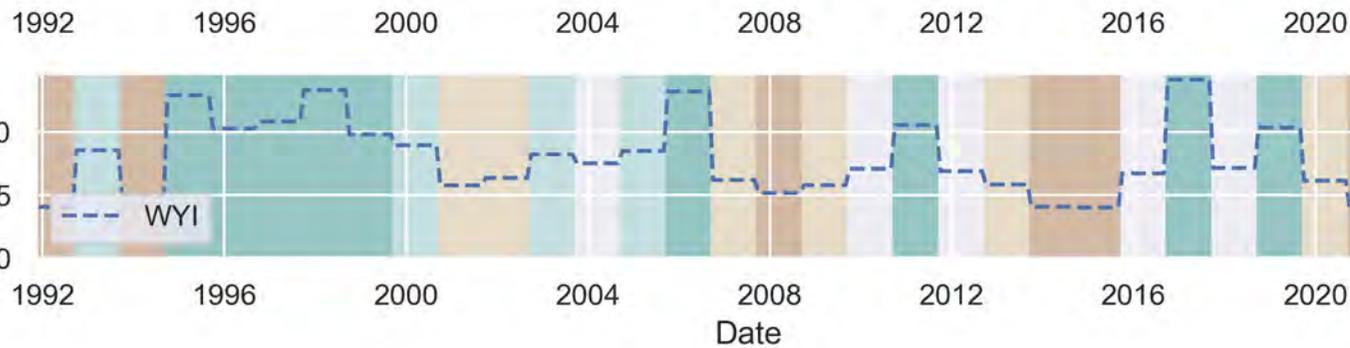
MO = 64.0 ft AMSL

MT = 10.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.

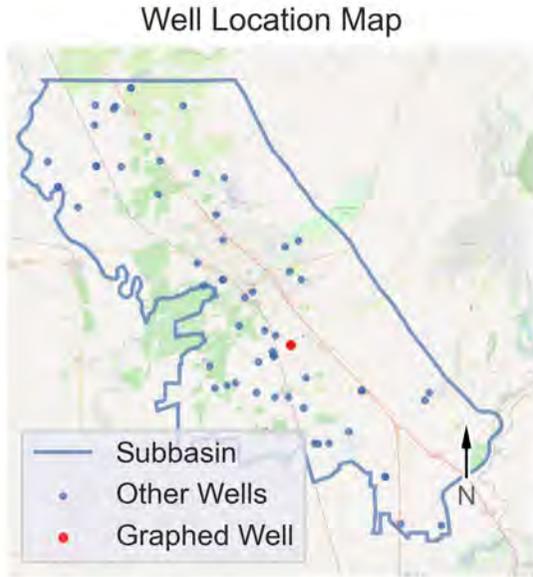


WYI



# VINA Subbasin - State Well Number (SWN): 21N02E18C003M

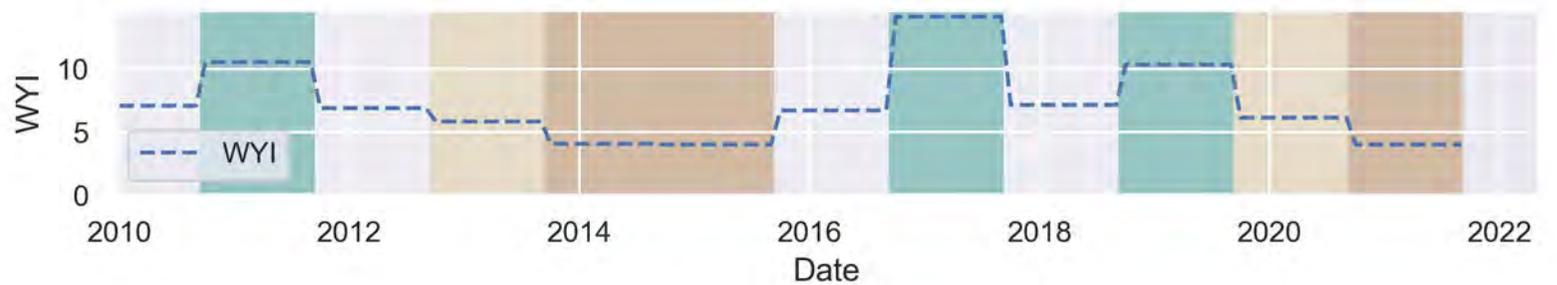
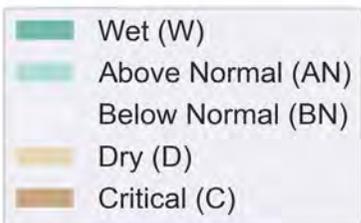
Perforation 1: 130.0 - 140.0 ft BGS; Perforation 2: 160.0 - 170.0 ft BGS; Perforation 3: 190.0 - 200.0 ft BGS



## Sustainable Management Criteria:

IM (2027) = 132.0 ft AMSL  
 MO = 130.0 ft AMSL  
 MT = 65.0 ft AMSL

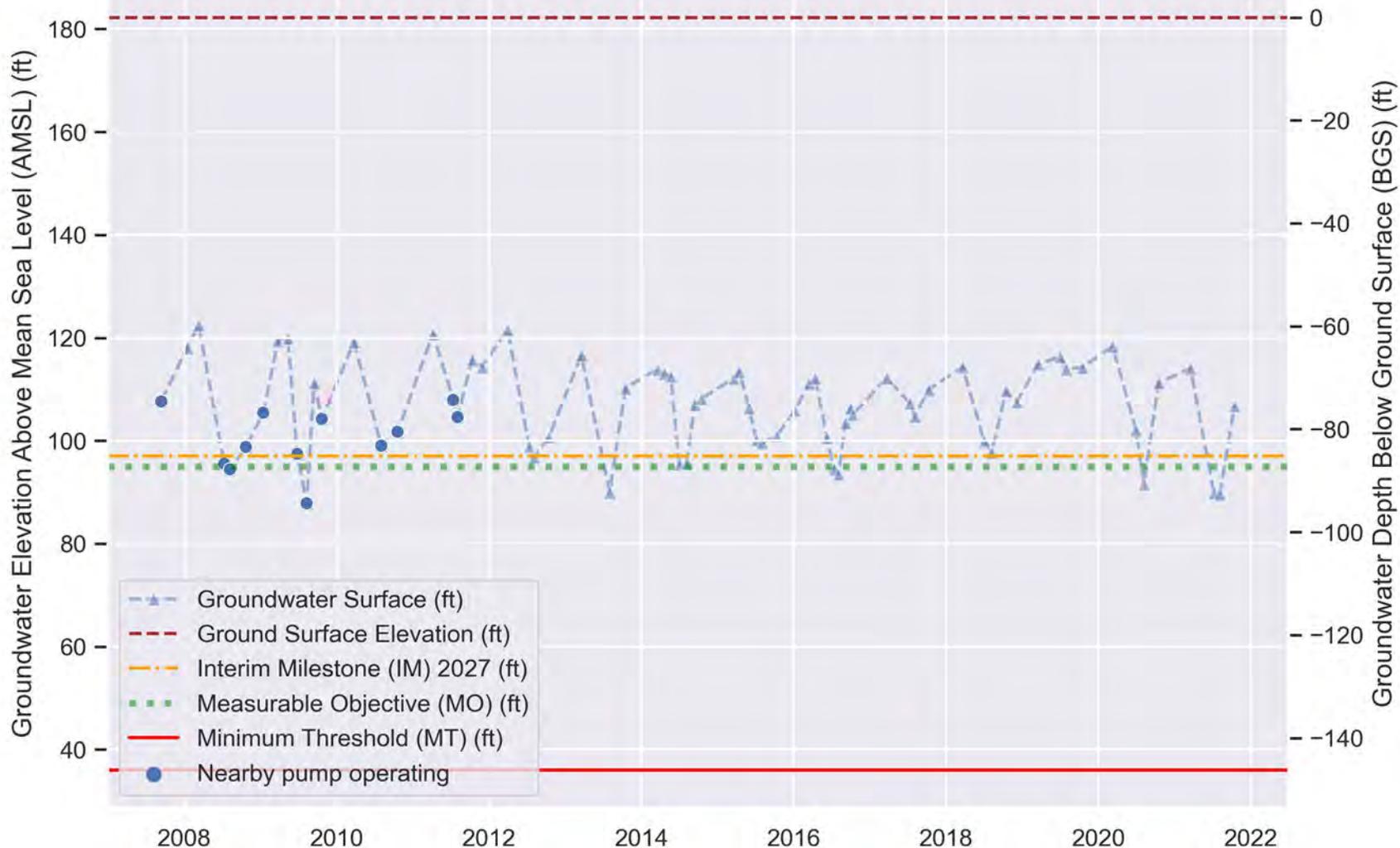
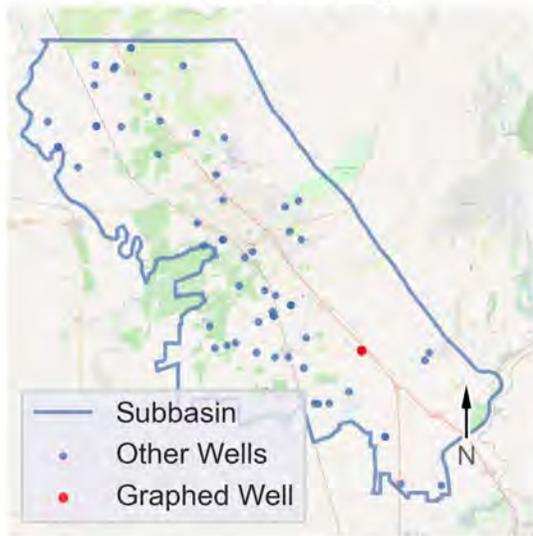
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): 21N02E26E005M

Perforation 1: 265.0 - 275.0 ft BGS; Perforation 2: 280.0 - 290.0 ft BGS

Well Location Map



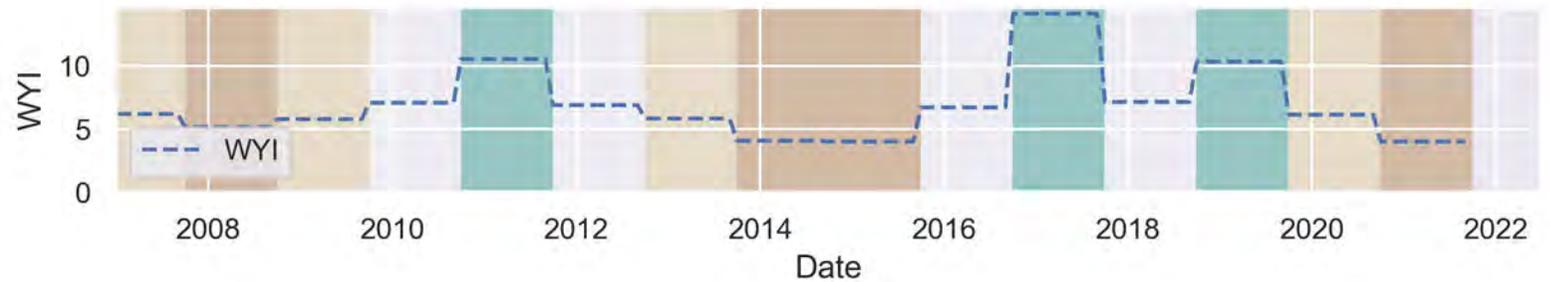
## Sustainable Management Criteria:

IM (2027) = 97.0 ft AMSL

MO = 95.0 ft AMSL

MT = 36.0 ft AMSL

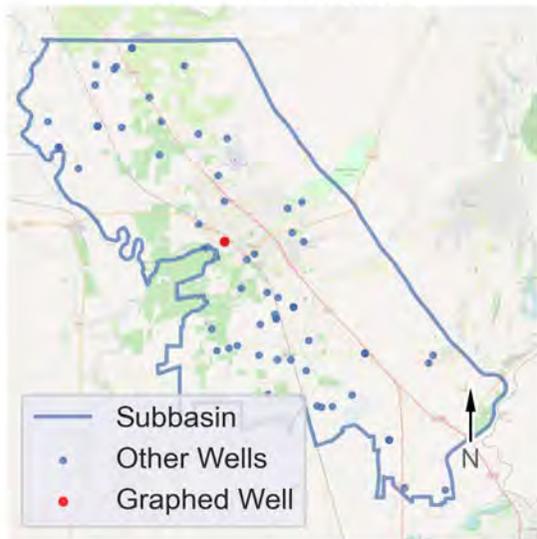
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): 22N01E28J003M

Perforation 1: 200.0 - 279.0 ft BGS

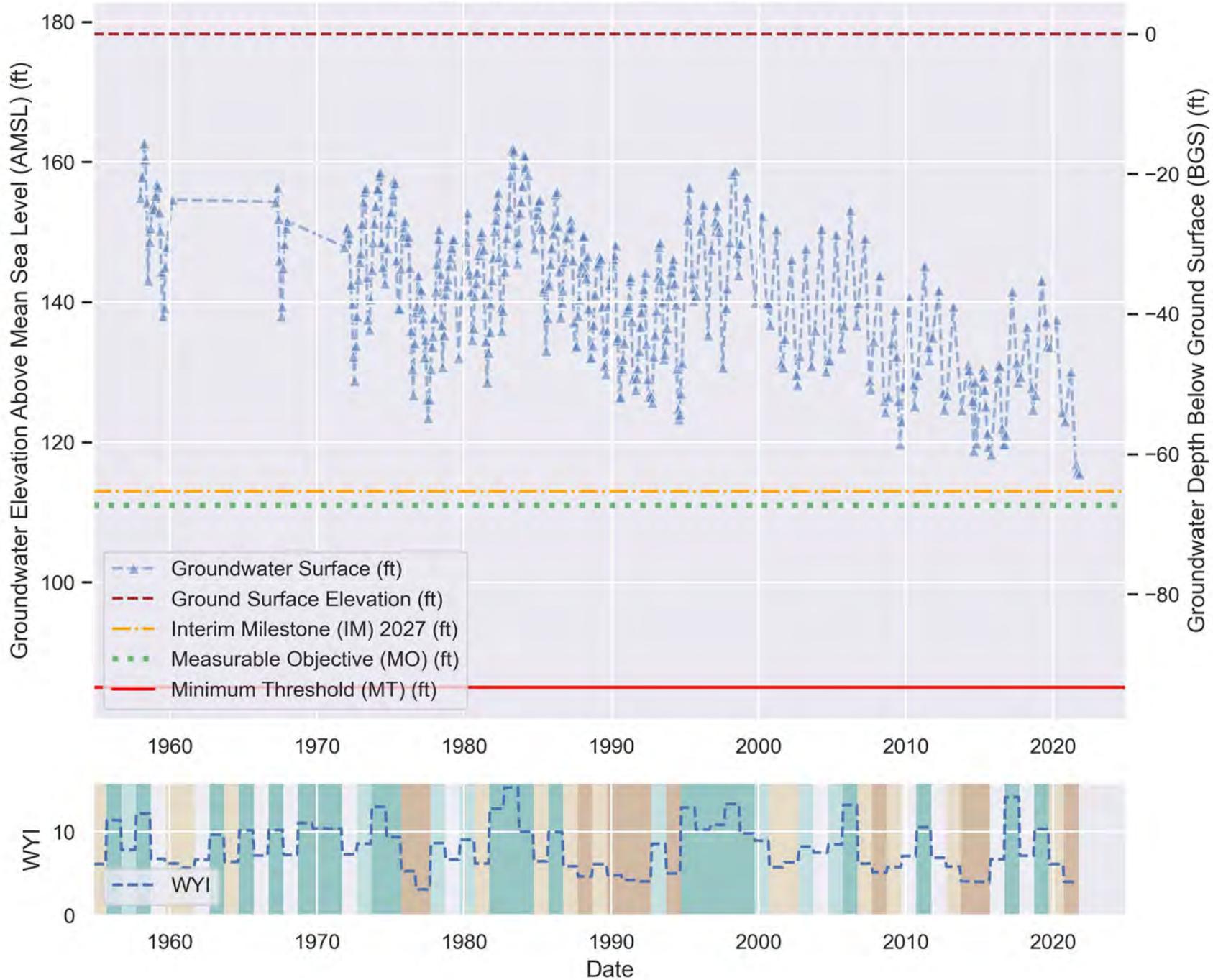
Well Location Map



## Sustainable Management Criteria:

IM (2027) = 113.0 ft AMSL  
 MO = 111.0 ft AMSL  
 MT = 85.0 ft AMSL

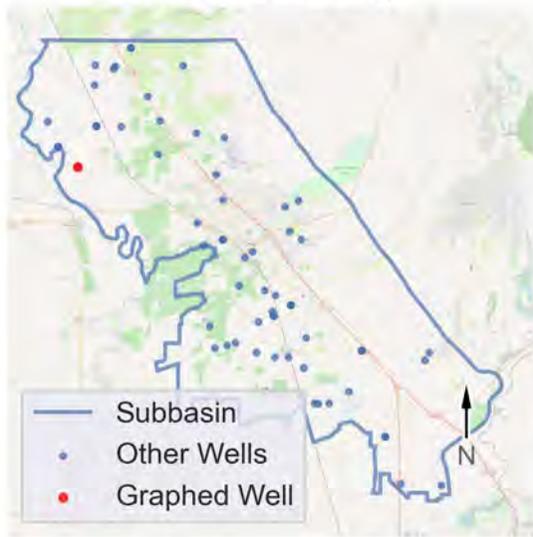
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



