Luhdorff & Scalmanini
Consulting Engineers

DRAFT | TECHNICAL MEMORANDUM

DATE: April 19, 2023 Project No. 23-1-033

TO: Kamie Loeser, Director, Butte County Water and Resource Conservation Dept.

FROM: Eddy Teasdale, PG, CHG, Supervising Hydrogeologist
Jacques DeBra, Principal, Supervising Water Resource Planner

SUBJECT: Wyandotte Creek GSA – 2023 Long-Term Funding Project Summary

INTRODUCTION

Luhdorff & Scalmanini, Consulting Engineers (LSCE) was hired by Butte County in 2023 to complete the Wyandotte Creek Groundwater Sustainability Agency (WCGSA) 2023 Long-Term Funding Project (Project) to ensure that a long-term funding mechanism is in place by January 2024 to support GSA operations while meeting GSA Sustainable Groundwater management Act (SGMA) compliance requirements. The WCGSA prepared and adopted its 2022 Groundwater Sustainability Plan (GSP) which was approved by the WCGSA Board of Directors (Board) and submitted to the California Department of Water Resources (DWR) in accordance with the DWR January 31, 2022 GSP submittal deadline. DWR is currently reviewing the WCGSA GSP. The WCGSA Board is now focused on GSP implementation and addressing long-term financial sustainability to maintain compliance with SGMA requirements and implement recommended management actions, projects, and programs to achieve groundwater sustainability within the Subbasin by 2042. This Technical Memorandum (TM) summarizes the long-term funding needs and options to facilitate approval of a long-term local funding mechanism to support GSP implementation over the next five-year planning horizon. **Attachment 1** contains information regarding the WCGSA GSP adoption process.

BACKGROUND

The WCGSA's 2022 GSP identifies long-term funding needs for GSP implementation and SGMA compliance. This TM identifies long-term funding options and mechanisms to support the WCGSA revenue needs required for achieving and maintaining SGMA compliance while meeting groundwater sustainability goals and objectives. Financial sustainability will support successful GSP implementation and compliance with SGMA requirements over the next 20-year time horizon through 2042.

The overall funding needs for GSP implementation and SGMA compliance are outlined below. Future revenue needs were updated to reflect actual SGMA compliance costs to date and expected future costs to comply with SGMA regulations and cover on-going GSA administration costs. GSP implementation costs

will be refined over time based on actual costs and the level of effort required to maintain SGMA compliance.

2023 LONG-TERM GSA FUNDING PROJECT

LSCE was engaged to review the WCGSA GSP, project GSP implementation and SGMA compliance costs, analyze alternative funding options for allocating costs, and develop a long-term funding recommendation for consideration by the WCGSA Board of Directors so that a sustainable local funding source could be in place by January 2024. There is currently no other funding source available to cover the on-going costs of WCGSA operations and SGMA compliance actions. The recommended long-term funding option will be based on information in the WCGSA GSP, and feedback provided by the WCGSA Board and other stakeholders through GSA outreach activities. The long-term GSA funding option will address the following:

1. **GSP Costs:** Using the Wyandotte Creek Subbasin GSP, LSCE reviewed, categorized, and summarized costs to implement the GSP and meet SGMA requirements. LSCE, in coordination with the WCGSA, updated key cost assumptions and corresponding changes to future revenue projections.

2. **Revenue Needs:** In coordination with the WCGSA, GSA revenue needs were defined based on the updated GSP implementation and SGMA compliance costs. This task included identifying those costs which would be included or excluded from a long-term funding option that could be included in the final Fee Study.

3. **Cost Allocation Analysis:** LSCE developed alternative cost allocation methods in evaluating funding options to analyze considerations such as ease of implementation and understanding, equitability, reliability, and implementation costs.

4. **Recommendations:** Based on discussions and feedback with the WCGSA, LSCE recommended cost allocation method to determine the costs assigned to landowners subject to the charge options considered that would be needed to cover GSA revenue projections.

LSCE will be subsequently developing a Charge Report to evaluate the services provided by WCGSA and how each funding mechanism allocates the cost of service. The results of the Charge Report will be used to support and inform approval of the long-term funding mechanism at the July 2023 WCGSA Board meeting.

Wyandotte Creek Subbasin GSP Development and Implementation Funding

The Wyandotte Creek Subbasin, classified as a Medium Priority basin by DWR, developed a single GSP through the WCGSA. The member agencies include Butte County, City of Oroville, and Thermalito Water and Sewer District. The Wyandotte Creek Subbasin GSP was approved at the December 2021 WCGSA Board meeting and submitted to DWR in accordance with the January 31, 2022 submittal deadline.

The Wyandotte Creek Subbasin GSP was funded largely by grant funding acquired by the GSAs and member agency contributions. Specifically, GSP development was funded by a Proposition 1 (Water Quality, Supply, and Infrastructure Improvement Act of 2014) Sustainable Groundwater Planning Grant, and supplemental

Proposition 1 grant funding for outreach and engagement. Additional technical evaluation of data gaps and projects and management actions was funded by a Proposition 68 (California Drought, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018) grant. Other implementation costs were funded under DWR grants for Facilitation and Support Services (FSS) and direct and in-kind contributions by the Wyandotte Creek GSA member agencies.

The GSAs will continue to pursue grant funding opportunities to support GSP implementation, including addressing data gaps and developing projects and management actions. Any shortfall in funding for additional GSP costs for staff time, administration, legal, reporting (annual reports and 5-year updates), and other technical studies would be funded by other local fees or assessments.

At the March 2023 WCGSA meeting, the Board approved the use of five-year revenue projections for the long-term funding project. The WCGSA Board also provided direction that revenue projection should s account for the possibility that the WCGSA could receive DWR grant funds that would allow lower long-term charges to be implemented over the initial five-year GSP implementation period.

The WCGSA Board is implementing public outreach efforts to engage stakeholders and inform those that are subject to the GSA's proposed long-term charges. The WCGSA has updated its website to include updated information and facts about the GSA's long-term funding strategy. A project Fact Sheet and Frequently-Asked-Question documents have been prepared and made available as part of the public outreach materials charge. More information is available at: https://www.wyandottecreekgsa.com.

