

# Discussion and possible recommendation on use of additional grant funds within the Data Gap Identification and Data Improvement Project (Component 2)

**Vina Stakeholder Advisory Committee Meeting**  
**April 23, 2025**

Christina Buck, Ph.D.  
Assistant Director  
Dept. of Water and Resource Conservation




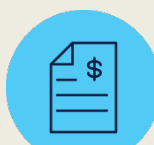
# Grant Funded Projects





Funding End Date:  
March 2026



## Component #

- 2.  Data Gap Identification and Data Improvement
- 3.  Demand Reduction Strategies
- 4.  Lindo Channel Recharge Feasibility
-  Long-Term Fee Study

- 5.  Water Supply and Recharge Feasibility
- 6.  Inter-basin Coordination Analysis and Modeling
- 7.  Outreach Program
- 1.  Grant Administration

# Grant Amendment – Vina GSA Board Direction



- Staff received direction from the Vina GSA Board (4/9/2025) to amend the Vina SGM grant agreement:
  - Reallocate \$1.195 M from Demand Reduction Strategies project (Component 3) to the Data Gap Identification and Data Improvement Project (Component 2) and the Water Supply and Recharge Project (Component 5)
  - Consistent with SHAC recommendation:
    - ✦ Additional \$300K to Component 2
    - ✦ Additional \$800K to Component 5
  - There is an additional \$95,000 available - Board directed it to Component 2 for domestic well survey, as needed

# Grant Amendment – Vina GSA Board Direction



<b>Components</b>	<b>Grant Amount</b>	<b>Change</b>
Component 1: Grant Administration	\$200,000	
Component 2: GSP Updates, Data Gaps, and Outreach	\$1,070,000	300,000
Component 3: Demand Reduction Strategies in the Vina Subbasin	\$2,440,000	(1,195,000)
Component 4: Lindo Channel Surface Water Recharge Implementation	\$330,000	
Component 5: Surface Water Supply and Recharge Feasibility Study	\$850,000	800,000
Component 6: Inter-basin Coordination, Modeling and Reporting	\$480,000	
Component 7: Outreach Program	\$165,000	
	<b>Total: \$5,535,000</b>	

Additional \$95,000 available: Board directed it to Component 2 for additional analysis (domestic well survey/database, as needed)

# Additional \$300,000 for Monitoring Network Enhancements



- A combination of additional multi-completion monitoring well(s) and shallow monitoring wells will be installed with the added funds
- Locations of additional wells are still to be determined
- With CalSIP funding awarded that will install additional stream gages, no additional stream gages are recommended at this time (Rose Ave. bridge location is currently under consideration for inclusion)

# Background: Domestic Well Survey



- Background from the Groundwater Sustainability Plan (GSP):
  - “Minimum thresholds for groundwater levels were developed with reference to domestic well depths.”
  - “The DWR database used for information on total depths of the domestic wells is not always accurate or precise, nor is it known which of the wells in the database are in use or have been abandoned or replaced. As such, additional characterization of active domestic wells within the subbasin may be considered during GSP implementation (see Section 5.4.3).”
- Goal: Develop an inventory of all active domestic wells within the Vina Subbasin.