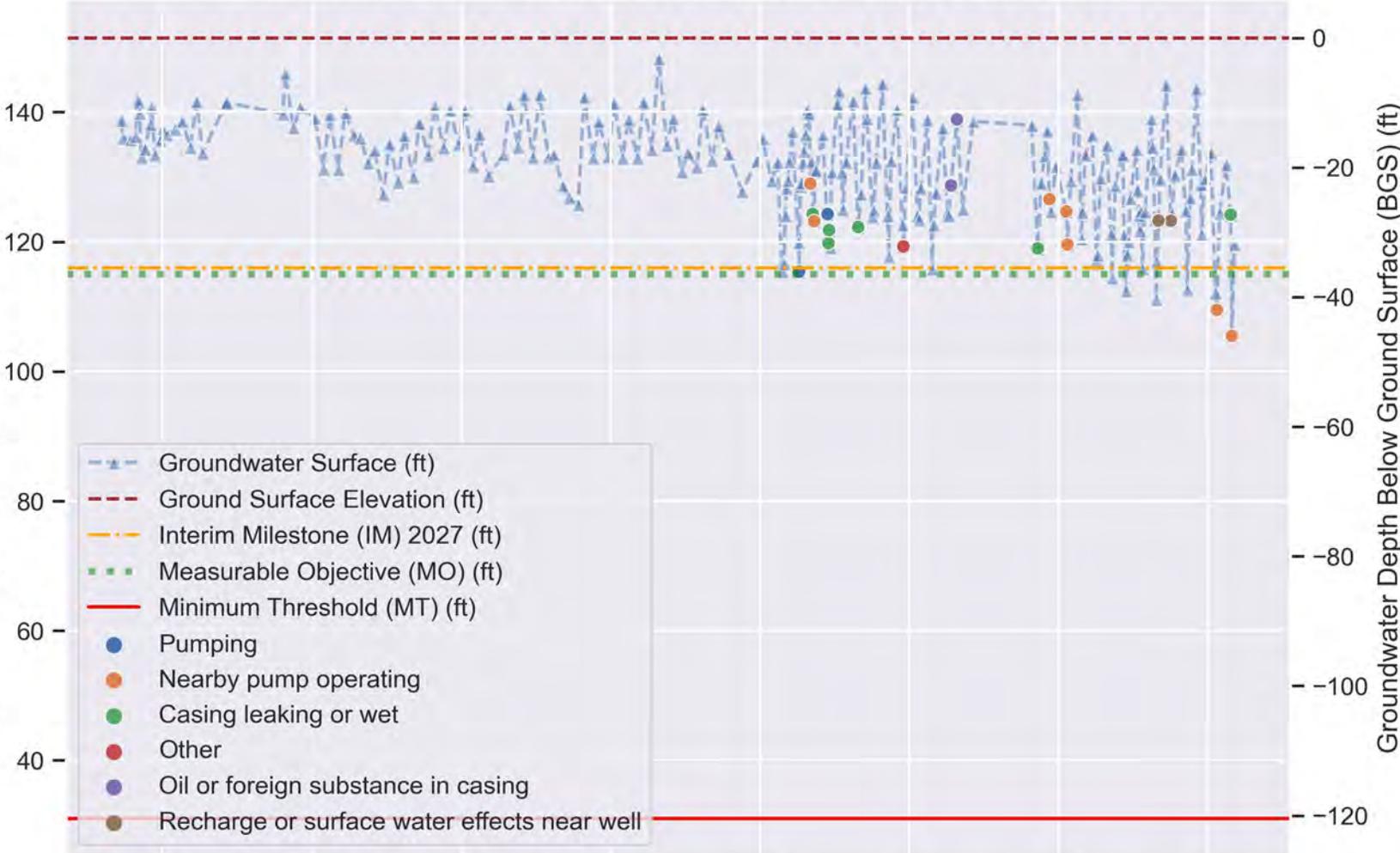
# VINA Subbasin - State Well Number (SWN): 22N01W05M001M

Perforation 1: 240.0 - 300.0 ft BGS; Perforation 2: 448.0 - 508.0 ft BGS

Well Location Map



Groundwater Elevation Above Mean Sea Level (AMSL) (ft)



Groundwater Depth Below Ground Surface (BGS) (ft)

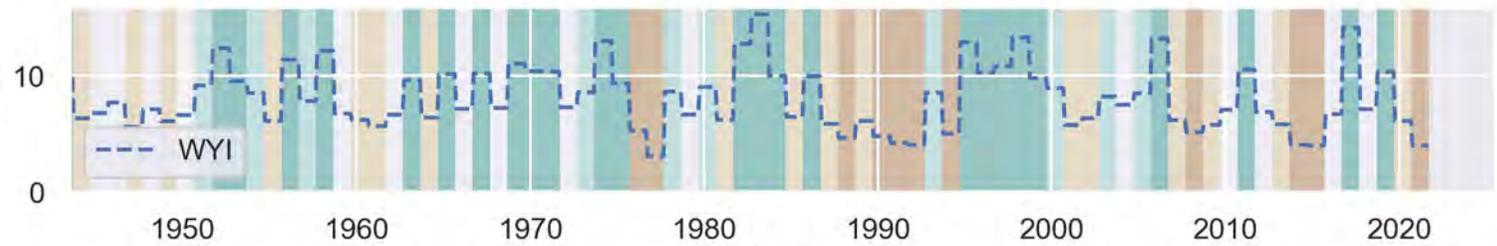
## Sustainable Management Criteria:

IM (2027) = 116.0 ft AMSL  
 MO = 115.0 ft AMSL  
 MT = 31.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



WYI

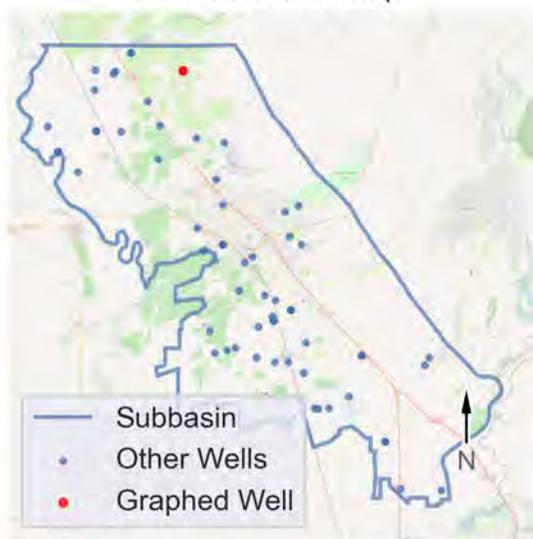


Date

# VINA Subbasin - State Well Number (SWN): 23N01E07H001M

Perforation 1: 115.0 - 195.0 ft BGS

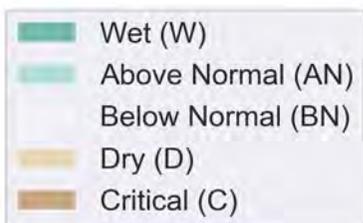
Well Location Map



## Sustainable Management Criteria:

IM (2027) = 140.0 ft AMSL  
 MO = 136.0 ft AMSL  
 MT = 72.0 ft AMSL

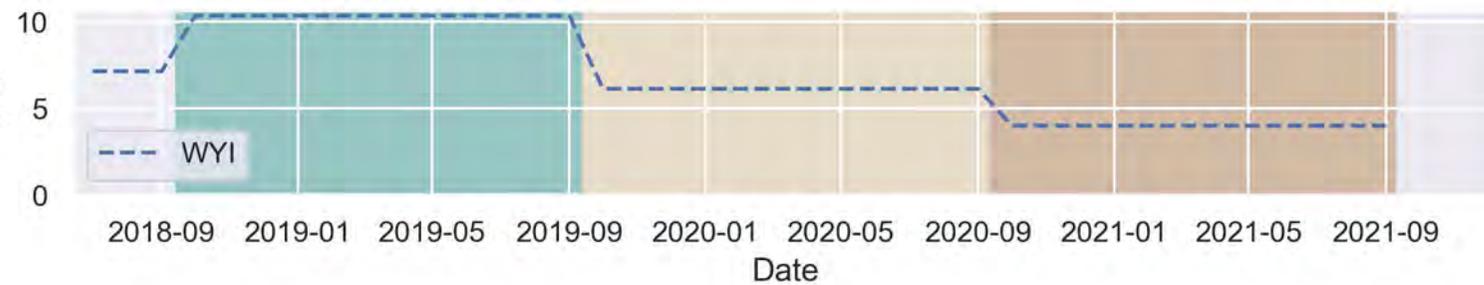
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



Groundwater Elevation Above Mean Sea Level (AMSL) (ft)



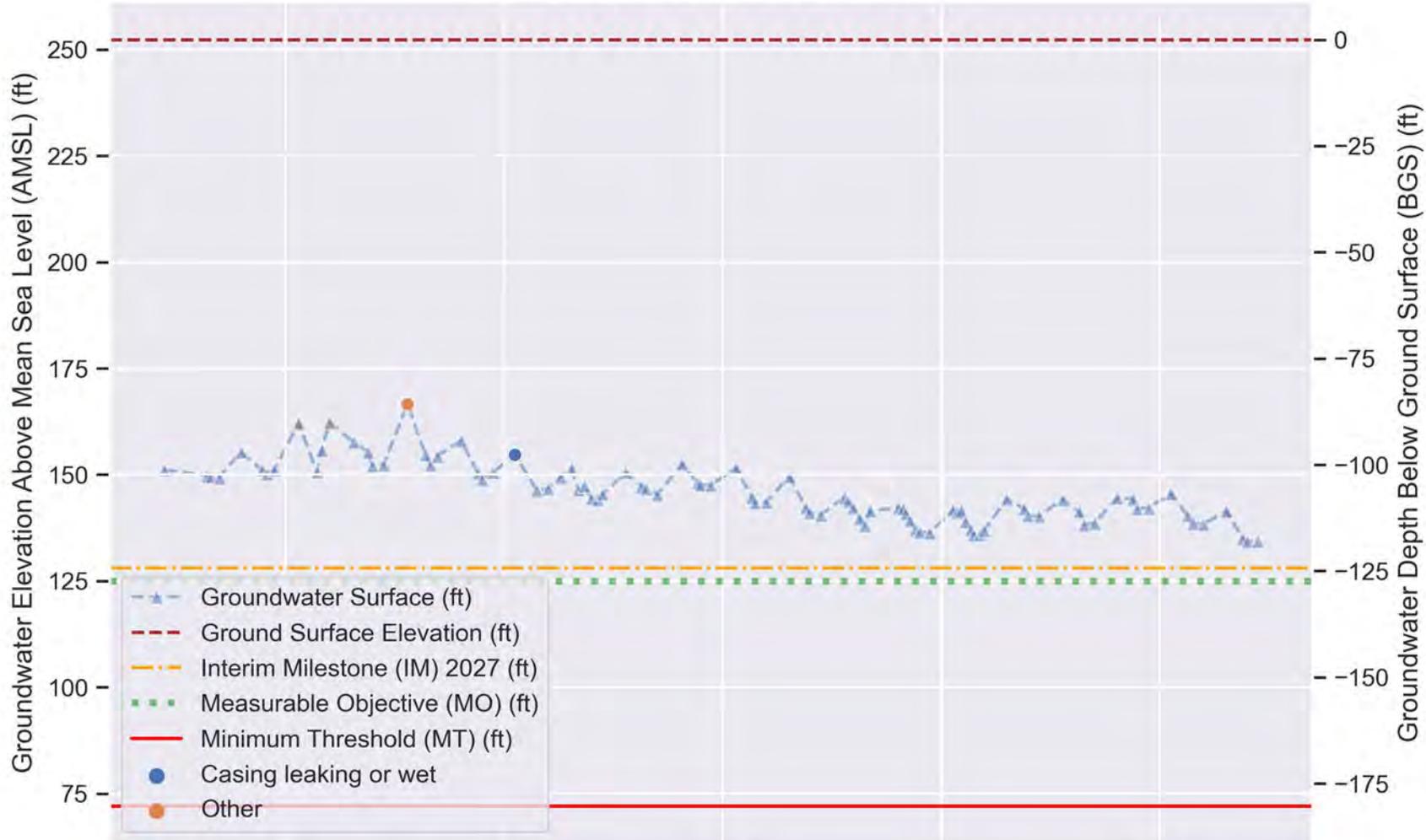
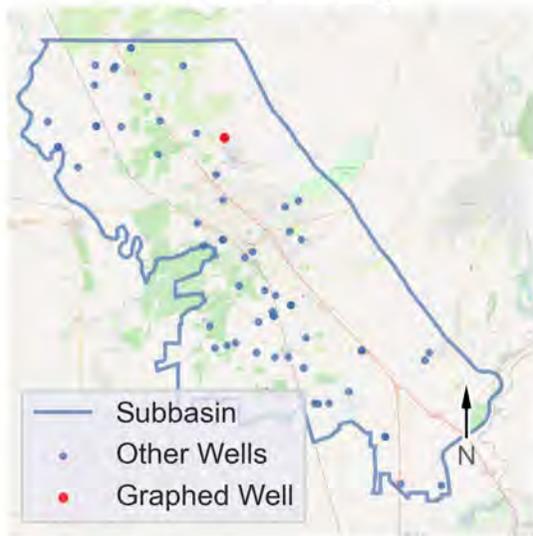
WYI



# VINA Subbasin - State Well Number (SWN): 23N01E33A001M

Perforation 1: 53.0 - 506.0 ft BGS

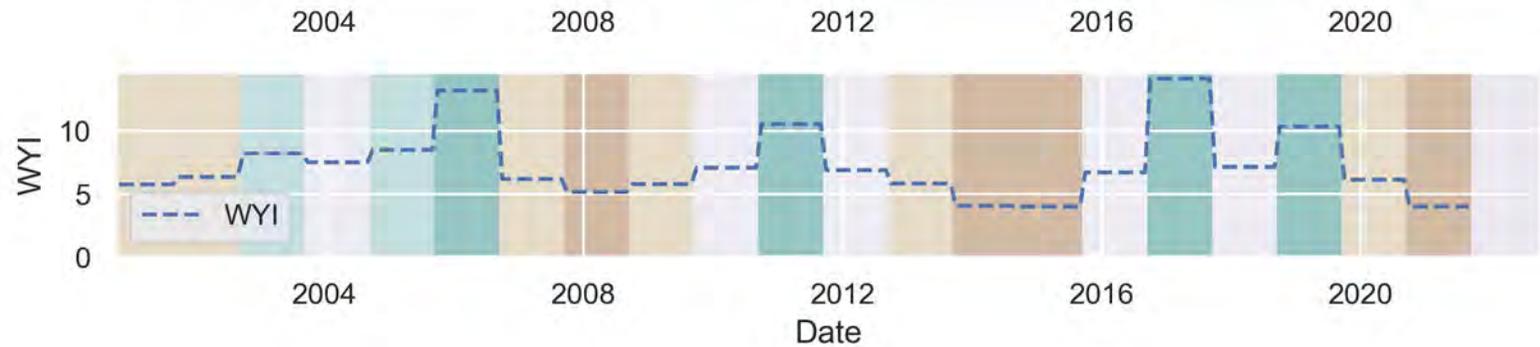
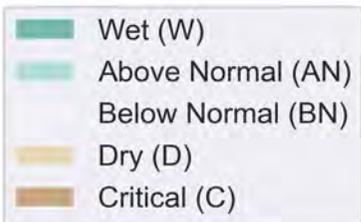
Well Location Map



## Sustainable Management Criteria:

IM (2027) = 128.0 ft AMSL  
 MO = 125.0 ft AMSL  
 MT = 72.0 ft AMSL

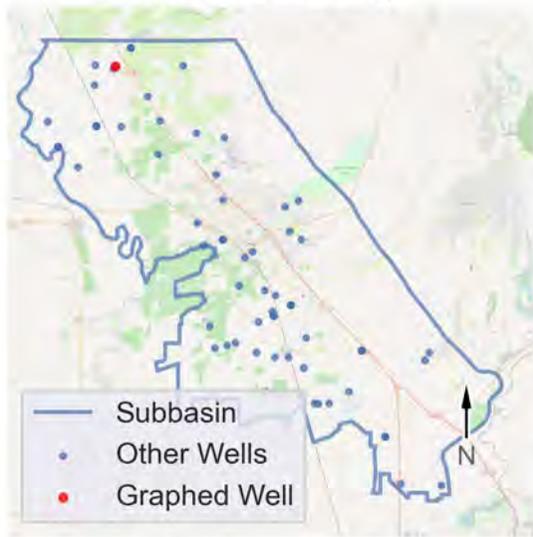
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