The WCGSA is also coordinating its activities with the South Feather Water and Power Agency to cost share and defray the costs associated with operating the WCGSA and meeting future SGMA requirements. The WCGSA is collaborating and working together with its landowners to keep long-term GSA charges as low as possible. The WCGSA is also preparing to update its project priorities and develop a long-range capital improvement program to implement projects that will assist the Subbasin meet its water balance by 2042. This will involve developing a long-term project funding strategy once the GSA knows which projects may be funded through its 2022 SGMA Implementation Round 2 grant funding application.

The WCGSA member agencies will continue to work together and keep long-term revenue needs for GSA operations and SGMA compliance costs as low as possible. Butte County will continue to serve as the Program Manager for the WCGSA which serves as the business model with the lowest GSA administration costs. This will benefit the member agencies and those within the GSA service area who are relying on the GSA to ensure that SGMA compliance is achieved for all landowners within the GSA service area boundary.

GSP Costs

The Wyandotte Creek Subbasin GSP split costs into three aggregate cost categories:

- **GSA Administration Costs:** Costs incurred by the WCGSA for administration related to the GSP.
- **GSP Implementation and SGMA Compliance Costs:** Costs incurred by the WCGSA related to GSP implementation and SGMA compliance.
- **Project and management Action (PMA) Costs:** Costs that are specific to individual PMAs. Funding sources for PMA costs have not been identified at this time. Grant funding and other sources will be evaluated to fund these projects and programs.

GSA Administration Costs

GSA Administration costs include costs that the WCGSA will incur for implementation of the GSP on behalf of its members and stakeholders. GSA Administration costs in the Wyandotte Creek Subbasin were based on the estimated costs as reported in Chapters 5 and 6 of the GSP and updated to reflect updated information. LSCE reviewed and inventoried these costs, then evaluated different business models to identify the lowest cost option for GSA operations.

GSA Administration costs include GSA Administration personnel costs, office expenses, professional services, Assessor's Office fees, legal expenses, and contingency. The GSA Administration budget covers day-to-day activities to implement the GSP, such as public outreach, legal services, financial reporting, and other tasks. A 3% annual inflation factor is recommended for inclusion in the GSA Administration budget. Finally, the Contingency adds 10% of the estimated budget to cover unexpected costs. These costs are shown in **Table 1** below. The Wyandotte Creek Subbasin GSP estimated total GSA Administration costs at $75,000 per year, with actual costs coming in at $50,000 per year by continuing with the County serving as the Program Manager as the most cost-effective administration approach for the GSA.

Table 1. Wyandotte Creek GSA – Long-Term Funding Fee Project Updated Five-Year Revenue Projections – GSA Operational Budget (assuming NO DWR SGMA Implementation Grant Funds)					
5-Year GSP Implementation Inflation Adjustment	0%	3%	3%	5%	5%
Proposed	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Cost Category – GSA Admin	**FY23-24**	**FY24-25**	**FY25-26**	**FY26-27**	**FY27-28**
Professional Services – Admin					
Auditor	$5,000	$5,000	$5,000	$5,000	$5,000
Financial Services	$2,500	$2,500	$2,500	$2,500	$2,500
Legal Services	$10,000	$5,000	$5,000	$5,000	$5,000
Program Manager (w/County Management)	$50,000	$50,000	$50,000	$50,000	$50,000
Professional Services – Admin Subtotal	**$67,500**	**$62,500**	**$62,500**	**$62,500**	**$62,500**
Office Expense					
Bank Fees	$250	$250	$250	$250	$250
Insurance	$2,000	$2,000	$2,000	$2,000	$2,000
Outreach (per education and outreach plan)	$2,500	$2,500	$2,500	$2,500	$2,500
Website	$1,500	$1,500	$1,500	$1,500	$1,500
Supplies	$1,000	$500	$500	$500	$500
Office Expense Subtotal	**$7,250**	**$6,750**	**$6,750**	**$6,750**	**$6,750**
Professional Services – GSP Implementation	$10,000	$10,000	$10,000	$10,000	$10,000
Legal Defense Reserve	$0	$0	$0	$0	$0
County Tax Roll Fee Support	$5,000	$5,000	$5,000	$5,000	$5,000
Contingency (10%)	$8,975	$8,425	$8,425	$8,425	$8,425
GSA Admin Subtotal	**$98,725**	**$92,675**	**$92,675**	**$92,675**	**$92,675**

GSP Implementation and SGMA Compliance Costs

GSP implementation and SGMA compliance costs include Annual Reporting, GSP Five-Year Updates, GSA Coordination and Outreach, Surface-Groundwater interaction modeling, data management system (DMS) maintenance and updates, financial planning, and grant funding to implement priority projects. DWR is currently reviewing the Wyandotte Creek Subbasin GSP and will issue an assessment after it completes the review. In addition to this ongoing assessment, the Wyandotte Creek Subbasin GSP must be updated in 2027. Monitoring and Implementation covers GSA-level monitoring of wells and water uses and updating the DMS as needed.

The WCGSA will coordinate with other GSAs in the region regarding GSP implementation and SGMA compliance activities. All landowners subject to the WCGSA long term charge will pay its share of the GSA Administration and GSP implementation costs including the activities for implementation of the GSP. The

Wyandotte Creek GSA GSP implementation and SGMA compliance costs were based on the data reported in the GSP and updated to reflect actual GSP implementation costs and updates regarding SGMA compliance costs.