# Existing Data: DWR OSWCR Database



## **1.4.4 Online System for Well Completion Reports**

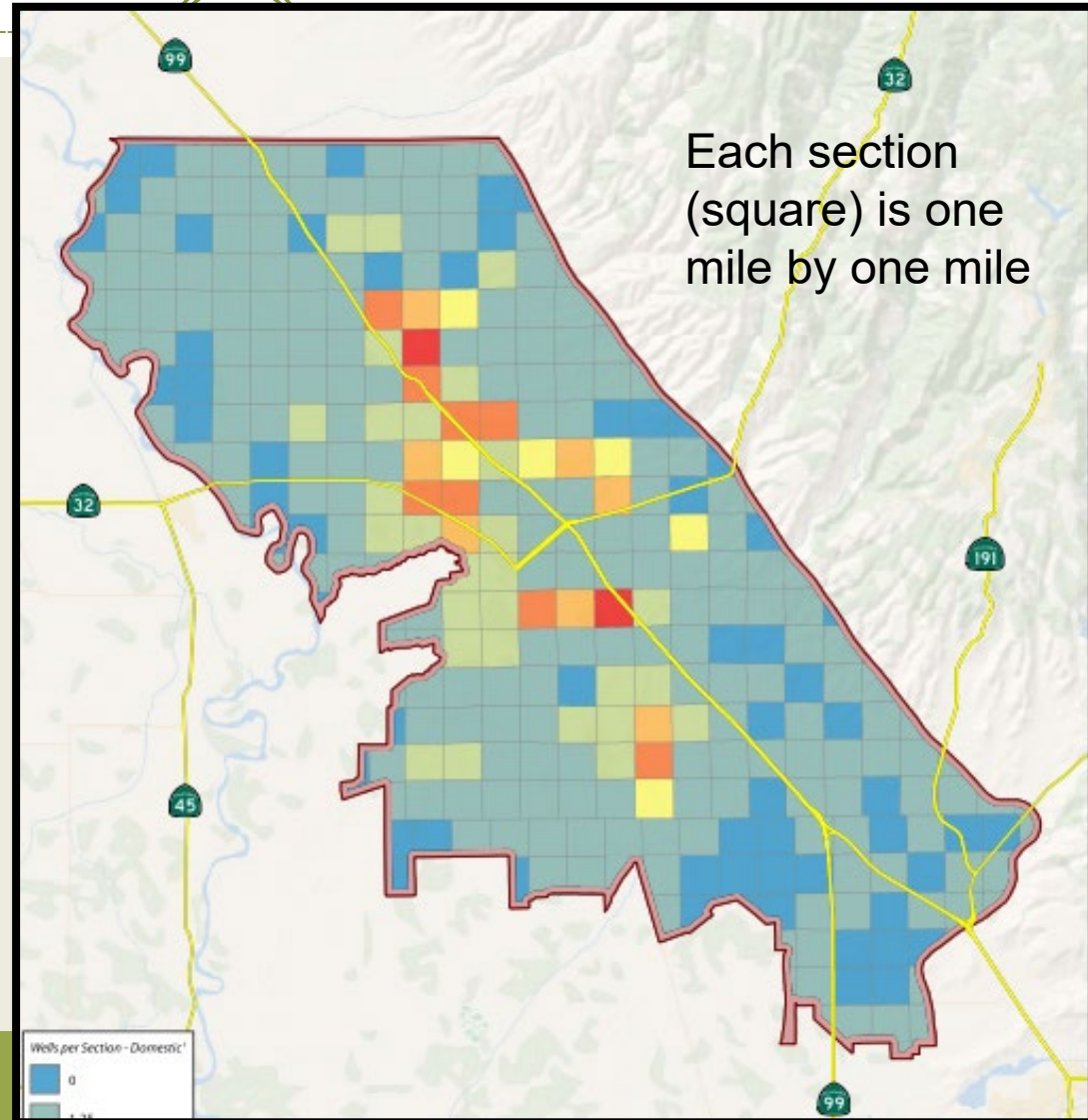
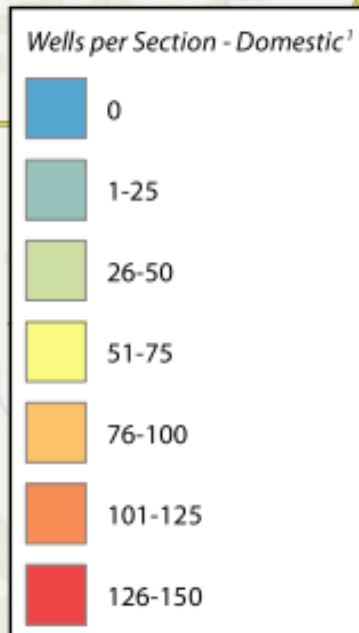
The OSWCR is a DWR program used to document and compile boring or well completion records throughout California. There are as many as two million domestic, irrigation, and monitoring water wells in California included in this dataset, including more than 4,000 domestic wells located in the Vina Subbasin. However, as discussed in Section 3, the well characteristics in this database are not always accurate or precise, and, unfortunately, it is not known which of the wells in the database are in use or have been abandoned or replaced. When a well is constructed, modified, or destroyed, drilling contractors are required to submit a Well Completion Report (WCR) to DWR for upload to the interactive OSWCR website. OSWCR is used as a data source for wells identified for monitoring. In this GSP, the OSWCR database was used to describe the GSP area and identify SMC.