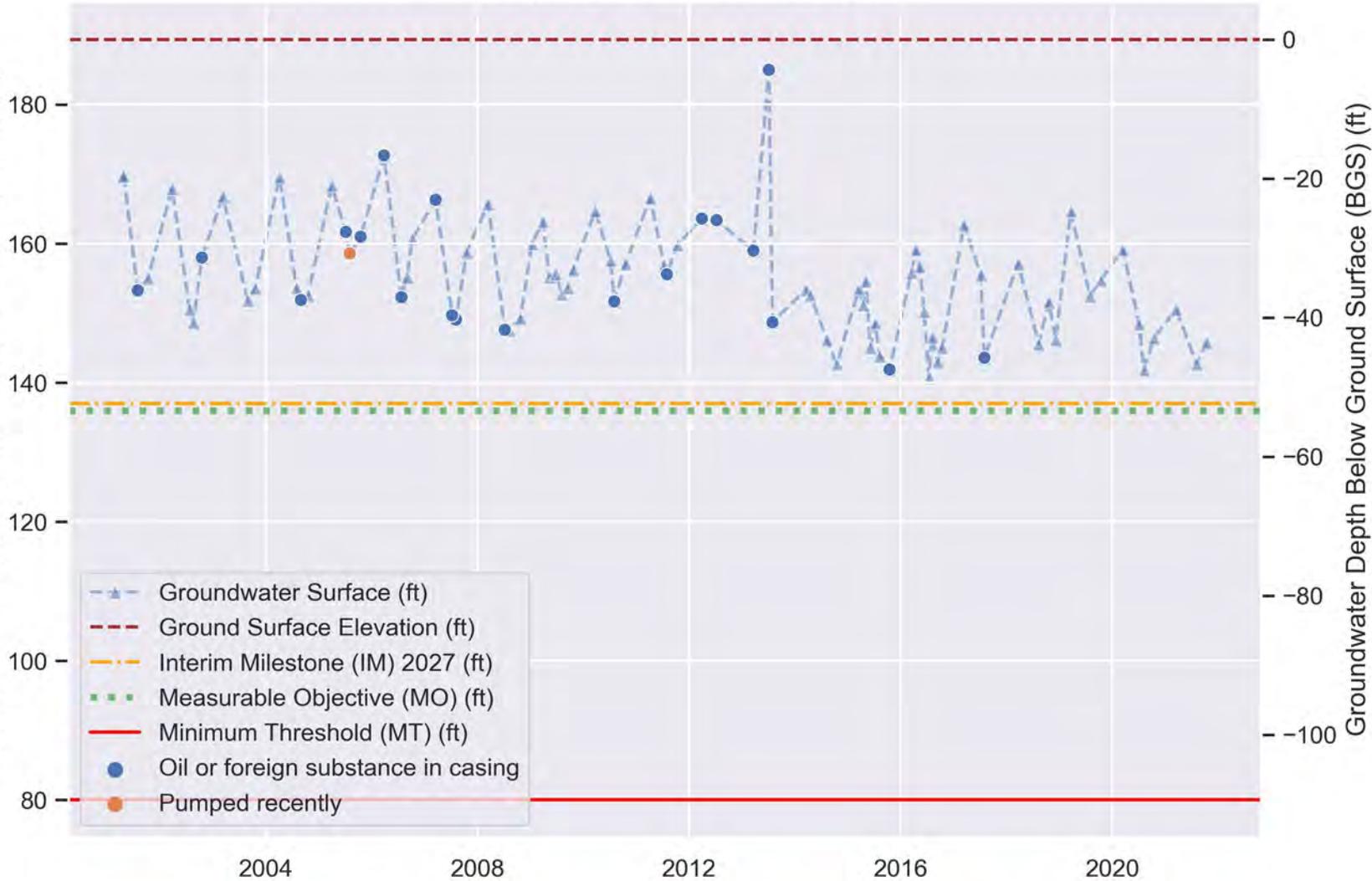
# VINA Subbasin - State Well Number (SWN): 23N01W10E001M

Perforation 1: 600.0 - 668.0 ft BGS

Well Location Map



Groundwater Elevation Above Mean Sea Level (AMSL) (ft)



Groundwater Depth Below Ground Surface (BGS) (ft)

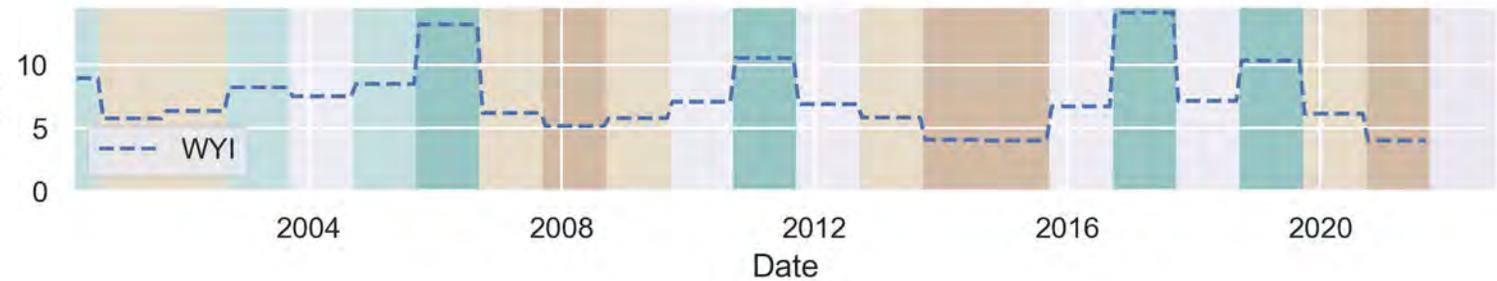
## Sustainable Management Criteria:

IM (2027) = 137.0 ft AMSL  
 MO = 136.0 ft AMSL  
 MT = 80.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



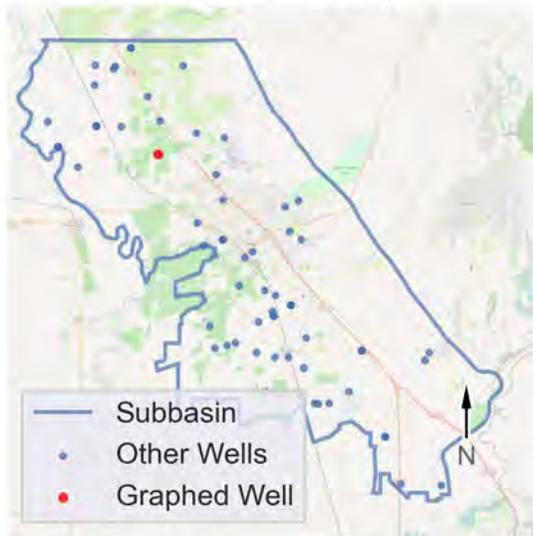
WYI



# VINA Subbasin - State Well Number (SWN): 23N01W36P001M

Perforation 1: 240.0 - 300.0 ft BGS; Perforation 2: 448.0 - 508.0 ft BGS

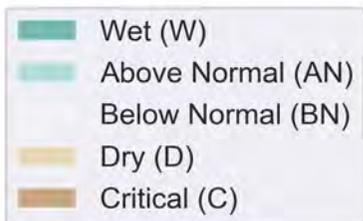
Well Location Map



## Sustainable Management Criteria:

IM (2027) = 110.0 ft AMSL  
 MO = 108.0 ft AMSL  
 MT = 45.0 ft AMSL

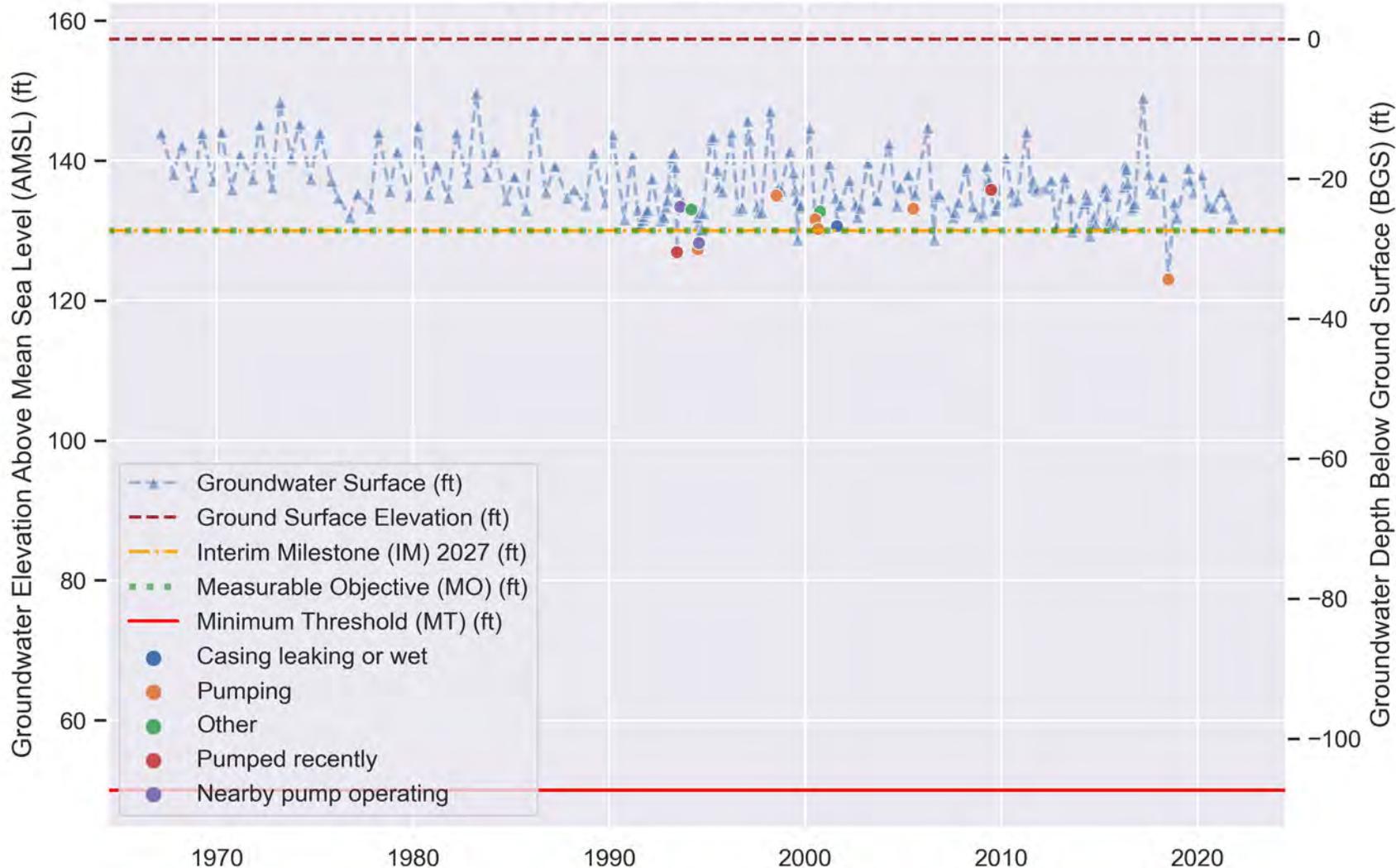
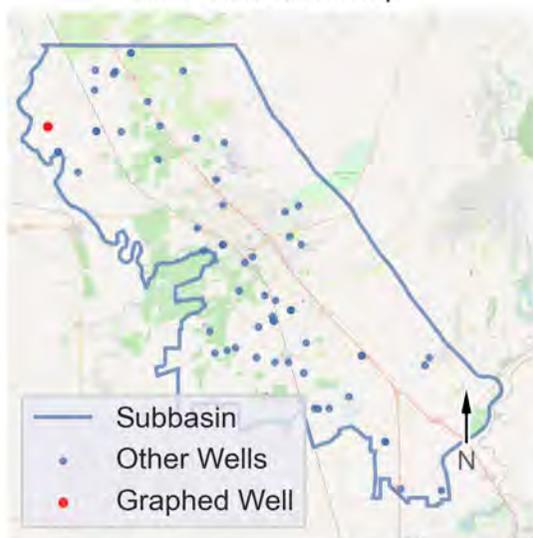
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): 23N02W25C001M

Perforation 1: 115.0 - 195.0 ft BGS

Well Location Map



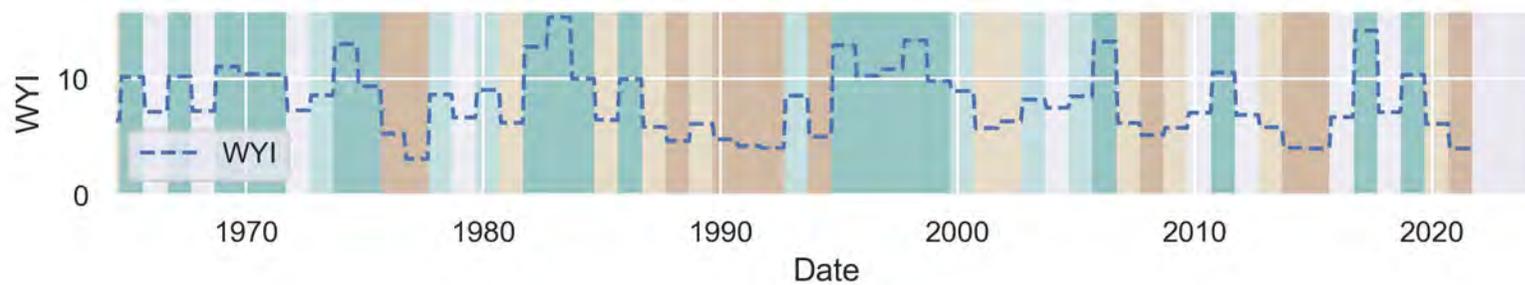
## Sustainable Management Criteria:

IM (2027) = 130.0 ft AMSL

MO = 130.0 ft AMSL

MT = 50.0 ft AMSL

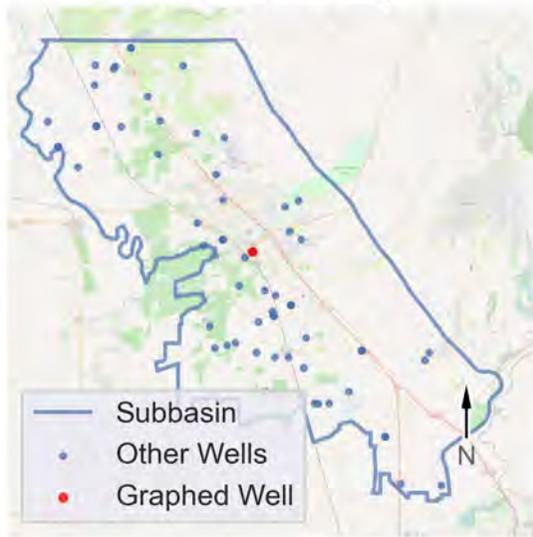
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): CWSCH01b

Perforation 1: Perforation data not available.