GSP Implementation and SGMA Compliance activities include:

- **Annual Reports:** Collect data, prepare and submit Annual Reports to DWR each April 1. These Reports serve as a report card on groundwater conditions in the Subbasin.
- **Five-Year GSP Updates**: The GSA must prepare and submit Five-Year GSP updates to DWR which includes conducting updated groundwater modeling calibrations and preparing the updated GSP Report based on Annual Report data.
- **Surface-Groundwater Interaction Modeling**: Collaborate with GSAs in the Northern Sacramento Valley to address surface-groundwater interactions especially for boundary conditions in GSA service areas to ensure that groundwater depletions will not impact surface water interactions or environmental uses.
- **GSA Coordination and Outreach**: The GSA will need to continue with intra and inter-basin GSA coordination and outreach activities to facilitate GSP implementation in an efficient and collaborative manner.
- **DWR Review of GSA GSP**: The GSA will need to respond to any comments provided by the GSA regarding submittal of the Wyandotte Creek Subbasin GSP. This may include items for inclusion in the 2027 GSP update process.
- **GSP Monitoring and Data Management**: Well monitoring and maintenance and the implementation and maintenance of a data management system.
- **GSA Financial Planning**: GSA financial planning will continue to evaluate future GSA funding sources for GSA operations and project implementation.
- **Grant Procurement**: Identify and apply for federal, state, and private grants to supplement GSP implementation activities and keep future charges as low as possible.
- **Contingency:** Ten percent for GSA administration and eight percent for estimated SGMA compliance budget to cover unexpected costs.

The long-term GSP implementation and SGMA compliance costs in the GSP were updated to reflect actual costs and refined assumptions that were incorporated into the updated revenue projections as shown in **Table 2** below. These costs are between $175,500 and $186,300 per year, or approximately $900,000 over the 5-year period. Note that the costs do not include an inflation adjustment factor which is recommended for inclusion in the final revenue projections.

Table 2. GSA SGMA Compliance Cost Projections (assuming no DWR SGMA grants)					
Cost Category – SGMA Compliance	**FY23-24**	**FY24-25**	**FY25-26**	**FY26-27**	**FY27-28**
Annual Reporting (with continued DWR Monitoring)	$30,000	$30,000	$30,000	$30,000	$30,000
Five Year GSP Update w/Modeling Calibrations	$43,750	$43,750	$43,750	$43,750	$35,000
Surface – GW Interaction Modeling	$7,500	$7,500	$7,500	$7,500	$7,500
GSA Coordination & Outreach (w/in and between GSAs)	$10,000	$30,000	$30,000	$30,000	$30,000
Data Management System Maintenance	$5,000	$5,000	$5,000	$5,000	$5,000
Long-Term Financial Planning/Fees	$10,000	$10,000	$10,000	$10,000	$10,000
Grant Procurement	$10,000	$10,000	$10,000	$10,000	$10,000
Contingency (8%)	$9,300	$9,300	$9,300	$9,300	$8,600
SGMA Compliance Subtotal	**$125,550**	**$125,550**	**$125,550**	**$125,550**	**$116,100**

PMA implementation and PMA costs would be covered through outside grant funding sources and other revenue sources as available. Project funding efforts would be the responsibility of the lead project proponent (or partners) based on any cost sharing arrangements or project implementation agreements in place between the interested parties.

A summary of the WCGSA projects and programs requesting grant funding through the 2022 SGMA Implementation Round 2 funding cycle are included in **Table 3** below.

Table 3. Wyandotte Creek GSA PMA – DWR 2022 SGMA Grant Funding Request	
Wyandotte Creek GSA DWR SGMA Grant Application Task	**Budget**
Task 1. Grant Administration	$200,000
Task 2. GSP Implementation & Compliance Activities	$1,175,000
Task 3. Regional Conjunctive Use Project - SFWPA	$400,000
Task 4. Monitoring Network Enhancements – CSU Chico	$1,433,800
Task 5. Thermalito Water and Sewer District Water Treatment Plant Upgrade Project	$2,318,500
Task 6. Groundwater Recharge Feasibility Analysis, Design, and Construction	$1,840,000
Total DWR Grant Funding Request	**$7,367,300**

LSCE assisted with the preparation of the Wyandotte Creek GSA DWR SGMA Implementation Round 2 grant funding application which was submitted to DWR in December 2022 with grant awards expected to be released by DWR in the Summer of 2023. Depending on DWR grant award decisions, future WCGSA

charges could be lower if some of the SGMA compliance actions are grant funded. The Wyandotte Creek GSA Board will consider this item as part of the long-term charge approval process.

Wyandotte Creek Subbasin GSP Revenue Needs

The Wyandotte Creek Subbasin GSP implementation revenue needs are based on the estimated GSP costs for GSA Operations and SGMA Compliance. As described earlier, LSCE coordinated with the GSA and stakeholder process to present and receive feedback on the estimated GSA costs. Outcomes included:

- GSA administration and legal costs are updated to reflect the GSA's best estimates of implementation costs assuming the County serves as the Program Manager for the GSA and that no legal costs need to be set aside related to any legal challenges that could impede GSA progress.
- The Wyandotte Creek Subbasin GSA administration budget includes approximately $50,000 in costs that the GSA would incur on behalf of its members because of its role as the lead for GSP implementation.
- The member agencies would pay their proportional share of total GSA revenue projections since they are located within the Subbasin based on any charges approved by the WCGSA.
- PMA costs will be excluded from the initial revenue needs assessment because these costs may be developed and funded by individual project proponents under separate funding processes or through other funding sources.

Revenue needs account for expected general cost inflation over a five-year planning horizon, the statutory limit for projected charges under a Proposition 218 charge process. The GSA will periodically review, and revise revenue needs as the GSA moves forward with GSP implementation based on updated cost information, economies of scale, and related factors.

Table 4 summarizes total projected revenue needs for the five-year period from FY23-24 through FY27-28 showing additional detail for cost categories within the GSA Administration and GSP implementation and SGMA compliance costs. While actual costs for particular budget items may be projected, these items reflect the best current estimates available from known information. Initial revenue needs are approximately $98,725 in administration costs and $125,550 for GSP implementation and SGMA compliance costs with total annual revenue projections ranging between $224,275 and $242,230.