-- Vina GSP

# Existing Data: Density of Domestic Wells per Section based on DWR Database

Figure 1-10 from GSP

<b>Density of Domestic Wells per Section</b> Vina Groundwater Subbasin GSP	
<b>Geosyntec</b> consultants	Figure <b>1-10</b>
Project No.: SAC282	December 2021





# Addressing a Data Gap: Domestic Well Depths



The following data gaps and proposed resolutions have been identified in the Vina Subbasin:

- Domestic Well Depths – The MT for groundwater levels is based on total depths of domestic wells. The dataset used for this assessment is poor and may include wells no longer in use or poorly maintained. To resolve this data gap, the GSAs will conduct surveys of active domestic wells to assess the actual total depth of these wells within the Vina Subbasin. The GSAs will also maintain a record of verifiable domestic wells that go dry during the implementation period that will include depth of these wells, screen intervals, and available maintenance records. These data will be used to modify the MT over the implementation period, as appropriate.

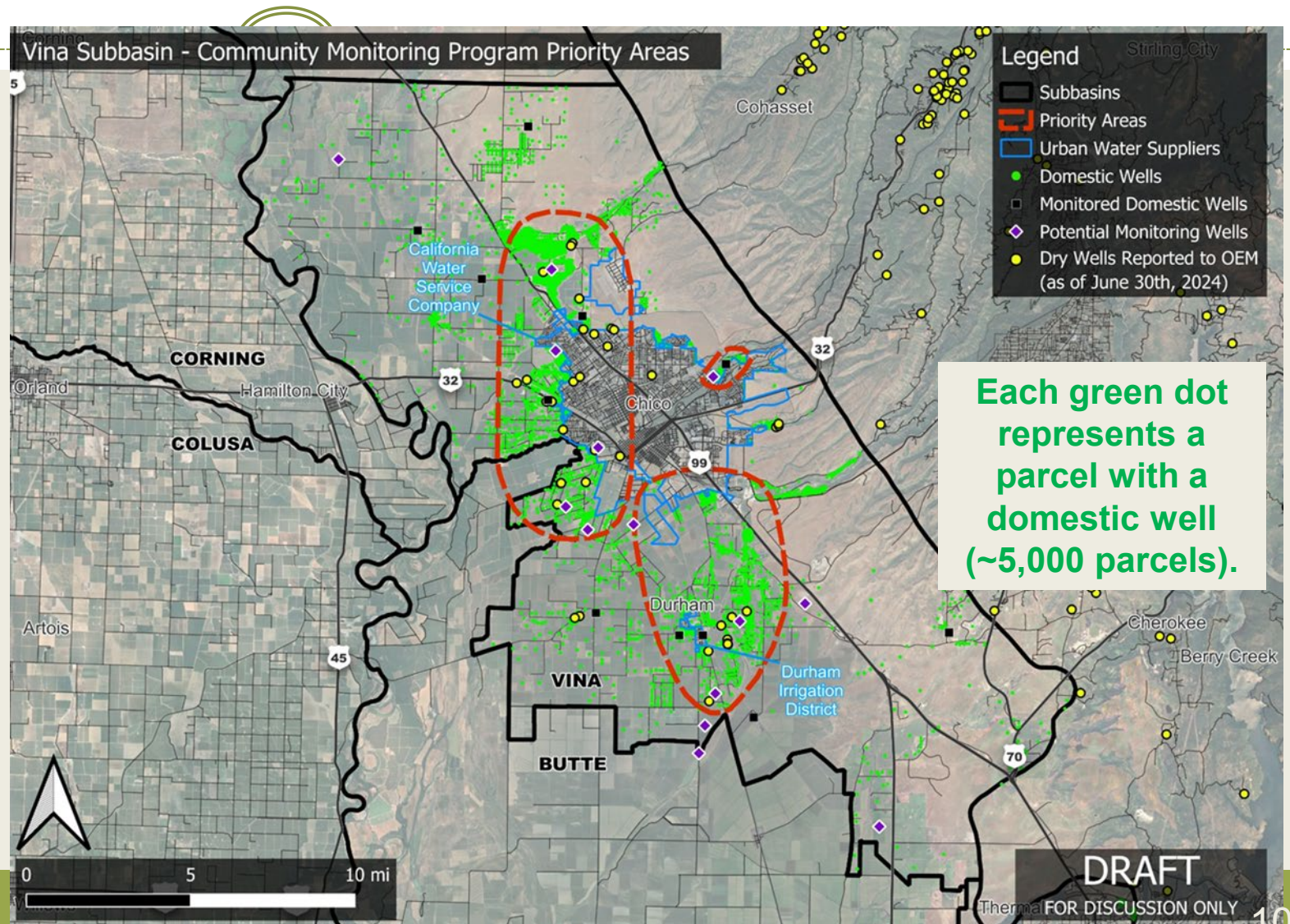
Vina GSP, pg. 186

The grant funded work conducts analysis and takes steps to address this data gap



# Current Efforts to refine the Domestic Well Database

- Goal: Develop an inventory of all active domestic wells (and their depths) within the Vina Subbasin.
- The following information will be collected, as feasible:
  - Drill / completion depth of well,
  - Screened interval(s),
  - Pump depth,
  - Age / status (e.g., active vs abandoned),
  - Water level,
  - Number of domestic wells per parcel, &
  - Other well specifications (based on DWR's OSWCR database).





# All \$95,000 likely not needed for Domestic Well Survey



- A portion of the \$95,000 could be spent on additional analysis to expand the effort and development of the Domestic Well Survey.
- If not all funds are utilized for that task, other tasks could also benefit from an additional level of effort and increased funding

Given the planned effort and existing funding – staff does not recommend additional dollars are needed for the domestic well survey analysis



# Additional \$95,000: Component 2; Budget Category D



Within the same budget category as the Domestic Well Survey, other tasks in the grant agreement include:

1. **Response to DWR Groundwater Sustainability Plan (GSP) Determination**
  - Upcoming amendments to the GSP will address DWR recommended corrective actions
2. **Draft Periodic Evaluation of the GSP**
  - Final must be submitted by January 31, 2027
3. **Gather, Evaluate Data, and Develop Approach for Interconnected Surface Water Sustainable Management Criteria**
4. **Create Community Monitoring Plan and Equip Volunteer Wells with Monitoring Equipment**
  - Budget currently seems adequate
5. **Community Monitoring and Dry Well Data and Visualization**