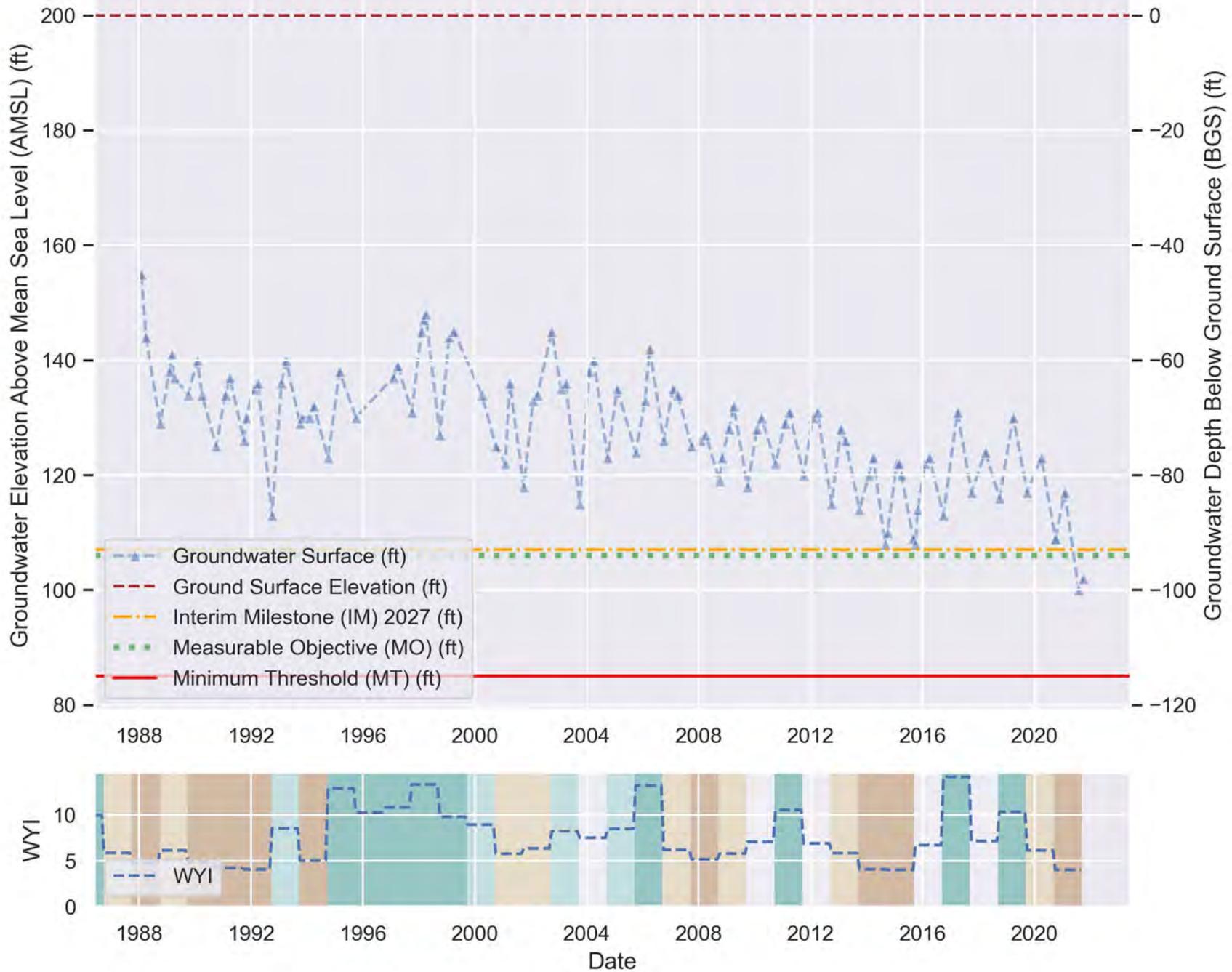
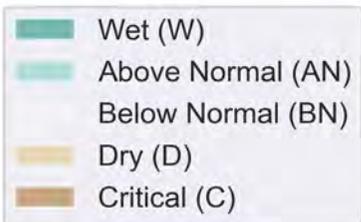
Well Location Map



## Sustainable Management Criteria:

IM (2027) = 107.0 ft AMSL  
 MO = 106.0 ft AMSL  
 MT = 85.0 ft AMSL

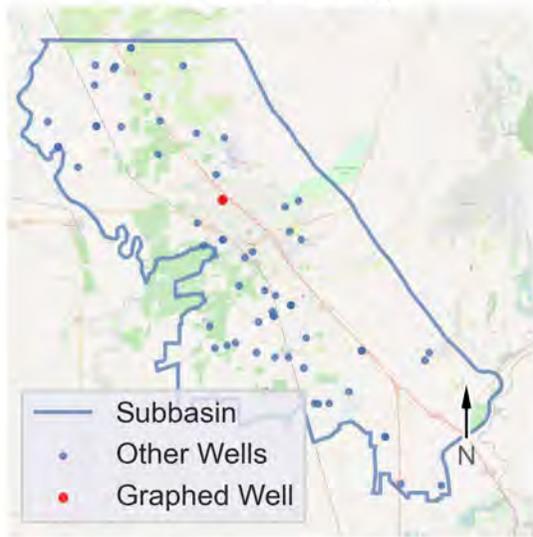
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): CWSCH02

Perforation 1: Perforation data not available.

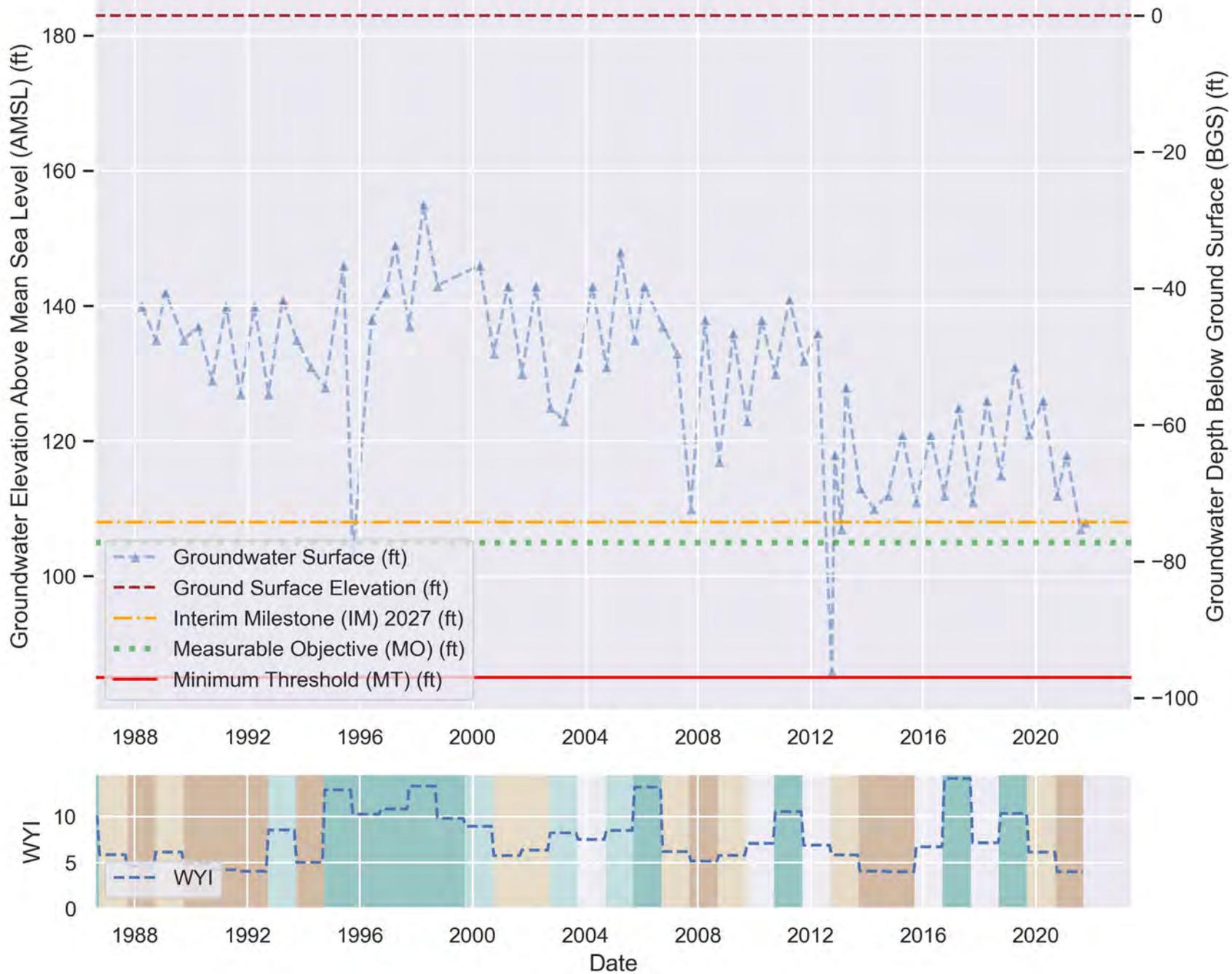
Well Location Map



## Sustainable Management Criteria:

IM (2027) = 108.0 ft AMSL  
 MO = 105.0 ft AMSL  
 MT = 85.0 ft AMSL

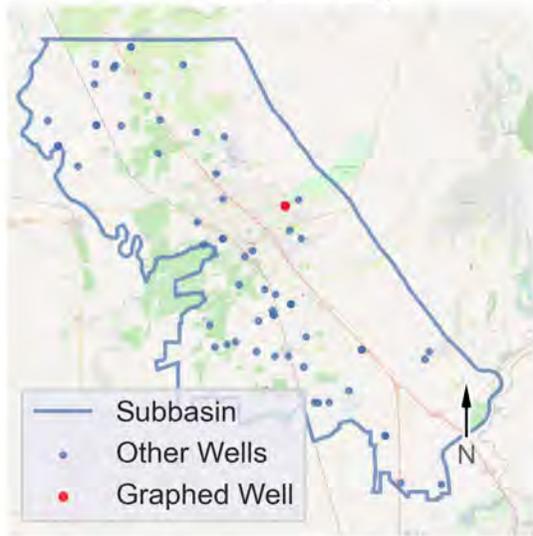
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): CWSCH03

Perforation 1: Perforation data not available.

Well Location Map



## Sustainable Management Criteria:

IM (2027) = 109.0 ft AMSL  
 MO = 108.0 ft AMSL  
 MT = 85.0 ft AMSL

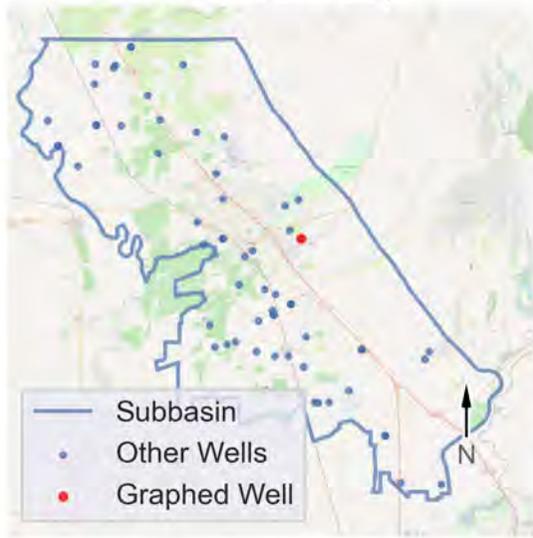
Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



# VINA Subbasin - State Well Number (SWN): CWSCH07

Perforation 1: Perforation data not available.

Well Location Map



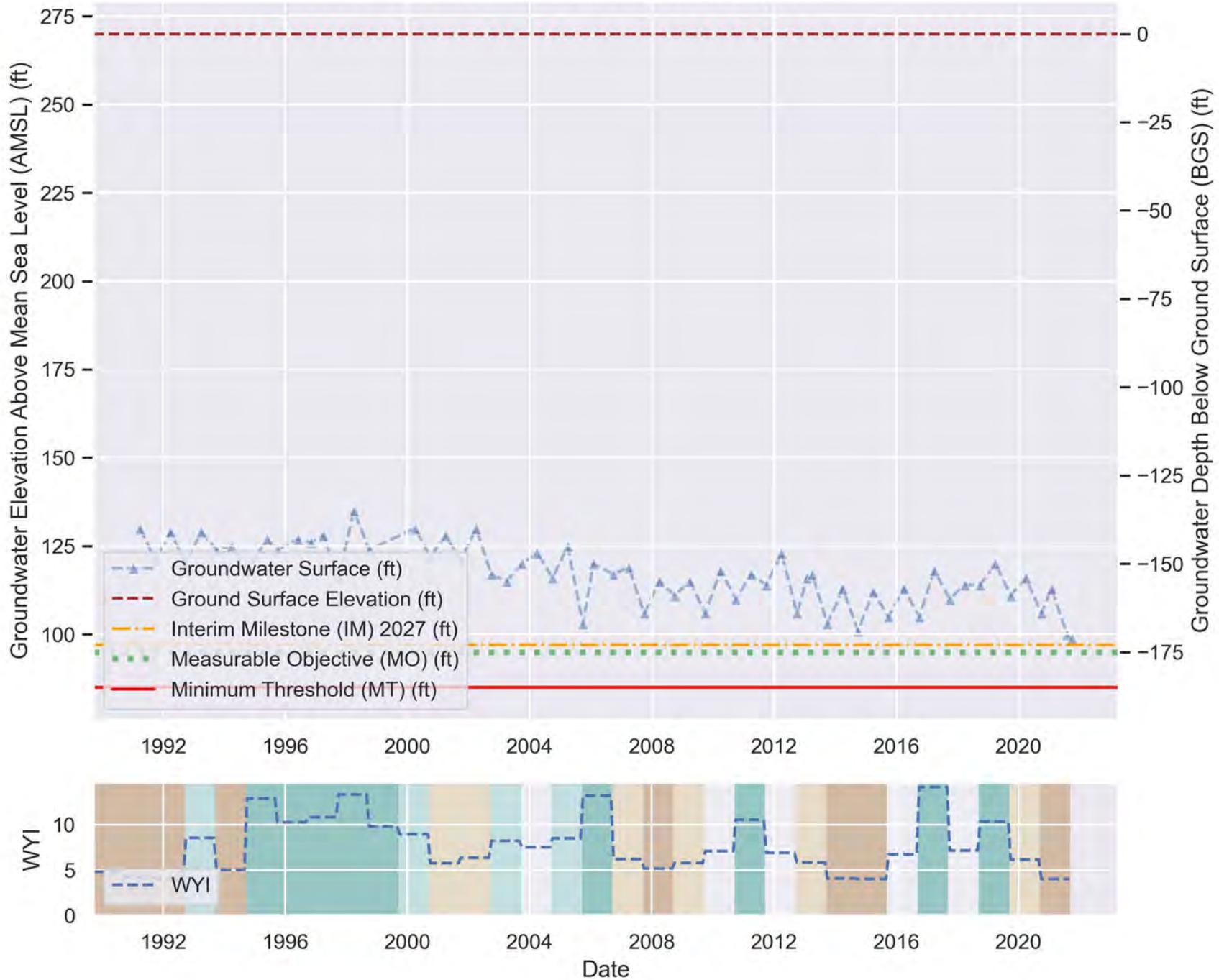
## Sustainable Management Criteria:

IM (2027) = 97.0 ft AMSL

MO = 95.0 ft AMSL

MT = 85.0 ft AMSL

Sacramento Valley Water Year Index (WYI) shown on lower right. Meaning of colors defined below.



2021 Water Year Annual Report

# Appendix B

Explanation of Sustainable Management Criteria

## Appendix B: Explanation of Sustainable Management Criteria

The Sustainable Groundwater Management Act (SGMA) requires a Groundwater Sustainability Plan (GSP) to define Sustainable Management Criteria (SMC) for the groundwater subbasin. The SMC offer guideposts and guardrails for groundwater managers seeking to achieve sustainable groundwater management. SGMA defines sustainable groundwater management as “the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results,” where the planning and implementation horizon is 50 years with the first 20 years spent working toward achieving sustainable groundwater management and the following 30 years (and beyond) spent maintaining it (California Water Code §10721).

Undesirable results are associated with up to six Sustainability Indicators (SI), including groundwater levels, groundwater storage, water quality, seawater intrusion, land subsidence, and interconnected surface water. SGMA defines undesirable results as those having significant and unreasonable negative impacts. Failure to avoid undesirable results on the part of the GSAs may lead to intervention by the State. Once the sustainability goal and undesirable results have been locally identified, projects and management actions are formulated to achieve the sustainability goal and avoid undesirable results.



### *SI and associated undesirable results, if significant and unreasonable*

The Vina Subbasin is divided into three management areas (MAs): North, Chico, and South. The associated undesirable results for each SI have been defined similarly across the three MAs within the Vina Subbasin. In turn, the rationale and approach for determining Minimum Thresholds and Measurable Objectives for each SI are the same across all MAs in the Vina Subbasin.