Table 4. Wyandotte Creek GSA – Long-Term Funding Fee Project Updated Five-Year Revenue Projections – GSA Operational Budget (assuming NO DWR SGMA Implementation Grant Funds)					
5-Year GSP Implementation Inflation Adjustment	0%	3%	3%	5%	5%
Proposed	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Cost Category – GSA Admin	**FY23-24**	**FY24-25**	**FY25-26**	**FY26-27**	**FY27-28**
Professional Services – Admin					
Auditor	$5,000	$5,000	$5,000	$5,000	$5,000
Financial Services	$2,500	$2,500	$2,500	$2,500	$2,500
Legal Services	$10,000	$5,000	$5,000	$5,000	$5,000
Program Manager (w/County Management)	$50,000	$50,000	$50,000	$50,000	$50,000
Professional Services – Admin Subtotal	**$67,500**	**$62,500**	**$62,500**	**$62,500**	**$62,500**
Office Expense					
Bank Fees	$250	$250	$250	$250	$250
Insurance	$2,000	$2,000	$2,000	$2,000	$2,000
Outreach (per education and outreach plan)	$2,500	$2,500	$2,500	$2,500	$2,500
Website	$1,500	$1,500	$1,500	$1,500	$1,500
Supplies	$1,000	$500	$500	$500	$500
Office Expense Subtotal	**$7,250**	**$6,750**	**$6,750**	**$6,750**	**$6,750**
Professional Services – GSP Implementation	$10,000	$10,000	$10,000	$10,000	$10,000
Legal Defense Reserve	$0	$0	$0	$0	$0
County Tax Roll Fee Support	$5,000	$5,000	$5,000	$5,000	$5,000
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GSA Admin Subtotal	**$98,725**	**$92,675**	**$92,675**	**$92,675**	**$92,675**
Annual Reporting (with continued DWR Monitoring)	$30,000	$30,000	$30,000	$30,000	$30,000
Five-Year GSP Update w/Modeling Calibrations	$43,750	$43,750	$43,750	$43,750	$35,000
Surface – GW Interaction Modeling	$7,500	$7,500	$7,500	$7,500	$7,500
GSA Coordination & Outreach (w/in and between GSAs)	$10,000	$10,000	$10,000	$10,000	$10,000
Data Management System Maintenance	$5,000	$5,000	$5,000	$5,000	$5,000
Long-Term Financial Planning/Fees	$10,000	$10,000	$10,000	$10,000	$10,000
Grant Procurement	$10,000	$10,000	$10,000	$10,000	$10,000
Contingency (8%)	$9,300	$9,300	$9,300	$9,300	$8,600
SGMA Compliance Subtotal	**$125,550**	**$125,550**	**$125,550**	**$125,550**	**$116,100**
Total WCGSA Administration (w/inflation adjustment)	**$98,725**	**$95,455**	**$98,236**	**$102,869**	**$107,503**
Total WCGSA SGMA Compliance (w/inflation adjustment)	**$125,550**	**$129,317**	**$133,083**	**$136,361**	**$134,676**
Total WCGSA Operational Budget	**$224,275**	**$224,772**	**$231,319**	**$242,230**	**$242,179**

Adjusting for Inflation

GSP implementation costs will be impacted by inflation as they are long-term fees and inflation is a long-term force that impacts the costs of service for consumers, producers and suppliers in the economy. Over the past ten years we have moved from a low inflation to a high inflation environment. It is important to include an inflation adjustment factor in the WCGSA revenue projections so that adequate revenues are available to accomplish necessary tasks and actions during the planning period. LSCE recommends that the WCGSA consider including an average 3% annual inflation adjustment in the proposed revenue projections so that charges may be collected in a stable fashion. The most recent consumer price index (CPI) data indicates that higher inflation has persisted in recent years and may continue into the near future. An inflation rate of 3% was applied to all revenue needs over years 2 and 3 and 5% inflation rate applied in years 4 and 5 over the five-year period for an average inflation rate of 4% which is consistent with recent CPI inflationary trends.

GSA Charges

GSAs may levy fees and assessments within their respective subbasin boundaries, pursuant to the applicable requirements and authorities of SGMA, Proposition 13, Proposition 26, and Proposition 218. California Water Code (CWC) § 10730 et seq. describes the various financial authorities provided to GSAs to fund the costs of their GSP and groundwater sustainability management efforts. SGMA authorizes GSAs to impose charges to fund the cost of administration, operations, permitting, property and services acquisitions, water supply, a prudent reserve, and other activities necessary or convenient to implement the plan. The different authorities allow GSAs to structure funding that could be imposed upon different units of measure. Charges that are adopted by the GSA may be adjusted periodically as new funding needs are identified and new data becomes available. Proposition 218, which is based on a property-related fee, is the most common method by which GSAs currently structure funding. Additional information regarding the Proposition 218 approach to establishing potential WCGSA charges is provided in **Attachment 2.** The recommended long-term funding mechanism for the WCGSA is to pursue a Proposition 218 process which is the most common method applied by GSAs to date and supports a property-based charge structure for all landowners within the GSA service areas boundary.

Attachment 2 also contains additional information about Proposition 218 and 26 funding options. The Proposition 218 process allows for a majority protest whereby those subject to the charge can submit protest ballots voting against the proposed charges being considered by the GSA Board. The GSA Board would count the number of protests received at the close of the public hearing. If a majority protest is received (50% + 1, one vote per parcel) the GSA Board would not be able to approve a proposed charge. Proposition 218 has specific notice, ballot, and voting requirements that require notice to all landowners subject to a proposed charge at least 45-days before the Board would consider approving a proposed charge disclosing the time and location of the public hearing before.

Member agencies may consider paying the property fee collectively for their constituents in urban areas with smaller parcels through an MOU or similar method on an annual basis. Member agencies can decide which charge approach they want for their customers by May 2023 when the Wyandotte Creek GSA plans to approve the 2023 Charge Report. A draft Charge Report table of contents is included in **Attachment 3**.

Member agencies who choose to enter into a cost sharing MOU with the Wyandotte Creek GSA would commit to making annual contributions to the GSA with agreed to payment schedule and amount based on approved Wyandotte Creek GSA charges and final determination as to the appropriate cost sharing allocation for each contributing entity. It is recommended that MOUs making this payment commitment be approved in July 2023 in accordance with when the WCGSA Board would consider approving new long-term GSA charges that cover the updated revenue projections included in **Tables 1-3**.