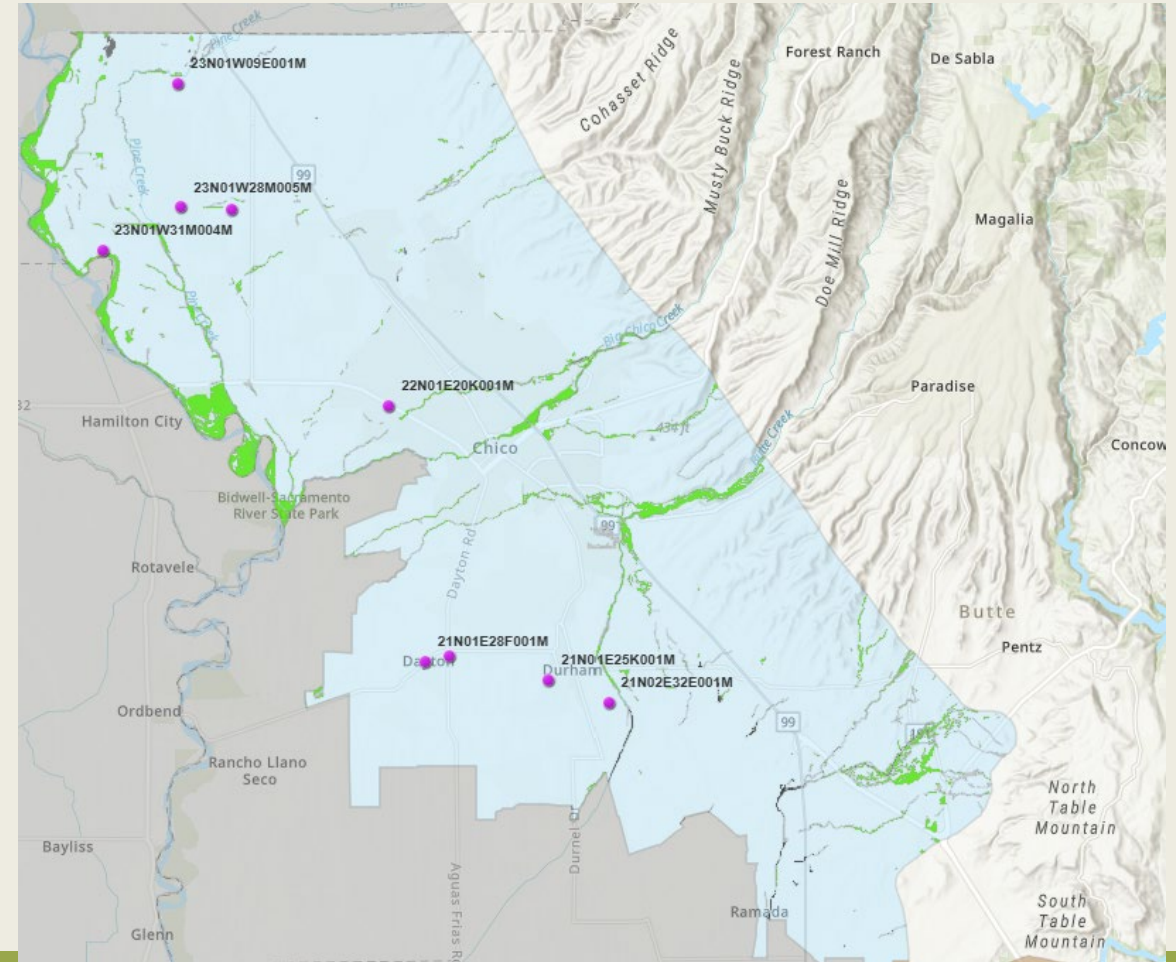
# Within Category D Tasks: Possible Activities Could Include



- Additional effort to support data management and integration with Data Management System being developed with Wyandotte Creek GSA grant funds
- Additional analysis and refinement related to Groundwater Dependent Ecosystems (GDEs)
- Use of the Butte Basin Groundwater Model to run scenarios to better understand projects/climate and their effect on subbasin conditions

# Groundwater Dependent Ecosystem (GDE) Refinement/Analysis

- Recommended Goal: Better understand Chico Urban Forest and its relationship to shallow groundwater and the principal aquifer
  - Analyze available groundwater level data in relation to available hydrogeology info
  - Integrate insights learned from Lindo Channel Recharge study



# Butte Basin Groundwater Model Scenarios

- Create model runs to help answer questions such as:
  - How extensive is the groundwater deficit for the Vina Subbasin under different climate assumptions?
  - How do the proposed demand reduction, recharge, and/or water supply projects affect subbasin conditions?
  - Explore dynamics of recharge, groundwater pumping, interconnected surface water