The terminology for describing SMC is defined as follows:

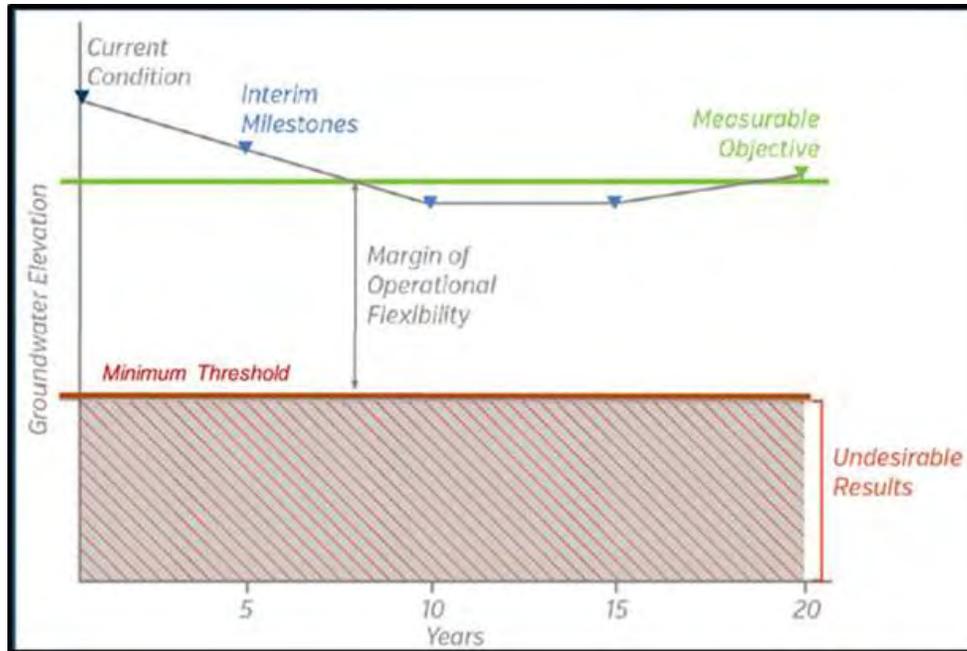
**Undesirable Results** – Significant and unreasonable negative impacts associated with each SI.

**Minimum Threshold (MT)** – Quantitative threshold for each SI used to define the point at which undesirable results may begin to occur.

**Measurable Objective (MO)** – Quantitative target that establishes a point above the MT that allows for a range of active management to prevent undesirable results.

**Margin of Operational Flexibility** – The range of active management between the MT and the MO.

**Interim Milestones (IMs)** – Targets set in increments of five years over the implementation period of the GSP offering a path to sustainability.



***Illustration of Terms Used for Describing Sustainable Management Criteria Using the Groundwater Level SI***

The Figure above illustrates these terms for the groundwater level SI.

SI are intended to be measured and compared against quantifiable SMC throughout a monitoring framework of Representative Monitoring Site (RMS) wells. Ongoing monitoring of SI can:

- Determine compliance with the adopted GSP
- Offer a means to evaluate the effectiveness of projects and management actions over time
- Allow for course correction and adaptation in five-year updates
- Facilitate understanding among diverse stakeholders
- Support decision-making on the part of the GSAs into the future

The SMC for the Vina Subbasin is fully explained and defined in Section 3 of the GSP available here:

<https://www.vinagsa.org/>

**Vina GSA Stakeholder Advisory Committee – Discussion on Potential Future Processes**

There are two guiding Vina GSA formation documents to consider when discussing items related to the Vina GSA Stakeholder Advisory Committee (SHAC). One is the attached Vina GSA Joint Powers Agreement, which established specific requirements of the SHAC. This agreement is rather solid and not easily amendable. The second document, also attached, is the SHAC Charter (rev.11/18/20) which could be amended by SHAC recommendations and Vina GSA Board approval. The intent of this discussion is to work on framing up a recommendation for the GSA Board to consider potential changes to the SHAC Charter.

The SHAC current processes have been discussed in previous SHAC meetings and some suggestions have already been voiced. In the table below, the Management Committee has tried to capture most of the topics previously heard, along with a list of how these processes were conducted through 2021. The Management Committee is also providing some guiding questions intended to help a discussion of the SHAC’s and Management Committee’s perspectives on future processes and how those may be accomplished with the resources available.

Based on SHAC input, the Management Committee will decide what level of service they can provide. Other tasks prioritized by the SHAC will be presented to the Board for consideration for how those tasks may be addressed.

Topic	Previously Included:	Moving Forward:
<b>Decision Making</b>	<ul style="list-style-type: none"> <li>• 10 members striving for consensus for Board recommendations</li> <li>• Only a quorum of all seated members in attendance (currently 6+) allows for a recommendation to the Board or other decisions</li> <li>• If consensus cannot be reached, reports indicating areas of agreement and disagreement are given to the Board.</li> </ul>	<p><b><u>Guiding questions</u></b></p> <ul style="list-style-type: none"> <li>• Although not required, is consensus still a priority for members?</li> <li>• Is a simple vote adequate?</li> <li>• Is a formal process of motions/seconds etc. required vs. wanted?</li> <li>• Who will keep the formal process in line if chosen?</li> </ul>
<b>Committee Structure</b>	<ul style="list-style-type: none"> <li>• 10 members striving for consensus for Board recommendations</li> <li>• No officers</li> </ul>	<p><b><u>Guiding questions</u></b></p> <ul style="list-style-type: none"> <li>• What would be the pros/cons of having a Chair/ Vice Chair?</li> <li>• Is it required to fill a need vs. a want?</li> <li>• Does it fill the facilitation role well?</li> <li>• Would facilitation be needed for specific deliverable type discussions in addition to having officers (i.e. The Board requests a recommendation from the SHAC on which PMAs to pursue)?</li> </ul>

<p><b>Facilitation</b></p>	<p><u>R Facilitation Support</u></p> <ul style="list-style-type: none"> <li>• Facilitation of discussions at mtgs. ensuring charter is upheld</li> <li>• Developing detailed meeting notes in coordination with staff and Committee, including distribution of drafts, inclusion of revisions and drafting/distributing final versions</li> <li>• Coordination with Management Committee re: development of agenda packets and public noticing</li> <li>• Coordination of Action Items</li> <li>• Hosting/Managing/Support for Zoom</li> <li>• Product development</li> <li>• Workshop development / planning / coordination</li> <li>• Correspondence with Committee and compilation</li> </ul>	<p><u>Guiding questions</u></p> <ul style="list-style-type: none"> <li>• Is facilitation required vs. wanted?</li> <li>• Is staff able to / trained to facilitate?</li> <li>• Is it appropriate for staff to facilitate?</li> <li>• What roles would a facilitator take on or not take on?</li> </ul>
<p><b>Meeting Summary/Record Keeping</b></p>	<p>ID of discussion points with extensive detail</p> <ul style="list-style-type: none"> <li>• ID of discussion points with extensive detail</li> <li>• Executive summary (brief)</li> <li>• Action item tables</li> <li>• Time stamps of recordings</li> <li>• Links to documents</li> <li>• Attendance record</li> <li>• Identification on areas of agreement and disagreement by name of member</li> </ul>	<p><u>Guiding questions</u></p> <ul style="list-style-type: none"> <li>• What are the priority elements to be captured? <ul style="list-style-type: none"> <li>- Decisions?</li> <li>- Areas of agreement /disagreement?</li> </ul> </li> <li>• Which elements are required versus wanted for ease?</li> </ul>

<p><b>Requests for Agenda Items / Staff Work</b></p>	<ul style="list-style-type: none"> <li>• Submit agenda items to Management Committee at least 5 business days before the meeting or the topic(s) are considered for the next mtg.</li> <li>• Requests of Staff made during meetings and provided if/when resources allow</li> </ul>	<p><b><u>Guiding questions</u></b></p> <ul style="list-style-type: none"> <li>• Depending on the item, is 5 days before a mtg. enough time to prepare backup items?</li> <li>• Should SHAC members vote on which items the Management Committee considers to be added to agenda or specific requests of staff?</li> <li>• Should the Management Committee keep SHAC efforts focused on GSP Implementation by having final say in management of the agenda</li> </ul>
--	---	--

**JOINT EXERCISE OF POWERS AGREEMENT  
ESTABLISHING THE VINA GROUNDWATER SUSTAINABILITY AGENCY**

This JOINT EXERCISE OF POWERS AGREEMENT (“Agreement”) establishing the Vina Groundwater Sustainability Agency is made and entered into and effective upon the date when the last Member Agency signs this Agreement (“Effective Date”) by and among the public agencies listed on the attached Exhibit A (“Members”) for the purpose of forming a Groundwater Sustainability Agency (“GSA”) and achieving groundwater sustainability in a portion of the Vina Groundwater Subbasin (“Basin”) within the jurisdictional boundaries of its Members.

**Recitals**

**WHEREAS**, in 2014, the California legislature adopted, and the Governor signed into law, three bills (SB 1168, AB 1739, and SB 1319) collectively referred to as the “Sustainable Groundwater Management Act” (“SGMA”), that initially became effective on January 1, 2015, and that has been amended from time-to-time thereafter; and

**WHEREAS**, the stated purpose of SGMA, as set forth in California Water Code section 10720.1, is to provide for the sustainable management of groundwater basins at a local level by providing local groundwater agencies with the authority, and technical and financial assistance necessary, to sustainably manage groundwater; and

**WHEREAS**, SGMA requires the designation of Groundwater Sustainability Agencies (“GSAs”) for the purpose of achieving groundwater sustainability through the adoption and implementation of Groundwater Sustainability Plans (“GSPs”) or an alternative plan for all medium and high priority basins as designated by the California Department of Water Resources (“DWR”); and

**WHEREAS**, each Member is a local agency, as defined by SGMA, duly organized and existing under and by virtue of the laws of the State of California, and each Member has water supply, water management or land use responsibilities within the Vina Subbasin, which is designated subbasin number 5-021.57 in the most recent edition of DWR Bulletin Number 118; and

**WHEREAS**, Section 10720.7 of SGMA requires all basins designated as high or medium priority basins by the DWR in its Bulletin 118 be managed under GSPs or coordinated GSPs pursuant to SGMA; and

**WHEREAS**, The Members have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the Members operating through a joint powers agency; and

**WHEREAS**, the Joint Exercise of Powers Act (Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the California Government Code; the “Act”), authorizes two or more public agencies to, by agreement, jointly exercise any power held in common by agencies entering into such an agreement and to exercise additional powers granted under the Act; and

**WHEREAS**, the Members desire, through this Agreement, to form the Vina Groundwater Sustainability Agency (“Agency”), a separate legal entity, for the purpose of acting as a GSA for the portion of the Basin within the jurisdictional boundaries of its Members; and

**WHEREAS**, the governing board of each Member has determined it to be in the Member's best interest and in the public interest that this Agreement be executed;

**NOW THEREFORE**, In consideration of the matters recited and the mutual promises, covenant, and conditions set forth in this Agreement, the Members hereby agree as follows:

## **TERMS OF AGREEMENT**

### **ARTICLE 1. DEFINITIONS**

As used in this Agreement, unless context requires otherwise, the meanings of the terms set forth below shall be as follows:

1.1. "Act" means the Joint Exercise of Powers Act, set forth in Chapter 5 of Division 7 of Title 1 of the Government Code, sections 6500, *et seq.*, including all laws supplemental thereto.

1.2. "Agency" means the Vina Groundwater Sustainability Agency.

1.3. "Agency Jurisdiction" means those areas in the Basin where the Agency is the exclusive GSA within the basin.

1.4. "Agreement" means this joint powers agreement, which creates the Vina Groundwater Sustainability Agency.

1.5. "Basin" means the Vina Subbasin, to reflect the most recent Bulletin 118 boundaries and as currently shown on the map attached to this Agreement as Exhibit B, which is incorporated herein by this reference.

1.6. "Board of Directors" or "Board" means the governing body of the Agency as established by Article 7 of this Agreement.

1.7. "Board Member" or "Director" shall mean a member of the Agency's Board of Directors.

1.8. "Committee" shall mean any committee established pursuant to Article 11 of this Agreement.

1.9. "Effective Date" means the date on which the last Member executes this Agreement.

1.10. "Fiscal Year" means July 1 through June 30.

1.11. "GSA" shall mean a groundwater sustainability agency.

1.12. "GSP" shall mean a groundwater sustainability plan.

1.13. "Member" means each party to this Agreement that satisfies the requirements of section 6.1 of this Agreement, including any new members as may be authorized by the Board pursuant to Section 6.2 of this Agreement.

1.14. "Member Director" means a director or alternate director appointed by the governing board of each Member pursuant to Article 7 of this Agreement.

1.15. "Member's Governing Body" means the board of directors, trustees or other voting body that controls the individual public agencies that are Members.

1.16. "SGMA" has the meaning assigned to it in the first Recital of the Agreement.

1.17. "Special Project" means a project undertaken by some, but not all Members of the Agency, pursuant to Article 14 of this Agreement.

1.18. "Stakeholder Director" means a Director appointed pursuant to Article 6 that represents stakeholder interests.

1.19. "Association" means Agricultural Groundwater Users of Butte County.

1.20. "State" means the State of California.

1.21. "Management Area" refers to an area within a basin for which a GSP may identify different minimum thresholds, measurable objectives, monitoring, and projects and actions based on unique local conditions or other circumstances as described in the GSP regulations. The GSP must describe each Management Area, including rationale for approach and demonstrate it can be managed without causing undesirable results inside the Management Area or outside of the Management Area.

1.22. "Coordination Agreement" means a legal agreement adopted between two or more GSAs that provides the basis for intra-basin coordination of the GSPs of multiple GSAs within a basin pursuant to SGMA.

## **ARTICLE 2. THE AGENCY**

2.1. Upon the effective date of this Agreement, the Agency is hereby created. Pursuant to the provisions of the Act, the Agency shall be a public agency separate from its Members.

2.2. The Agency Jurisdiction boundaries shall be as shown on the map on Exhibit B, which is attached to this Agreement and incorporated herein by this reference. The Basin boundary will reflect the most recent Bulletin 118 boundaries as they become available. The Board of Directors may, upon a majority vote and without amendment to this Agreement, modify the boundaries of the GSA so as to continue serving as a GSA for the Vina Subbasin, as the same may be modified from time to time by DWR.

## **ARTICLE 3. PURPOSE OF THE AGENCY**

3.1. The purpose of this Agreement is to create a joint powers agency (Agency) that will elect to be a GSA for the Basin. The purpose of the Agency is to (a) provide for the joint exercise of powers common to each of the Members and powers granted pursuant to SGMA (subject to the restrictions contained in this Agreement); (b) cooperatively carry out the purposes of SGMA; (c) become a GSA for purposes of management of the Basin in accordance with

SGMA; (d) develop, adopt, and implement a legally sufficient GSP for the Basin in order to implement SGMA requirements and achieve the sustainability goals outlined in SGMA; (e) to enter into a Coordination Agreement (as applicable) with other GSAs in the Vina subbasin to mutually achieve groundwater sustainability; and (f) to comply with any further legislative mandates that alter or amend SGMA within the Agency Jurisdiction. Additional organizing principles include (a) public involvement and stakeholder outreach and engagement in developing and implementing the Vina Subbasin Groundwater Sustainability Plan; and (b) mutual respect for the autonomy of individual Members and preservation of each Member's separate legal authorities, powers, duties and rights as separate public agencies, except as set forth in this Agreement.

#### **ARTICLE 4. TERM**

4.1. This Agreement shall become effective upon execution by each of the Parties and shall continue in full force and effect until terminated pursuant to the provisions of Article 17.

4.2. By execution hereof, each Member certifies and declares that it is a legal entity that is authorized to be a party to a joint exercise of powers agreement and to contract with each other for the joint exercise of a common power under Article 1, Chapter 5, Division 7, Title 1 of the Government Code, commencing with section 6500 or other applicable law including but not limited to California Water Code § 10720.3(c).

#### **ARTICLE 5. POWERS OF THE AGENCY**

5.1 Powers. To the extent authorized by the Members through the Board of Directors, and subject to the limitations of this Agreement, the Agency shall possess the ability to exercise those powers specifically granted by the Act and SGMA. Additionally, the Agency shall possess the ability to exercise the common powers of its Members related to the purposes of the Agency, including, but not limited to, the following:

- 5.1.1 To designate itself the GSA for the Agency Jurisdiction pursuant to SGMA.
- 5.1.2 To develop, adopt and implement a GSP for the Agency Jurisdiction pursuant to SGMA.
- 5.1.3 To adopt rules, regulations, policies, bylaws and procedures governing the operation of the Agency and adoption and implementation of a GSP for the Agency Jurisdiction.
- 5.1.4 To adopt ordinances within the Agency Jurisdiction consistent with the purpose of the Agency as necessary to implement the GSP and otherwise meet the requirements of the SGMA.
- 5.1.6 To obtain legal, financial, accounting, technical, engineering, and other services needed to carry out the purposes of this Agreement.
- 5.1.7 To perform periodic reviews of the GSP including submittal of annual

reports.