FUNDING OPTIONS – COST ALLOCATION APPROACHES

The WCGSA established updated revenue projections over the upcoming five-year period for use in evaluated long-term funding options. The WCGSA discussed a range of funding options and resulting cost allocation approaches. These included simpler options, such as combining GSA-level administration and its share of GSP implementation and SGMA compliance costs and uniformly distributing costs per acre within the GSA, and more complex options, such as distributing costs based on irrigator/non-irrigator delineations and considering land use hybrids that would consider land and/or water use factors. The WCGSA Board expressed support for cost allocation approaches that were easy to understand and implement, fair and equitable, reasonable, and had lower implementation costs that would not significantly increase final funding recommendations. All funding options being considered were based on meeting updated WCGSA revenue projections over the project planning horizon.

The WCGSA Board discussed long-term funding options while developing the updated revenue projections and wanted staff to consider any legal implications for different charge options that could further increase legal expenses for the GSA or result in new legal challenges. Legal challenges challenging any funding mechanism result in increased future charges for all landowners within the Subbasin.

The WCGSA Board approved the exploration of the following long-term charge options at the March 2023 meeting and directed staff to conduct a funding option evaluation process with more in-depth evaluation and analysis noting trade-offs (pros/cons) between the options that would assist the Board in selecting a preferred funding mechanism at the April 2023 Board meeting. The funding options prioritized for further evaluation include:

- **Uniform**. A uniform cost allocation would combine all costs and evenly distribute them across the Wyandotte Creek Subbasin on a per-acre basis. In a uniform approach, a flat fee per acre would be assessed to landowners within the WCGSA Subbasin. The uniform charge is supported because it provides SGMA administration to all landowners paying the fee.
- **Irrigated/Non-irrigated**. This option would allocate a higher percentage of total GSA costs to irrigators who rely on groundwater resources and would receive additional benefits from achieving groundwater sustainability. Non-irrigators would be subject to lower GSA charges and pay a smaller proportion of total GSA costs. This method would require parcel-level data and a methodology for distinguishing between irrigated and non-irrigated parcels and would require the development of user class definitions.
- **Land Use Hybrid**. This option could consider land use, Evapotranspiration (ET), and/or estimated groundwater use criteria to refine property fees based on the inclusion of more intricate parcel-level data. This option would focus on defining parcels by their respective dependence on

groundwater use. More user classes would be included in this approach with distinct user class definitions based on levels of groundwater use. This method could include currently metered and acceptable estimated groundwater pumping based on a 15–20-year groundwater use dataset. This option would have higher implementation costs than the uniform or irrigated/non-irrigated charge options and would be more challenging to understand and implement.

- **Metering Groundwater Extraction (excluded)**. Metering all groundwater use in the Subbasin would be extremely expensive to implement and would significantly increase GSA charges. This option was excluded from further exploration because there is not sufficient information currently available and the projected costs to install meters and implement supporting meter reading program and data management system are high.
- **Well Registration Program (excluded)**. Establishing a well registration program is a substantial and expensive undertaking. The first step would be to conduct a broad survey with field verification as to the location of all wells in the Subbasin and to document key information about each well including well casing size and pumping horsepower. Then the well information would need to be incorporated into a data management system for easy access, updating, and possible future charge assessments. This option was excluded from further exploration because this information is not currently available and would be expensive to develop the well database and applying the information to a future charge approach that would take years to implement.
- **Land Use Hybrid-Real-time ET (excluded)**. Open ET and other tools such as Land IQ can make real-time ET information available as a surrogate for metering water use. ET based approaches for setting GSA charges are being utilized in other parts of the State where groundwater overdraft conditions exist. While the ET data can be collected and validated with in-field instrumentation, it is very costly to implement and would increase GSA administration costs. This option was excluded from further exploration because of the higher implementation costs and impacts on future GSA revenue projections and increased complexity for charge implementation and understanding. And the GSA does not want to become the revenue collector.
- **Member Contributions (excluded)**. Butte County, City of Oroville and Thermalito Water and Sewer District are the member agencies of the WCGSA. If all three entities had adequate reserves or available funds in their respective budgets, they could each make annual contributions based on their fair share of total GSA revenue projections to fund the GSA operations and SGMA compliance action items. This option was excluded from further exploration because the member agencies do not have adequate funds available from their respective budgets and do not expect to have adequate funds available in their future budgets to pursue a member contribution approach for meeting future GSA revenue projections.
- **Land Use Hybrid-Parcel-Area Based Charges (excluded).** This option would have separate funding structures for GSA operational costs and SGMA compliance costs. funded on a per acre basis and SGMA compliance costs funded based on a per acre basis. This option is excluded from further exploration because the parcel charge would undercharge small parcels and overcharge large parcels. In addition, this charge model has not been adopted by any other GSAs at this time.

The WCGSA will assess the funding options analyzed in this TM and provide a recommendation for the proposed charges to be included in the Charge Report which will be considered at the May 2023 GSA Board meeting. Several cost allocation methods, and revenue recovery methods, would result in

additional implementation costs for additional data acquisition, monitoring and enforcement, such as remote sensing or metering, and technical support that would result in higher charges for those subject to the charges. **Table 5** summarizes funding option implementation cost estimates. These implementation costs would add to actual charges calculated using any given option below.

Table 5. WCGSA Funding Option Estimated Implementation Cost ($/ac.)

Charge Option	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Irrigated/Non-Irrigated	$0.39	$0.40	$0.41	$0.42	$0.44
Land Use Hybrid Crop Type	$1.10	$1.13	$1.16	$1.20	$1.23
Land Use Hybrid Crop ET	$1.95	$2.01	$2.06	$2.12	$2.18
Well Registration/Permit System	$4.28	$4.41	$4.54	$4.75	$4.96
Metered Groundwater Extraction	$11.59	$12.13	$12.68	$13.23	$13.77

Funding options consider the GSA service area information in **Attachment 4** and are guided by the factors below to help determine which charge option would be most suitable for the WCGSA Board to consider for approval in 2023.

- Reasonable
- Sufficient
- Equitable
- Easy to Understand and Implement
- Low Implementation Costs

The WCGSA Stakeholder Advisory Committee requested that the TM include the funding options charges on an equivalent annualized total assessment basis for discussion purposes. The annualized charge is the average of the charges over a five-year period that could be charged per year. Annual charges would be the same throughout the five-year period as long as they do not exceed the established maximum charge.