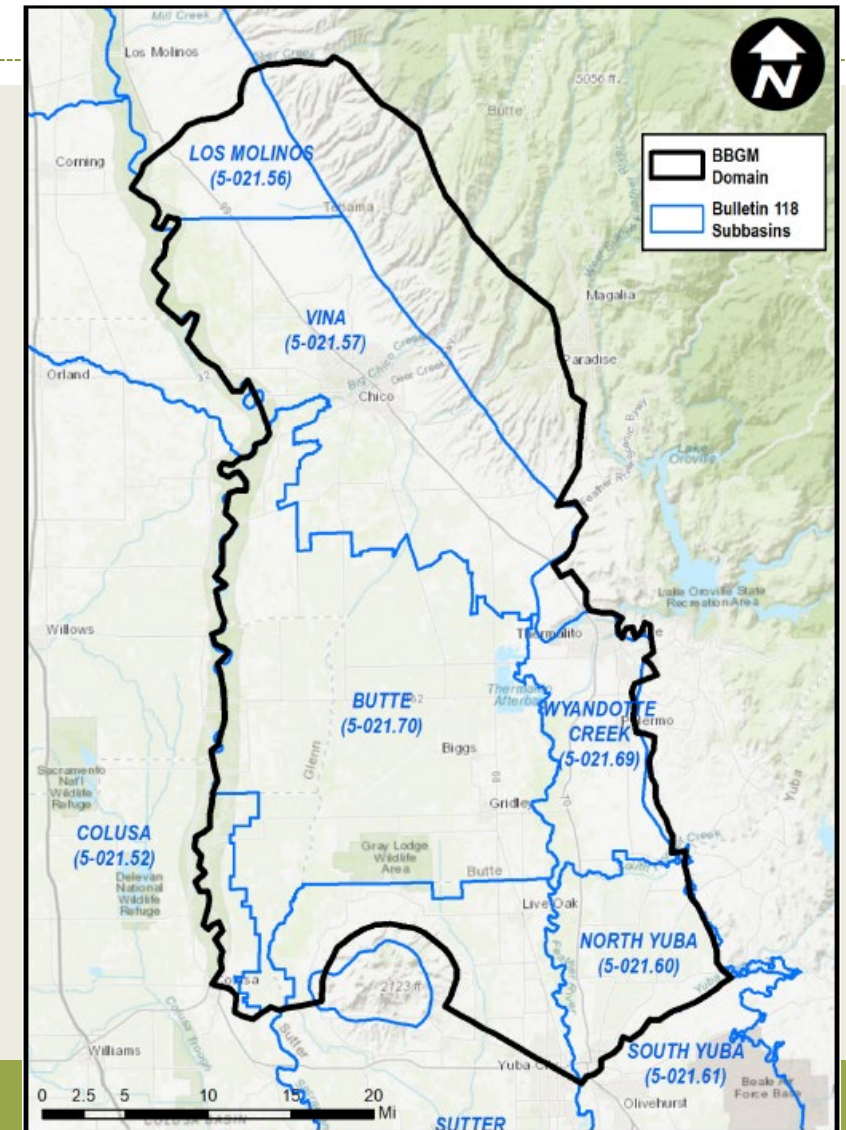


Figure 1-1. BBGM Domain and Bulletin 118 (2018) Groundwater Subbasins



# Staff Recommendation



- Staff recommends \$30,000 to support data management and coordination with data management system being created for Wyandotte Creek
- New News! Potential for grant agreement extension – staff recommends \$20,000 for component administration



# Request of the SHAC



SHAC discussion and recommendation will inform amendments to Larry Walker Associates' contract which is anticipated to go to the Vina GSA board in May.

**Requested Action:** Discuss and provide a recommendation regarding priority activities for the additional \$95,000 to be used for tasks within Budget category D of Component 2.