- 5.1.8 To require the registration and monitoring of wells within the Agency Jurisdiction.
- 5.1.9 To issue revenue bonds or other appropriate public or private debt and incur debts, liabilities or obligations.
- 5.1.10 To exercise the powers permitted under Government Code section 6504 or any successor statute.
- 5.1.11 To levy taxes, assessments, charges and fees as provided in SGMA or otherwise provided by law.
- 5.1.12 To regulate and monitor groundwater extractions within the Agency Jurisdiction as permitted by SGMA, provided that this Agreement does not extend to a Member's operation of its systems to distribute water once extracted or otherwise obtained, unless and to the extent required by other laws now in existence or as may otherwise be adopted.
- 5.1.13 To establish and administer projects and programs for the benefit of the Basin.
- 5.1.14 To cooperate, act in conjunction and contract with the United States, the State of California, federally recognized Tribes or any agency thereof, counties, municipalities, special districts, groundwater sustainability agencies, public and private corporations of any kind (including without limitation, Public Utilities Commission (PUC) regulated utilities and mutual water companies), and individuals, or any of them, for any and all purposes necessary or convenient for the full exercise of powers of the Agency.
- 5.1.15 To accumulate operating and reserve funds and invest the same as allowed by law for the purposes of the Agency and to invest funds pursuant to California Government Code section 6509.5 or other applicable State Law.
- 5.1.16 To apply for and accept grants, contributions, donations and loans under any federal, state or local programs for assistance in development or implementing any of its projects or programs for the purposes of the Agency.
- 5.1.17 To acquire by negotiation, lease, purchase, construct, hold, manage, maintain, operate and dispose of any buildings, property, water rights, works or improvements within and without the respective boundaries of the Members necessary to accomplish the purposes described herein.
- 5.1.18 To sue and be sued in the Agency's own name.
- 5.1.19 To exercise the common powers of its Members to develop, collect, provide and disseminate information that furthers the purposes of the Agency, including but not limited to the operation of the Agency and

adoption and implementation of a GSP for the Agency Jurisdiction to the Members' legislative, administrative, and judicial bodies, as well as the public generally.

5.1.20 To perform all other acts necessary or proper to carry out fully the purposes of this Agreement.

5.1.21 To enter into a Coordination Agreement with other GSAs in the Vina Basin who elect to develop and implement their own GSP.

5.2 Preservation of Powers. Each Member reserves the right, in its sole and absolute discretion and the Agency and all of its Members confirm that nothing contained herein shall grant the Agency any power to:

5.2.1 Alter any water right, contract right, or any similar right held by its Members or any Member's landowners or customers, or amend a Member's water delivery practice, course of dealing, or conduct without the express consent of the holder thereof.

5.2.2 Limit or interfere with the respective Members' rights and authorities over their own internal matters, including, but not limited to, an agency's legal rights to surface water supplies and assets, groundwater supplies and assets, facilities, operations, water management and water supply matters.

5.2.3 Modify or limit a Member's police powers, land use authorities, well permitting or any other authority.

5.2.4 Prevent an eligible local agency from becoming a GSA, and exercise the powers conferred to a GSA, within the Member's boundaries, except in the case of Butte County who shall have the right to become a GSA for those areas not overlapping other Members' boundaries;

5.3 Coordination within the Basin. Each Member acknowledges that SGMA requires that multiple GSAs within a Basin subject to SGMA must coordinate, and are required to use the same data and consistent methodologies for certain required technical assumptions when developing a GSP, and that the entire Basin must be managed under one or more GSP(s) to be deemed in compliance with SGMA.

5.4 Coordination between Basins. In order to maintain consistency and the efficient use of resources, to the extent feasible, the Agency shall strive to coordinate between and among the other adjoining subbasins for administration, matters involving public communication and outreach, and for developing frameworks to support groundwater management, which may include agreement to certain areas of coordination, provided that the Agency retain its own authority and that such recommendations are ratified by the Board. The Agency may clarify and acknowledge coordination among the other GSAs through a document or agreement if deemed appropriate.

## **ARTICLE 6. MEMBERSHIP**

6.1. Initial Members. The initial Members of the Agency shall be the County of Butte, City of Chico, and Durham Irrigation District.

6.2. New Members. Additional Parties may join the Agency and become a Member provided that the prospective new member: (a) is eligible to join a GSA as provided by SGMA (Water Code §10723), (b) possesses powers common to all other Members, (c) pays its share of all previously incurred costs, if any, (d) pays all applicable fees and charges, if any, and (e) receives unanimous consent of the existing Members, evidenced by the execution of a written amendment to this Agreement signed by all Members, including the additional public agency.

6.3 Role of Members. Each Member agrees to undertake such additional proceedings or actions as may be necessary in order to carry out the terms and intent of this Agreement. The support of each Member is required for the success of the Agency in complying with and implementing SGMA. This support will involve the following types of actions:

6.3.1. The members will provide support to the Board of Directors and any third party facilitating the development of the GSP by making available staff time, information and facilities within available resources.

6.3.2. Each Member may contribute to the Agency.

6.3.3. Contributions of public funds and of personnel, services, equipment, or property may be made to the Agency by any Member for any of the purposes of this Agreement, provided that no repayment will be made for such contributions.

## **ARTICLE 7. AGENCY DIRECTORS AND OFFICERS**

7.1. Formation of the Board of Directors. The Agency shall be governed and administered by a Board of Directors (“Board of Directors” or “Board”) which is hereby established and which shall be initially composed of one (1) voting seat per Member. Without amending this Agreement, the composition of the Board may be altered from time to time to reflect the addition of stakeholder directors, the withdrawal of any Member and/or the admission of any New Member. The governing board shall be known as the “Board of Directors of the Vina Groundwater Sustainability Agency.” All voting power shall reside in the Board. The Board shall consist of the following representatives, who shall be appointed in the manner set forth in Section 7:

7.1.1. One (1) representative appointed by the governing board of each Member, who shall be a member of the governing body of the Member (each, a “Member Director”).

7.1.2. Two (2) Stakeholder Directors appointed by the Butte County Board of Supervisors. One Stakeholder Director shall be representative of agricultural groundwater user stakeholders and interests within the Agency Jurisdiction and one Stakeholder Director shall be representative of domestic well user stakeholders and interests within the Agency Jurisdiction. The two (2) Stakeholder Directors shall meet the following qualifications:

(a) One (1) Agricultural Stakeholder Director. The Agricultural Stakeholder Director shall meet the following criteria, determined at the sole discretion of the Butte County Board of Supervisors: (1) reside in the Agency Jurisdiction; (2) own/lease real property in active commercial agricultural production overlying the Agency Jurisdiction or be an employee of a commercial agricultural production operation overlying the Agency Jurisdiction involved with water use decisions; (3) the commercial agricultural production operation extracts groundwater from the Agency Jurisdiction for the irrigation/frost protection of at least fifty (50) acres of agricultural crops in commercial operation; and (4) the business entity that the

Agricultural Stakeholder represents has commercial agricultural interests solely within the Sacramento Valley region. The Agricultural Stakeholder, or the entity he/she represents, may not be a party to any pending litigation against the Agency or any of its Members.

(b) One (1) Non-Agricultural Domestic Well User Stakeholder Director. The Domestic Well User Stakeholder Director shall meet the following criteria, determined at the sole discretion of the Butte County Board of Supervisors: (1) reside in the Agency Jurisdiction and owns or leases residential real property in the Agency Jurisdiction; and (2) extracts groundwater from the Agency Jurisdiction for domestic water use only. The Domestic Well User Stakeholder may not be a party to any pending litigation against the Agency or any of its Members.

7.2. Duties of the Board of Directors. The business and affairs of the Agency, and all of the powers of the Agency, including without limitation all powers set forth in Article 5, are reserved to and shall be exercised by and through the Board of Directors, except as may be expressly delegated to others pursuant to this Agreement, Bylaws, or by specific action of the Board of Directors.

7.3. Appointment of Directors. The Directors shall be appointed as follows:

7.3.1. Member Directors. Each Member Director must sit on the governing board of the Member agency and be appointed by that governing board by notification, which shall be transmitted to the Chair of the Agency following adoption by the Member.

7.3.2. Stakeholder Directors. The two (2) Stakeholder Directors shall be appointed as follows:

(a) Agricultural Stakeholder Director. Butte County shall conduct an open application process and identify the qualified candidates. The Agricultural Groundwater Users of Butte County (Association) shall provide a list of four (4) nominees selected from the list of qualified candidates.

(b) Domestic Well User Stakeholder Director. Butte County shall conduct an open application process and identify the qualified candidates.

(c) Ad-hoc Nomination Committee. Member Agencies, excluding Butte County, shall form an ad-hoc nomination committee that shall provide recommendations on Stakeholder Directors' selection to the Butte County Board of Supervisors through an open, transparent public process.

(d) The Butte County Board of Supervisors shall consider the four (4) agricultural nominees, the domestic candidates and recommendations of the Ad-hoc Nomination Committee at a regular meeting and shall appoint the Stakeholder Directors and Alternates.

7.4. Alternate Directors. Each Member's governing body shall also appoint one Alternate Director to the Board of Directors. An Alternate Stakeholder Director shall be appointed by the Butte County Board of Supervisors for each Stakeholder Director. All Alternate Directors shall be appointed in the same manner as set forth in Section 7.3. Alternate Directors shall have no vote, and shall not participate in any discussions or deliberations of the Board unless appearing as a substitute for a Director due to absence or conflict of interest. If the

Director is not present, or if the Director has a conflict of interest which precludes participation by the Director in any decision-making process of the Board, the Alternate Director appointed to act in his/her place shall assume all rights of the Director, and shall have the authority to act in his/her absence, including casting votes on matters before the Board. Each Alternate Director shall be appointed prior to the third meeting of the Board. Alternate Directors are encouraged to attend all Board meetings and stay informed on current issues before the Board. Alternate Board Members have no vote at Board of Director meetings if the Board Member is present. If the Board Member is not present, the Alternate Board Member shall be entitled to participate in all respects as a regular Board Member.

7.5. Terms of Office. The term of office for each member of the Agency's Board of Directors is four (4) years and these individuals may be reappointed. Each Member Director and Alternate Member Director shall serve at the pleasure of the appointing Member's Governing Body and may be removed from the Board of Directors by the appointing Members' Governing Body at any time. If at any time a vacancy occurs on the Board of Directors, a replacement shall be appointed to fill the unexpired term of the previous Board Member pursuant to this Article 7 and within ninety (90) days of the date that such position becomes vacant.

7.6. Removal of Board Members. A Director that no longer meets the qualifications set forth in section 7.1.1 is automatically removed from the Agency Board of Directors. Upon removal of a Director, the Alternate Director shall serve as a Director until a new Director is appointed. Members must submit any changes in Member Director or Alternate Member Director positions to the Chair in writing with submissions signed by the Member. A Stakeholder Director may only be removed by the Butte County Board of Supervisors for failure to attend three (3) consecutive meetings or as a result of no longer meeting the qualifications set forth in Article 7 of this Agreement.

7.7. Vacancies. A vacancy on the Board of Directors shall occur when a Director resigns or reaches the end of that Director's term, as set forth in Section 7.5. For Member Directors, a vacancy shall also occur when he or she is removed by his or her appointing Member's governing body. For Stakeholder Directors, a vacancy shall also occur when the Stakeholder Director is removed, as set forth in Section 7.6. Upon the vacancy of a Director, the Alternate Director shall serve as Director until a new Director is appointed as set forth in Section 7.3 unless the Alternate Director is already serving as an Alternate Director in the event of a prior vacancy, in which case, the seat shall remain vacant until a replacement Director is appointed as set forth in Section 7.4. Members shall submit any changes in Director or Alternate Director positions to the Chair by written notice signed by an authorized representative of the Member.

## **ARTICLE 8. AGENCY MEETINGS**

8.1. Initial Meeting. The initial meeting of the Agency's Board of Directors shall be called by the County of Butte and held in the Chico City Council Chambers, 421 Main Street Chico CA 95928, within 60 days of the effective date of this Agreement.

8.2. Time and Place. The Board of Directors shall provide in its adopted bylaws or by other means authorized or required by law for the time and place for holding regular meetings, at least annually, and at such other times as determined by the Board of Directors.

8.3. Conduct. All meetings of the Board shall be noticed, held, and conducted in

accordance with the Ralph. M. Brown Act to the extent applicable. Board Members and Alternate Board Members may use teleconferencing in connection with any meeting in conformance with and to the extent authorized by the applicable laws.

## **ARTICLE 9. BOARD OF DIRECTORS VOTING**

9.1. Quorum. A majority of the members of the Board of Directors shall constitute a quorum for purposes of transacting business.

9.2. Director Votes. Each member of the Board of Directors of the Agency shall have one (1) vote. With the exception of the items in section 9.3 below, an affirmative vote by a majority of the Board of Directors is required to approve any item. Prior to taking a vote on any item of business, the Board of Directors shall strive for consensus of all members on items.

9.3. Supermajority Voting Requirement. A supermajority requires an affirmative vote of four or more Directors. Items that require a supermajority vote to pass consist of the following, which may be amended from time to time by the Board by a supermajority, or as may otherwise be required by this Agreement or by law:

- Bylaws adoption, modification or alteration
- GSP adoption, modification or alteration
- Adoption of assessments, charges and fees
- Adoption of regulations and ordinances
- Adoption or modification of annual budgets, including capital projects
- Property acquisition (excepting right of ways)
- Appointment of Treasurer, subject to the provisions in Article 12, Administrator, Plan Manager or General Counsel
- Modifications to the composition and number or removal of members of committees
- Acceptance of Management Area chapters submitted by Member(s).
- Establishment of new or modification to existing Management Areas
- Development of the Management Area chapter(s) and associated cost allocations to Members within such Management Area(s) in the event of a failure by a Member(s) to develop Management Area chapter(s) for their respective portion of the subbasin.

## **ARTICLE 10. OFFICERS**

10.1. Officers. The Board of Directors shall select a Chair and Vice-Chair and any other officers as determined necessary by the Board of Directors.

10.1.1. The Chair shall preside at all Board Meetings.

10.1.2. The Vice-Chair shall act in place of the Chair at meetings should the Chair be absent.

10.1.3. All Officers shall be chosen at the first Board of Directors meeting of the calendar year. An Officer may serve for multiple consecutive terms. Any Officer may resign at any time upon written notice to the Agency.

## **ARTICLE 11. COMMITTEE FORMATION**

11.1 Management Committee. There shall be established by the Board of Directors a committee comprised of at least one (1) staff representative from each Member. The Management Committee shall meet as directed by the Board of Directors, and shall recommend agenda items, proposed action for the Board of Directors, administer the Stakeholder Advisory Committee, establish and administer technical working groups, and bring staff reports to the Board of Directors.

11.2 Internal Committee Formation. There shall be established such internal committees as the Board of Directors shall determine from time to time. Each such internal committee shall be comprised of a minority number of the seated Directors, shall exist for the term specified in the action establishing the committee, shall meet as directed by the Board of Directors, and shall make recommendations to the Board of Directors on the various activities of the Agency.

11.3. Stakeholder Advisory Committee Formation. The Board of Directors shall establish an advisory committee comprised of diverse social, cultural, and economic elements of the population and area stakeholders within the Agency Jurisdiction. The Board of Directors shall encourage the active involvement of the advisory committee(s) prior to and during the development and implementation of the GSP. The Board of Directors will ensure that at least one (1) member from the Management Committee administers the advisory committee(s). The advisory committee(s) shall meet as directed by the Board of Directors and as specified in Appendix A, and shall make recommendations to the Board of Directors as requested.

11.4. Technical Working Groups. There may be established by the Management Committee technical working groups from time to time, the purpose of which shall be to provide advice to the Management Committee on issues of a technical nature related to the activities of the Agency. The Board of Directors will ensure that at least one (1) member from the Management Committee administers technical working groups.

## **ARTICLE 12. OPERATIONS AND MANAGEMENT**

### 12.1 Administrator and Plan Manager

12.1.1 Administrator: The Board may appoint an Administrator, from time-to-time and when it seems appropriate. If appointed, the Administrator shall serve at the pleasure of the Board of Directors and his/her duties and responsibilities shall be set forth by the Board in their bylaws or actions.

12.1.2 Plan Manager: The Board shall appoint a Plan Manager. The Administrator and Plan Manager may be the same individual. The Plan Manager shall serve at the pleasure of the Board of Directors and his/her duties and responsibilities shall be set forth by the Board.

12.2 Treasurer and Controller. The County of Butte shall act as treasurer and controller for the Agency. The controller of the Agency shall cause an independent audit of the Agency's finances to be made by a certified public accountant in compliance with California Government Code section 6505. The treasurer of the Agency shall be the depositor and shall have custody of all money of the Agency from whatever source. The controller of the Agency shall draw warrants and pay demands against the Agency when the demands have been approved by the Agency or any authorized representative pursuant to any delegation of Agency adopted by the

Agency. The treasurer and controller shall comply strictly with the provisions of statutes relating to their duties found in Chapter 5 (commencing with section 6500) of Division 7 of Title 1 of the California Government Code.

12.2. Legal Counsel and Other Consultants. The Board of Directors may appoint legal counsel who shall serve at the pleasure of the Board. Subject to the limits of the Agency's approved budget, the Board shall also have the power to appoint and contract for the services of other officers, consultants, advisers and independent contractors as it may deem necessary or convenient for the business of the Agency, all of whom shall serve at the pleasure of the Board. The appointed General Legal Counsel and other appointed officers of the Agency shall not be employees or contractors of one or more of the Members. Appointment of a General Legal Counsel shall be subject to all applicable Rules of Professional Responsibility, and notwithstanding anything to the contrary in this Agreement, each of the Members expressly reserve and do not waive their rights to approve or disapprove of potential conflicts of Agency General Legal Counsel.