Uniform Funding Option

This option typically results in a $/acre charge based on spreading the GSA revenue needs across the Subbasin on a per acre basis. This is the most common type of GSA charge in place throughout California. The charge is calculated by dividing the total GSA costs by the total net assessable acreage in the Subbasin. Federal, State and Tribal lands are exempt from SGMA related charges, see **Table 6** below.

Table 6. WCGSA Uniform Funding Option by Charge Basis

WCGSA Funding Option Charge Basis	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Total GSA Revenue Needs ($)	$224,275	$224,772	$231,319	$242,230	$242,179
Total GSA Net Assessable Acres	51,409	51,409	51,409	51,409	51,409
Proposed Total Assessment ($/ac.)	$4.36	$4.37	$4.50	$4.71	$4.71
Annualized Total Assessment ($/ac.)	$4.53	$4.53	$4.53	$4.53	$4.53

Pros: Easy to understand and implement, low implementation costs, minimal impact on GSA budget.

Cons: Inability to distinguish and categorize benefits from groundwater sustainability.

Uniform charges are presented annually as well as on the annualized basis over the five-year period to indicate the possible charge impacts. The WCGSA will annually assess the GSA revenue needs and consider adjusting the assessment within the maximum allowable charge included in the Fee Study.

The FY23-24 annual estimated assessment impacts using the Uniform funding option is summarized in **Table 7** below.

Table 7. WCGSA Uniform Funding Option Charge Basis Cost Impact by Acre Parcel

	0.5 Acre Parcel	1.0 Acre Parcel	5 Acre Parcel	10 Acre Parcel	50 Acre Parcel
Proposed Total Assessment ($/ac.)	$2.18	$4.36	$21.81	$43.63	$218.13
Annualized Total Assessment ($/ac.)	$2.27	$4.53	$22.66	$45.31	$226.57

The Uniform funding option would be levied through the landowner's property tax bill through the County Assessor's Office. The GSA would update annual assessments for the GSA assessment based on GSA revenue needs within the maximum allowable charge approved by the Board.

DWR Grant Funding Impact

If DWR approves some of the top priority projects in the WCGSA DWR SGMA Implementation Proposition 68, Round 2 grant funding application the actual assessments could be set below the maximum charge based on lower revenue needs and corresponding lower charges are presented below for informational purposes, see **Table 8** below.

Table 8. WCGSA Uniform Funding Option, with DWR Grants

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Total GSA Revenue Needs ($)	$120,325	$117,703	$121,132	$254,218	$254,707
Total GSA Net Assessable Acres	51,409	51,409	51,409	51,409	51,409
Proposed Total Assessment ($/ac.)	$2.34	$2.29	$2.36	$4.95	$4.95
Annualized Total Assessment ($/ac.)	$3.38	$3.38	$3.38	$3.38	$3.38

The annual charge impact for the Uniform charge option with DWR grant funding on different users is summarized in **Table 9** below.

Table 9. WCGSA Uniform Funding Option, with DWR Grants, Cost Impact Summary					
	0.5 Acre Parcel	1.0 Acre Parcel	5 Acre Parcel	10 Acre Parcel	50 Acre Parcel
Proposed Total Assessment ($/ac.)	$1.17	$2.34	$11.70	$23.41	$117.03
Annualized Total Assessment ($/ac.)	$1.69	$3.38	$16.89	$33.77	$168.86

Irrigated/Non-Irrigated Funding Option

This option typically results in a different $/acre assessment for irrigated vs. non-irrigated lands based on allocating a higher percentage of the total GSA revenue needs to irrigated acreage which may receive more benefit from Subbasin achieving water balance and sustainability metrics by 2042. This type of assessment has recently been considered by many GSAs in California, however very few have adopted this type of assessment option. The Irrigated/Non-irrigated funding option is based on allocating more of the total GSA costs to the irrigators who will be able to continue to divert a reliable source of water if Wyandotte Creek Subbasin can meet its long-term water balance objective. The preliminary cost allocation for this funding option is summarized in **Table 10** below. All of the cost allocation charges discussed in this section are preliminary and, if pursued by the GSA, would need to be further examined and supported in a charge report.

Table 10. WCGSA Irrigated/Non-Irrigated Funding Option – Preliminary Cost Allocation Summary		
	Irrigated Parcels	Non-Irrigated Parcels
GSA Administration Costs (by area)	50.95%	49.05%
SGMA Compliance Costs	87.50%	12.50%

The GSA Administrative costs are shared based on acreage with slightly more lands classified as irrigated (urban areas are included in the irrigated category). Non-irrigated cost allocation for SGMA compliance costs including cost share for the Five-Year GSP Update item because they are in the Subbasin and must be included in that Report to DWR to achieve SGMA compliance. The other SGMA compliance cost items would be allocated to the irrigators because they are directly or indirectly related to groundwater use which benefits irrigated lands at a higher rate than non-irrigated. If a non-irrigated lands become irrigated (e.g., adds a new well with a County permit) the land would be reclassified as an irrigated under this option upon approval of the well permit. This option would only include net assessable acreage with Federal, State and Tribal lands exempt from SGMA related charges as indicated in **Attachment 4**.

The Irrigated charge based on the cost allocation assumptions above are presented in Table 11 below.

Table 11. WCGSA Irrigated/Non-Irrigated Funding Option – Preliminary Irrigated Charge Basis

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Total Irrigated GSA Revenue Needs ($)	$154,390	$159,666	$166,541	$178,859	$188,220
Total Irrigated GSA Net Assessable Acres	26,192	26,192	26,192	26,192	26,192
Proposed Total Irrigated Assessment ($/ac.)	$5.89	$6.10	$6.36	$6.83	$7.19
Annualized Total Irrigated Assessment ($ac.)	$6.47	$6.47	$6.47	$6.47	$6.47

The Non-Irrigated charges based on the cost allocation assumptions are presented in Table 12 below.