12.3 Employees and Management. The Agency will not have any employees. In lieu of hiring employees, the Agency may engage one or more Members to manage any or all of the business of the Agency on terms and conditions acceptable to the Board of Directors. Any Member so engaged shall have such responsibilities as set forth in an agreement for such Member's services, which shall be approved by a super-majority vote of the Directors. The Agency shall have the power to employ competent registered civil engineers and other consultants to investigate and to carefully devise a plan or plans to carry out and fulfill the objects and purposes of SGMA, and complete a GSP.

12.4 Principal Office. At the initial meeting of the Board, the Board shall establish a principal office for the Agency, which shall be located at a place overlying the Agency Jurisdiction. The Board may change the principal office from time to time so long as that principal office remains at a location overlying the Agency Jurisdiction.

12.5 Bylaws. The Board shall adopt Bylaws governing the conduct of the meetings and the day-to-day operations of the Agency within six months of the Effective Date of this Agreement.

12.6 Official Seal and Letterhead. The Board may adopt, and/or amend, an official seal and letterhead for the Agency.

12.7 Conflict of Interest Code. The Board shall adopt and file a Conflict of Interest Code pursuant to the provisions of the Political Reform Act of 1974 within six months of the Effective Date. The Board may review and revise the Conflict of Interest Code from time to time as appropriate or when required by law.

## **ARTICLE 13. MANAGEMENT AREAS**

13.1 Formation of Management Areas. There will be three Management Areas within the Agency's Jurisdiction. One Management Area overlies the Butte County area north of the City of Chico and Big Chico Creek, within the jurisdictional boundary of the Agency, referred to as the Vina North Management Area. The second Management Area encompasses the area that overlies the municipal area within and adjacent to the City of Chico as is, referred to as the Vina

Chico Management Area. The third Management Area overlies the Durham Irrigation District and the Butte County areas south of the City of Chico and is referred to as the Vina South Management Area. The final boundaries and titles of the Management Areas shall be determined by the Agency Board in consultation with the Vina Stakeholder Advisory Committee.

13.2 Management Areas Chapters. Management Areas refer to an area within a basin for which a GSP may identify minimum thresholds, measurable objectives, monitoring, and projects and actions based on unique local conditions. The Management Areas will be distinct “chapters” in the GSP that will include specific minimum thresholds, measurable objectives, monitoring and projects. All chapters must be consistent with the subbasin-wide sustainability goals.

13.3 Management Area Lead Responsibilities and Coordination. Subject to the reservation of authority in Article 13.5, each of the Members will have the responsibility to cooperatively develop their relevant Management Area chapter for inclusion into the GSP. The development of all Management Area chapters will be coordinated through the Management Committee to ensure consistency and efficiency. Butte County will be responsible for preparing the Vina North Management Area chapter within the Agency Jurisdiction. The City of Chico will be responsible for preparing the Vina Chico Management Area chapter for the municipal area within and adjacent to Chico. Butte County and Durham Irrigation District will be responsible for preparing the Vina South Management Area chapter.

13.4 Role of Agency. Subject to the reservation of authority set forth in Article 13.5, the Agency will serve a coordination and administrative role in the development of the Management Area chapters prepared by the applicable Member agencies. The Agency will be responsible for reviewing and accepting Management Area chapters which they determine to be compliant with SGMA and applicable regulations for inclusion into the GSP. Upon inclusion of Management Area chapters into the GSP, the Agency will be responsible for implementation and enforcement pursuant to Article 5.

13.5 Reservation of Authority. In the event of a failure by a Member to develop and submit a Management Area chapter within the deadline set by the Agency, the Agency reserves and retains all requisite authority to (1) develop and approve the Management Area chapter, and (2) allocate the cost of development of the Management Area chapter to Members within such Management Area.

13.6 Additional Management Areas. Additional Management Areas may be defined and established by the Board of Directors as set forth in 9.3.

## **ARTICLE 14. SPECIFIC PROJECTS**

14.1. Projects. The Agency intends to carry out activities in furtherance of its purposes and consistent with the powers established by the Agreement with the participation of all Members.

14.2. Member Specific Projects. In addition to the general activities undertaken by all Members of the Agency, the Agency may initiate specific projects that involve less than all Members.

14.3. Project Agreement. Prior to undertaking any project that does not involve all Member Agencies, the Members electing to participate in the Project shall enter into a Project Agreement. A Member may elect not to participate in a specific project matter by providing notice and not entering into the Project Agreement specific to the matter in which the Member has elected not to participate. Each Project Agreement shall provide the terms and conditions by which the Members that enter into the Project Agreement will participate in the Project. All assets, rights, benefits, and obligations attributable to the Project shall be assets, rights, benefits, and obligations of those Members which have entered into the Project Agreement. Any debts, liabilities, obligations, or indebtedness incurred by the Agency in regard to a particular Project shall be the debts, liabilities, obligations, and indebtedness of those Members who have executed the Project Agreement in accordance with the terms thereof and shall not be the debts, liabilities, obligations, and indebtedness of those Members who have not executed the Project Agreement. Members that do not enter into Project Agreements will not receive or be entitled to any of the benefits accruing from the project.

14.4. Board of Directors Approval. The Board of Directors shall have the authority to disapprove any Project Agreement upon a determination that the Project Agreement has specific, substantial adverse impacts upon Members that have not executed the Project Agreement.

## **ARTICLE 15. FINANCIAL PROVISIONS**

15.1. Agency Funding and Contributions. In order to provide the needed capital to initially fund the Agency, the Agency shall be initially funded through a GSP grant awarded by the DWR and through in-kind contributions of Members. In subsequent years and as needed, the Agency may be funded through additional voluntary contributions by Members and as otherwise provided in Chapter 8 of SGMA (commencing with section 10730 of the Water Code).

15.2. Budgets. Within ninety (90) days after the first meeting of the Board of the Agency, and thereafter prior to the commencement of each fiscal year, the Board of Directors shall adopt a budget for the Agency for the ensuing fiscal year.

15.3. Long-Term Funding. Upon formation of the Agency, the Board of Directors shall work on the development, adoption and implementation of a long-term funding plan to cover the operating and administrative expenses of the Agency.

## **ARTICLE 16. LIABILITY AND INDEMNIFICATION**

16.1. Liability. The Members do not intend hereby to be obligated either jointly or severally for the debts, liabilities or obligations of the Agency, except as may be specifically provided for in California Government Code section 895.2, as amended or supplemented. Therefore, unless and to the extent otherwise required by law or agreed to herein by the Members, in accordance with California Government Code section 6507 the debts, liabilities and obligations of the Agency shall not be the debts, liabilities or obligations of the Member entities. The Agency shall own and hold title to all funds, property and works acquired by it during the term of this Agreement.

16.2. Indemnification. Funds of the Agency may be used to defend, indemnify, and hold harmless the Agency, each Member, each Director, and any officers, agents and employees of the Agency for their actions taken within the course and scope of their duties while acting on behalf of the Agency. Other than for gross negligence or intentional acts, to the fullest extent

permitted by law, the Agency agrees to save, indemnify, defend and hold harmless each Member from any liability, claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including attorney's fees and costs, court costs, interest, defense costs, and expert witness fees, where the same arise out of, or are in any way attributable in whole or in part to, negligent acts or omissions of the Agency officers or agents, or the employees, officers or agents of any Member, while acting within the course and scope of a Member relationship with the Agency.

Members participating in special project agreements if conducted by the Agency, shall hold each of the other parties to this Agreement who are not parties to the special project agreement free and harmless from and indemnify each of them against any and all costs, losses, damages, claims and liabilities arising from the special project agreement.

## **ARTICLE 17. WITHDRAWAL AND TERMINATION**

17.1. Withdrawal. A Member may unilaterally withdraw from this Agreement without causing or requiring termination of this Agreement, effective upon sixty (60) days written notice to the remaining Members. The notice of withdrawal shall state whether the withdrawing Member will elect to serve as a GSA for all or any portion of the lands within its boundaries or if the Agency shall continue to serve as the GSA for the withdrawing Member's boundaries. In the event the withdrawing Member's notice of withdrawal would create an overlap of GSA boundaries with the boundaries of any other Member, not including Butte County, the affected Members will meet and confer in good faith to attempt to resolve the overlap. In the event Butte County withdraws, it will not create a GSA overlap with the boundaries of any of the other Members.

17.2. Termination of Agency. This Agreement may be rescinded and the Agency terminated by unanimous written consent of all Members, except during the outstanding term of any Agency indebtedness.

17.3. Involuntary Termination. The Members acknowledge that SGMA requires that multiple GSAs within a given subbasin must coordinate and are required to use the same data and consistent methodologies for certain required technical assumptions when developing a GSP and that the entire Basin must be implementing one or more GSPs for the Basin to be deemed in compliance with SGMA. As a result, upon a supermajority determination of the Board of Directors that the actions of a Member (1) fail to comply with the terms of this Agreement; or (2) conflict with or undermines the functioning of the Agency or the preparation and implementation of the requirements of the GSP, the Board of Directors may terminate that Member's membership in this Agency, provided that prior to any vote to remove a Member involuntarily all of the Members shall meet and confer regarding all matters related to the proposed removal.

17.4. Effect of Withdrawal or Termination. This Agreement may be terminated and the Agency dissolved by a unanimous vote of the Member Directors. Upon termination of this Agreement or unilateral withdrawal, a Member shall remain obligated to pay its share of all debts, liabilities and obligations of the Agency required of the Member pursuant to the terms of this Agreement which were incurred or accrued prior to the date of such termination or withdrawal, including without limitation, those debts, liabilities and obligations pursuant to Section 5. Any Member that withdraws from the Agency shall have no right to participate in the business and affairs of the Agency or to exercise any rights of a Member under this Agreement

or the Act, but shall continue to share in distributions from the Agency on the same basis as if such Member had not withdrawn, provided that a Member that has withdrawn from the Agency shall not receive distributions in excess of the contributions made to the Agency while a Member. The right to share in distributions granted under this section shall be in lieu of any right the withdrawn Member may have to receive a distribution or payment of the fair value of the Member's interest in the Agency.

17.5. Right of Member to Become GSA in Event of Withdrawal or Termination. Upon withdrawal or involuntary termination of a Member, or termination of this Agreement pursuant to section 17.2, regardless of its occurrence after June 30, 2017, the withdrawing or terminated Member will retain all rights and powers to become or otherwise participate in a GSA for the lands within its boundaries. A Member may, in its sole discretion, withdraw from the JPA, effective sixty (60) days after written notice to the Agency. In such an event, the Agency and its remaining Members will not object to or interfere with the lands in the withdrawing Member's boundaries; will facilitate such a transition to the extent necessary; and will withdraw from management that portion of the subbasin and so notify DWR. Upon withdrawal or termination, any Member shall be entitled to use data or other information developed by the Agency during its time as a Member. Further should a member withdraw from the Agency after completion of the GSP, it shall be entitled to utilize the GSP for future implementation of SGMA within its boundaries.

#### 17.6. Disposition of Agency Assets upon Termination.

17.6.1. Surplus Funds. Upon termination of this Agreement, any reserves or surplus money on-hand shall be returned to the Members in the same proportion said Members have funded such reserves or surplus, in accordance with California Government Code section 6512.

17.6.2. Agency Property. The Agency shall first offer any assets of the Agency for sale to the Members on terms and conditions determined by the Board of Directors. If no such sale to Members is consummated, the Board shall offer the assets of the Agency for sale to any non-member for good and adequate consideration on terms and conditions determined by the Board of Directors.

### **ARTICLE 18. MISCELLANEOUS**

18.1. No Predetermination or Irretrievable Commitment of Resources. Nothing in this Agreement shall constitute a determination by the Agency or any of its Members that any action shall be undertaken or that any unconditional or irretrievable commitment of resources shall be made, until such time as the required compliance with all local, state, or federal laws, including without limitation the California Environmental Quality Act, National Environmental Policy Act, or permit requirements, as applicable, has been completed.

18.2. Notices. Notices hereunder shall be sufficient if delivered via electronic mail, First-Class mail or facsimile transmission to the addresses below:

County of Butte: Department of Water and Resource Conservation, 308 Nelson Ave, Oroville, CA 95965

City of Chico: 411 Main Street, Chico, CA 95928

18.3. Amendment. This Agreement may be amended at any time, by unanimous agreement of the Members, provided that before any amendments shall be operative or valid, it shall be reduced to writing and signed by all Members hereto.

18.4. Agreement Complete. This Agreement constitutes the full and complete agreement of the Members. This Agreement supersedes all prior agreements and understandings, whether in writing or oral, related to the subject matter of this Agreement that are not set forth in writing herein.

18.5. Severability. If any provision of this Agreement is determined to be invalid or unenforceable, the remaining provisions will remain in force and unaffected to the fullest extent permitted by law and regulation.

18.6. Execution in Counterparts. The Parties intend to execute this Agreement in counterparts. It is the intent of the Parties to hold one (1) counterpart with single original signatures to evidence the Agreement and to thereafter forward four (4) other original counterparts on a rotating basis for all signatures. Thereafter, each Member shall be delivered an originally executed counterpart with all Member signatures.

18.7. Withdrawal by Operation of Law. Should the participation of any Member to this Agreement be decided by the courts to be illegal or in excess of that Member's authority or in conflict with any law, the validity of this Agreement as to the remaining Members shall not be affected thereby.

18.8. Assignment. The rights and duties of the Members may not be assigned or delegated without the written consent of all other Members. Any attempt to assign or delegate such rights or duties in contravention of this Agreement shall be null and void.

18.9. Binding on Successors. This Agreement shall inure to the benefit of, and be binding upon, the successors or assigns of the Members.

18.10. Other JPAs. Nothing in this Agreement shall prevent the Members from entering into other joint exercise of power agreements.

18.11. Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California, and any action related to the terms of this Agreement shall be brought and tried in Butte County Superior Court.

IN WITNESS WHEREOF, the parties hereto, pursuant to resolutions duly and regularly adopted by their respective governing boards, have caused their names to be affixed by their proper and respective officers as of the date of execution of this Agreement.

**County of Butte**

By:  Date: 3/12/19  
Chair  
Board of Supervisors

**City of Chico**

By:  Date: 04/09/2019  
Mayor  
City Council

**Durham Irrigation District**

By:  Date: 3/12/19  
President  
Board of Directors

Exhibit A: List of Member Agencies

Exhibit B: Vina Subbasin Map

Appendix A: Stakeholder Advisory Committee to the Agency Board

**EXHIBIT A**

**LIST OF MEMBERS**

County of Butte  
Department of Water and Resource Conservation  
308 Nelson Ave  
Oroville, CA 95973

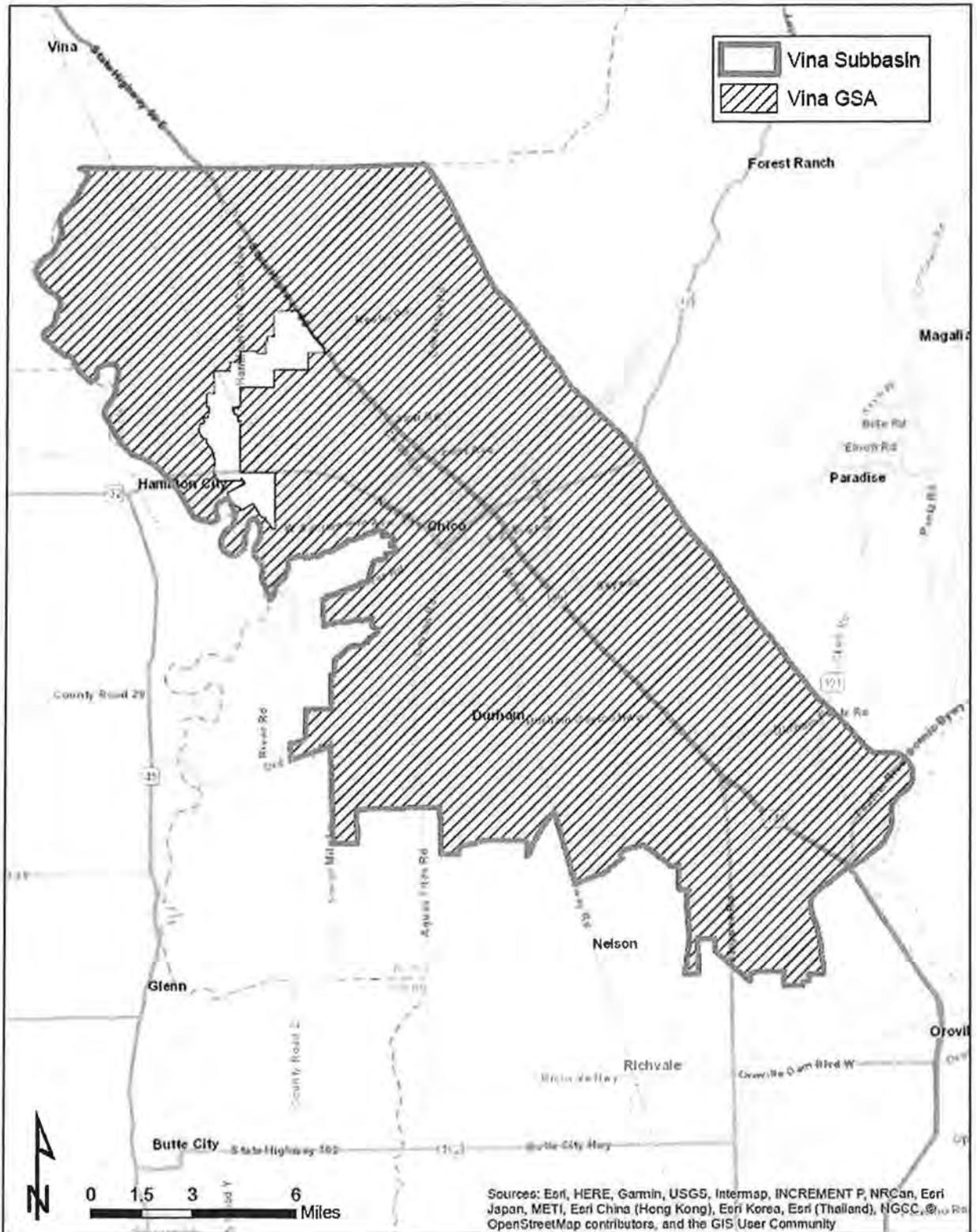
City of Chico  
411 Main Street  
Chico, CA 95928

Durham Irrigation District  
9418-C Midway  
Durham, CA 95938

# EXHIBIT B

## VINA SUBBASIN AND THE

### BOUNDARY OF THE VINA GROUNDWATER SUSTAINABILITY AGENCY



## APPENDIX A

### Stakeholder Advisory Committee to the Agency Board

The purpose of the Advisory Committee (AC) is to provide input and recommendations to the Agency Board of Directors concerning GSP development and implementation and on matters of policy affecting the GSA. The intent of the AC is to provide community perspective and a forum for public/stakeholder participation in the GSA.