Table 12. WCGSA Irrigated/Non-Irrigated Funding Option – Preliminary Non-Irrigated Charge Basis

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Total Non-Irrigated GSA Revenue Needs ($)	$69,885	$71,338	$74,330	$80,146	$85,244
Total Non-Irrigated GSA Net Assessable Acres	25,216	25,216	25,216	25,216	25,216
Proposed Total Non-Irrigated Assessment ($/ac.)	$2.77	$2.83	$2.95	$3.18	$3.38
Annualized Total Non-Irrigated Assessment ($ac.)	$3.02	$3.02	$3.02	$3.02	$3.02

The FY23-24 annual cost impact on the Irrigators is summarized in Table 13 below.

Table 13. WCGSA Irrigated Funding Option Annual Charge Impact

	0.5 Acre Parcel	1.0 Acre Parcel	5 Acre Parcel	10 Acre Parcel	50 Acre Parcel
Proposed Total Assessment ($/ac.)	$2.95	$5.89	$29.47	$58.94	$294.72
Annualized Total Assessment ($/ac.)	$3.24	$6.47	$32.36	$64.73	$323.63

The FY23-24 annual cost impact on the non-irrigators is summarized in Table 14 below.

Table 14. WCGSA Non-Irrigated Funding Option Annual Charge Impact

	0.5 Acre Parcel	1.0 Acre Parcel	5 Acre Parcel	10 Acre Parcel	50 Acre Parcel
Proposed Total Assessment ($/ac.)	$1.39	$2.77	$13.86	$27.71	$138.57
Annualized Total Assessment ($/ac.)	$1.51	$3.02	$15.11	$30.21	$151.07

There will be some additional Irrigated/Non-irrigated funding implementation costs vs. the Uniform charge which has the lowest implementation costs for any option. If considering the benefit of extraction is a critical driver for the WCGSA long-term charges, then Board may wish to consider this option which accounts for benefit of extraction compared to the Uniform charge option with relatively low implementation costs. Under this funding option irrigators (those using most of the groundwater resource) would pay a majority of the SGMA compliance costs because they benefit from the majority of total groundwater extractions in the Subbasin and determine the WCGSA's ability to meet long-term water balance and sustainability metrics.

Pros: Considers relative benefit from groundwater extraction.

Cons: Higher implementation costs, not as easy to understand, maintain, or implement.

Land Use Hybrid Funding Options

Land use hybrid methods could allocate funding by other parcel-specific data, such as crop type, specific water use basis, geographic location of parcel, or other data that could indicate why a parcel would benefit from SGMA sustainability more or less than another parcel. To further evaluate this option, additional parcel level data would need to be developed so that more detailed cost allocation and assessment options could be analyzed for a long-term funding strategy. The challenge with this option is that the additional implementation costs associated with collecting, analyzing and applying the additional parcel level data are in some cases higher than either the Uniform or Irrigated/Non-irrigated charge options.

Land use hybrid options evaluated are summarized in Table 15 below.

Table 15. WCGSA Irrigated/Non-Irrigated Funding Option – Non-Irrigated Charge Basis

	FY23-24	FY24-25	FY25-26	FY26-27	FY27-28
Irrigated/Non-Irrigated	$0.39	$0.40	$0.41	$0.42	$0.44
Land Use Hybrid Crop Type	$1.10	$1.13	$1.16	$1.20	$1.23
Land Use Hybrid Crop ET	$1.95	$2.01	$2.06	$2.12	$2.18

Irrigated/Non-Irrigated is a simplified form of a land use hybrid option with the lowest implementation costs. There is some overlap in benefit between the Land Use Hybrid Irrigated/Non-Irrigated and Crop Type options. Both options require at least annual updates to the associated parcel level data to ensure that any GSA funding is implemented in a fair and equitable manner. The Crop ET method is relatively expensive with the idea being to collect real-time ET data to accurately measure consumption use of crop and land use types with tiered charges possible to allocate more GSA costs to high users. This method is very data intensive and would likely require more GSA staff time to administer the charges than either the Uniform or Irrigated/Non-Irrigated options. Most GSAs have declined to develop specific land use funding because of the increase in implementation costs without receiving additional benefits for the GSA and those subject to the charges. The WCGSA has provided direction that funding options that would require the GSA to be responsible for billing and collections will likely result in assessments that too high

to consider. The most efficient method for collecting long-term GSA charges is through the County property tax roll process.

Pros: Ability to consider specific land use data and development of tailored assessments.

Cons: High implementation costs, more difficult to implement and understand, higher charges.

Funding Option Comparison

Table 16. Funding Option Comparison					
WCGSA Funding Options Comparison	Ease of Understanding	Ease of Implementation	Specific Parcel Benefit Analysis	Additional GSA Administration	Revenue Sufficiency
Uniform Charge	1	1	2/3	1	1
Irrigated/Non-Irrigated	2	2	2	2	1
Land Use Hybrid	3	3	1	3	2
Option Ranking: 1 = best, 3 = lowest					

The Uniform option has the highest ranking considering all funding option ranking criteria except for the specific parcel benefit analysis. The Uniform option is also proven and has been utilized successfully by many GSAs throughout California. Several GSAs who are updating their current GSA assessments are considering these same options as they update their long-term GSA charges to meet future SGMA compliance costs. The bottom line is that specific parcel benefit analysis can be achieved, however it will increase charge implementation costs. Each GSA will have to decide what level of additional funding option implementation costs they are willing to pay to improve understanding benefits at the parcel level. Many GSAs want low charges that are easy to understand and implement without burdening GSA staff.

LONG TERM FEE RECOMMENDATION

The recommendation is that the WCGSA consider approving: the Uniform charge option for the lowest possible charge, and the Irrigated/Non-Irrigated charge option as the most cost-effective way to achieve parcel benefit analysis for those subject to the charge. These options would be included in the Charge Report deliverable unless the WCGSA Board approves a preferred charge option at the April 2023 meeting.

FEE DETERMINATION

The goal of the WCGSA Board is to establish a long-term sustainable revenue source to reliably fund the GSA operations and SGMA compliance and GSP implementation costs at the lowest possible cost for landowners within the WCGSA service area. This is the first long-term charge the WCGSA has considered. Working together in the watershed will be the key to success in managing local groundwater resources through a local GSA. The WCGSA plans to implement its new long-term funding through the local property

tax bill which is the lowest cost method available for implementing these necessary assessments. The WCGSA will be using this TM to evaluate the best available long-term funding options. During the May 2023 WCGSA Board meeting the Board will be providing direction on the recommended charge to include in the Charge Report that would be reflected in the Proposition 218 Notice sent to all landowners.