The AC will review and/or provide recommendations to the Agency Board on groundwater-related issues that may include:

- Development, adoption, amendment of the GSP
- Sustainability goals and objectives
- Best management practices
- Monitoring programs
- Annual work plans and reports (including mandatory 5-year milestone reports)
- Modeling scenarios
- Inter-basin coordination activities
- Projects and management actions to achieve sustainability
- Community outreach
- Local regulations to implement SGMA
- Fee proposals
- Other

The AC will not be involved in the Agency's day to day operations, such as contracting, budgeting, etc.

### Membership

Composition of the AC is intended to represent the beneficial uses and users of groundwater identified in SGMA, as applicable in the Agency Jurisdiction. AC members may not serve concurrently on the Agency Board. Members must live or work within the Agency Jurisdiction or represent an organization with a presence in the Agency Jurisdiction.

The Agency Board will appoint representatives to the AC, for a total not to exceed 10 members. The following represents a draft, proposed list of possible AC representation:

- Cal Water-Chico (1)
- Agricultural groundwater users (3):
- At-large domestic well users (2):
- At-large environmental representative (1)
- At-large business representative (1)

The Agency Board may appoint other interests representing beneficial users and uses of groundwater as per Water Code Section 10723.3.

### **Member Appointment**

The Agency Board will appoint At-large members to fill AC seats. Interested individuals from the community or organizations may apply to the Agency Board, designating in the application the seat that the applicant would intend to fill.

The Agency Board encourages candidates with experience and familiarity with groundwater and its management. The Agency Board will also give preference to applicants who have the backing of multiple organizations or individuals and/or have experience working with diverse community-based groups.

### **Application Timeline**

The Agency Board will establish a timeline and process for appointment of the initial AC following Agency formation. In subsequent years, applicants will submit an application for vacant seats. The GSA will post applications on its website.

### **Advisory Committee Member Terms**

AC member seats are four-year terms. AC members are not term-limited. However, each term AC members must resubmit an application to the Agency Board.

The Agency Board can only remove an AC member if the member fails to attend three consecutive meetings or if the AC member no longer meets the criteria for AC membership. The Agency Board will appoint alternates, if the Agency Board deems alternates necessary.

### **Decision Making and Governing Board Consideration**

To inform Agency Board decision-making, the AC will provide written recommendations that will be included in Management Committee reports. The recommendations will identify areas of agreement and disagreement. The AC will strive for consensus when possible, but reaching consensus is not necessary. When unable to reach consensus on recommendations, the AC will outline the areas in which it does not agree, providing some explanation to better inform Agency Board decision-making.

Pursuant to Agency Board direction, the Management Committee will develop the annual work plan and schedule for AC meetings. The AC will adopt a charter describing their purpose, operating principles and ground rules that will be confirmed by the Agency Board.

The Agency Board will consider AC recommendations when making decisions. If the Agency Board does not agree with the recommendations of the AC, the Agency Board shall state the reasons for its decision.

### **Public Process**

All AC meetings are subject to the Brown Act and will be noticed and open to the public.



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

### **Purpose**

The purpose of the Stakeholder Advisory Committee (SHAC) is to provide input and recommendations to the Groundwater Sustainability Agency (GSA) Board of Directors on groundwater sustainability plan development and implementation. The intent of the SHAC is to provide community perspective and participation in Sustainable Groundwater Management Act (SGMA) implementation.

The SHAC will review and/or provide recommendations to the GSA Board on groundwater-related issues that may include:

- Development, adoption, amendment of the GSP
- Sustainability goals and objectives
- Best management practices
- Monitoring programs
- Annual work plans and reports (including mandatory 5-year milestone reports)
- Modeling scenarios
- Inter-basin coordination activities
- Projects and management actions to achieve sustainability
- Community outreach
- Local regulations to implement SGMA
- Fee proposals
- Other

The SHAC will not be involved in the GSA's day to day operations, such as contracting, budgeting, etc.

### **Brown Act, Open Process, and Conflicts of Interest**

All meetings of the SHAC are open to the public. The GSA will announce SHAC meetings through its regular communication channels.

SHAC meetings are subject to the Brown Act. The SHAC shall adopt a schedule and physical location for regular meetings, and meeting agendas shall be posted in accordance with the Brown Act. 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 being considered by the SHAC.



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

All SHAC meetings shall provide for public comment in accordance with the Brown Act, including non-agenda public comment and public comment on individual agenda items. Speakers will generally be limited to 3 minutes, but time may be adjusted based upon meeting circumstances. As needed, time limits may be placed on public comments to ensure the SHAC is reasonably able to address all agenda items during the course of the meeting. Special and emergency meetings need not provide for non-agenda public comment, but such comment may be allowed in the SHAC's discretion. Members of the SHAC are subject to all applicable conflict of interest laws including Government Code section 1090 and the California Political Reform Act. The Board shall adopt a conflict of interest code for the SHAC.

### **Roles and Responsibilities**

#### GSA Board of Directors

The Board commits to the value of the SHAC and will consider SHAC recommendations when making its policy decisions.

#### Stakeholder Advisory Committee

The role and responsibility of the SHAC is to solicit and incorporate community and stakeholder interests into recommendations on SGMA implementation in the Vina subbasin for the Board to consider in its decision-making process.

The criteria for SHAC members are to:

- Serve as a strong, effective advocate for the interest group represented
- Work collaboratively with others
- Commit time needed for ongoing discussions
- Collectively reflect diversity of interests

As part of membership, members agree to:

- Arrive at each meeting fully prepared to discuss the issues on the agenda. Preparation may include reviewing meeting summaries, technical information, and draft documents distributed in advance of each meeting.
- Present their constituent members' views on the issues being discussed and be willing to engage in respectful, constructive dialogue with other members of the group.
- Develop a problem-solving approach in which they consider the interests and viewpoints of all group members, in addition to their own.
- Keep their constituencies informed about the deliberations and actively seek their constituents' input.
- When desired, submit agenda items to the Management Committee at least 5 business days before the meeting takes place to ensure the Committee is able to consider inclusion on the SHAC meeting agenda. If agenda topic(s) are submitted less than 5 days prior to a SHAC meeting, the topic(s) will be considered for the subsequent meeting's agenda.



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

### Management Committee

- Maintain a current roster of SHAC members.
- Work with GSA Board to fill SHAC vacancies, as needed.
- Prepare agendas for SHAC meetings.
- Notice all meetings in accordance with the Brown Act.
- Staff all meetings, record minutes and develop and distribute meeting summaries.
- Work with SHAC and GSA Board to develop annual workplan and schedule for SHAC meetings.
- Facilitate the process of incorporating SHAC recommendations into Board packets.
- Provide options and ensure records for AC 1234 Ethics Training and Brown Act Training for SHAC members.
- Maintain a record of all meeting materials.

### Facilitator

As resources allow, a third-party facilitator may provide impartial facilitation services for SHAC meetings. The facilitator's primary responsibility is to ensure an open process where all member interests are heard and thoughtfully considered. To this end, the facilitator works on behalf of the process and the members contributing to SHAC efforts. Specific responsibilities include:

- Support the Management Committee in developing and distributing SHAC agendas and relevant materials.
- Advocate for a fair, effective, and credible process, but remain impartial with respect to the outcome of the deliberations.
- Apply collaborative, mutual-gain negotiation methods that foster openness and identify areas of preliminary and final consensus agreement for advice and recommendations to the Board.
- In the absence of consensus, help identify areas of agreement and disagreement.
- Check in with members as needed to ensure all issues are identified and explored.
- Coordinate with Management Committee to ensure accurate, impartial documentation of meetings and agreements (i.e. meeting summaries and recommendation reports).
- Ensure all members uphold the tenets of the charter.

## **Membership**

Composition of the SHAC is intended to represent the beneficial uses and users of groundwater identified in SGMA. SHAC members may not serve concurrently on the GSA Board. Members must live or work with in the Vina subbasin or represent an organization with a presence in the Vina subbasin.

The GSA Board will appoint a representative to the SHAC, for a total not to exceed 10 members. The following represents a draft, proposed list of possible SHAC representation:

- Cal Water (1)
- CSU Chico (1)



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

- Butte College (1)
- Agricultural groundwater users (3)
- At-large domestic well users (2)
- At-large environmental representative (1)
- At-large business representative (1)

The GSA Board may appoint other interests representing beneficial users and uses of groundwater as per Water Code Section 10723.3.

### Member Appointment

The GSA Board will appoint At-large members to fill SHAC seats. Interested individuals from the community or organizations may apply to the GSA Board, designating in the application the seat that the applicant would intend to fill.

The GSA Board encourages candidates with experience and familiarity with groundwater and its management. The GSA Board will also give preference to applicants who have the backing of multiple organizations or individuals and/or have experience working with diverse community-based groups.

### Application Timeline

The GSA Board will establish a timeline and process for appointment of the initial SGAC following GSA formation. In subsequent years, applicants will submit an application for vacant seats. The GSA will post applications on its website.

### Stakeholder Advisory Committee Member Terms

SHAC member seats are 4-year terms. SHAC members are not term-limited. However, each term SHAC members must resubmit an application to the GSA Board.

SHAC members serve at the will of the GSA Board and may be removed by the Board with or without cause upon a super majority vote by the Board. SHAC members may also be removed from the Committee at such time as they no longer meet the membership requirements or for failure to attend three consecutive meetings unless there are extenuating circumstances as determined by the GSA Board.

## **Decision Making and Governing Board Consideration**

To inform GSA Board decision-making, the SHAC will provide written recommendations that will be included in Management Committee reports. The recommendations will identify areas of agreement and disagreement. The SHAC will strive for consensus when possible, but reaching consensus is not necessary. Consensus means that everyone can at least live with a recommendation. When unable to reach consensus on recommendations, the SHAC will outline the areas in which it does not agree, providing some explanation to inform GSA Board decision-making. A quorum is required when making



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

decisions including, but not limited to, recommendations to the GSA Board, which is defined as the majority of seated members, regardless of the number of SHAC members in attendance.

Pursuant to GSA Board direction, the Management Committee will develop the annual work plan and schedule for SHAC meetings. The SHAC will adopt a charter describing its purpose, operating principles and ground rules that will be confirmed by the GSA Board of Directors.

The GSA Board will consider SHAC recommendations when making decisions. If that GSA Board does not agree with the recommendations of the SHAC, the GSA Board shall state the reasons for its decision.

The Management Committee in coordination with the Facilitator, if applicable, develops meeting notes memorializing discussion points, agreements, the range of opinions when consensus is not achieved, action items and next steps. Meeting notes will capture the names and number of SHAC members in support or opposition when making decisions including, but not limited to, recommendations to the Vina GSA Board. Following SHAC meetings, meeting notes will be distributed to the SHAC for review and comments after the Management Committee's initial review. The Management Committee in coordination with the Facilitator, if applicable, incorporates into the meeting notes any and all comments received by SHAC members and prepares a draft final version for final review and approval at the subsequent SHAC meeting. The Management Committee/Facilitator then distributes the final, approved meeting notes to the SHAC. The final version of the meeting notes will also be used by the Management Committee to develop staff reports to the Vina GSA board.

### **Process Agreements and Ground Rules**

To conduct a successful collaborative process, all SHAC members will work together to create a constructive, problem solving environment. To this end, all members agree to the following process agreements which the SHAC will use, and to ground rules which will guide individual and group behavior.

#### Process Agreements

- ✓ Everyone agrees to negotiate in good faith. All participants agree to participate in decision making, to act in good faith in all aspects of this effort and to communicate their interests during meetings. Good faith also requires that members not make commitments they do not intend to follow through with, and that members act consistently in the meetings and in other forums where the issues under discussion in these meetings are also being discussed.
- ✓ Everyone agrees to address the issues and concerns of the participants. Everyone who is joining in the SHAC is doing so because s/he has a stake in the issue at hand. For the process to be successful, all the members agree to validate the issues and concerns of the other members and strive to reach an agreement that takes all the issues under consideration. Disagreements will be viewed as problems to be solved, rather than battles to be won.



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

- ✓ Everyone agrees to inform and seek input from their constituents about the outcome of the facilitated discussions. To the extent possible, scheduling will allow for members to inform and seek input from their constituents, and others about discussions.
- ✓ Everyone agrees that members can meet with other organizational or interest group members in accordance with the Brown Act. SHAC members may find it helpful to meet with other organizations or interest group members and to consult with constituents outside of the meeting so the member is better able to communicate community concerns on the issues at hand.
- ✓ Everyone agrees to attend all the meetings to the extent possible. Continuity of the conversations and building trust are critical to the success of the Advisory Committee. Members are encouraged to turn off cell phones and focus on the issue at hand. GSA staff or the facilitator will coordinate the meeting schedule.

### Ground Rules

- ✓ Use Common Conversational Courtesy: Treat each other with mutual respect as you discuss and deliberate groundwater issues.
- ✓ All Ideas and Points of View Have Value: The goal is to achieve understanding. Simply listen, you do not have to agree. If you hear something you do not agree with or you think is "silly" or "wrong," please remember that the purpose of the forum is to share ideas.
- ✓ Be Honest, Fair, and as Candid as Possible: Put your interests forward, help others understand you and listen actively in order to understand others.
- ✓ Avoid Editorials: It will be tempting to analyze the motives of others or offer editorial comments. Please talk about your own ideas and thoughts. Avoid commenting on why you believe another participant thinks something.
- ✓ Honor Time, Be Concise and Share the Air: Help ensure an inclusive discussion by being cognizant of time constraints, stating your views clearly and concisely, and sharing the air so others can participate as well.
- ✓ Think Innovatively and Welcome New Ideas: Creative thinking and problem solving are essential to success. "Climb out of the box" and attempt to think about the problem in a new way.



## Vina Groundwater Sustainability Agency Advisory Committee Charter (version approved: 11/18/20)

- ✓ Invite Humor and Good Will: Don't hesitate to bring levity and humor to the process when warranted, as this often helps collaborative discussions.

### **Amendments**

The SHAC can recommend future changes to the charter. The Board may amend the charter when needed using its decision-making procedure.

# Proposed 2022 Vina Stakeholder Advisory Committee Meeting Schedule - 4th Wednesday, 9am-12pm

## January

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## February

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

## March

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## April

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## May

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## June

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

## July

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## August

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## September

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

## October

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## November

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

## December

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Vina GSA Board Meeting  
SHAC Meeting