The next steps in the Wyandotte Creek GSA's 2023 long-term funding project are highlighted below:

- April 27 WCGSA Board Meeting – consider Project Funding Option Evaluation TM and provide direction on Fee Study development.
- May 25 WCGSA Board Meeting – approve Project Fee Study (with recommended charges).
- July 27 WCGSA Board Meeting – hold hearing and vote on proposed long-term WCGSA charges.
- August 2023 – Property Tax Roll data to Butte County Assessor's Office.

Information regarding long-term funding will be updated regularly on the WCGSA website regarding the 2023 long-term funding project and next steps in the process.

ATTACHMENT 1

Wyandotte Creek GSA - GSP Adoption Process 2021-22

LSCE

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

308 Nelson Ave, Oroville, California • (530) 552-3591 • WyandotteGSA@gmail.com

CITY OF OROVILLE • THERMALITO WATER AND SEWER DISTRICT • COUNTY OF BUTTE

June 28, 2021

Paula Daneluk, Director
Butte County Department of Development Services
7 County Center Drive
Oroville, CA 95965

Re: Wyandotte Creek Groundwater Sustainability Plan

Director Daneluk:

Under the Sustainable Groundwater Management Act (SGMA), Groundwater Sustainability Agencies (GSA) must submit a Groundwater Sustainability Plan (Plan) that will assure groundwater is sustainable within 20 years. In Butte County, the Wyandotte Creek subbasin is required to have a Plan submitted by January 31, 2022. The Wyandotte Creek GSA is in the process of developing the Plan for the Wyandotte Creek subbasin in compliance with SGMA. SGMA requires that the GSAs provide at least a 90 day notice to cities and counties prior to adoption of a Plan. Through this letter, we are providing notice of the Plan development and seek your review of the draft Plan. (Water Code §10728.2)

SGMA recognizes the linkage between land use and groundwater management. Many of the projects and actions include recommendations for changes to land use, general plans, zoning and ordinances under your jurisdiction. The Plan takes into account projected growth from existing general plans. In the future, anytime a city or county readopts or substantially amends their general plan the planning agency shall review and consider an adoption of, or update to, a groundwater sustainability plan. (Under Government Code § 65350.5) We look forward to collaborating with you on groundwater sustainability in the Wyandotte Creek subbasin.

Various chapters of the Wyandotte Creek subbasin Plan are in draft form. The entire Wyandotte Creek subbasin Plan is expected to be released for a 60 day comment period in September, with a hearing to be held in November. Adoption of the Plan is expected in December. When the entire draft Plan is prepared in September, we will provide you with a notice of its availability. In the meantime, draft chapters are available for review at www.wyandottecreekgsa.com.

If you have any questions or would like more information please contact me.

Thank you.

Paul Gosselin, Administrator

Cc: Andy Pickett, Butte County CAO

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

308 Nelson Ave, Oroville, California • (530) 552-3591 • WyandotteGSA@gmail.com

CITY OF OROVILLE • THERMALITO WATER AND SEWER DISTRICT • COUNTY OF BUTTE

June 28, 2021

Bill LaGrone, City Administrator
Oroville City Hall
1735 Montgomery Street
Oroville, CA 95973

Re: Wyandotte Creek Groundwater Sustainability Plan

Mr. LaGrone:

Under the Sustainable Groundwater Management Act (SGMA), Groundwater Sustainability Agencies (GSA) must submit a Groundwater Sustainability Plan (Plan) that will assure groundwater is sustainable within 20 years. In Butte County, the Wyandotte Creek subbasin is required to have a Plan submitted by January 31, 2022. The Wyandotte Creek GSA is in the process of developing the Plan for the Wyandotte Creek subbasin in compliance with SGMA. SGMA requires that the GSAs provide at least a 90 day notice to cities and counties prior to adoption of a Plan. Through this letter, we are providing notice of the Plan development and seek your review of the draft Plan. (Water Code §10728.2)

SGMA recognizes the linkage between land use and groundwater management. Many of the projects and actions include recommendations for changes to land use, general plans, zoning and ordinances under your jurisdiction. The Plan takes into account projected growth from existing general plans. In the future, anytime a city or county readopts or substantially amends their general plan the planning agency shall review and consider an adoption of, or update to, a groundwater sustainability plan. (Under Government Code § 65350.5) We look forward to collaborating with you on groundwater sustainability in the Wyandotte Creek subbasin.

Various chapters of the Wyandotte Creek subbasin Plan are in draft form. The entire Wyandotte Creek subbasin Plan is expected to be released for a 60 day comment period in September, with a hearing to be held in November. Adoption of the Plan is expected in December. When the entire draft Plan is prepared in September, we will provide you with a notice of its availability. In the meantime, draft chapters are available for review at www.wyandottecreekgsa.com.

If you have any questions or would like more information please contact me.

Thank you.

Paul Gosselin, Administrator

Chico Enterprise-Record
400 E. Park Ave.
Chico, Ca 95928
530-896-7702
erlegal@chicoer.com

3520910

CITY OF OROVILLE
ACCOUNTS PAYABLE/LESLIE
1735 MONTGOMERY ST
OROVILLE, CA 95965

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, IN AND FOR THE COUNTY OF BUTTE

In The Matter Of
Public Notice - Water Code Section 10728.4

AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA } **SS.**
COUNTY OF BUTTE }

The undersigned resident of the county of Butte, State of California, says:

That I am, and at all times herein mentioned was a citizen of the United States and not a party to nor interested in the above entitled matter; that I am the principal clerk of the printer and publisher of

The Chico Enterprise-Record
The Oroville Mercury-Register

That said newspaper is one of general circulation as defined by Section 6000 Government Code of the State of California, Case No. 26796 by the Superior Court of the State of California, in and for the County of Butte; that said newspaper at all times herein mentioned was printed and published daily in the City of Chico and County of Butte; that the notice of which the annexed is a true printed copy, was published in said newspaper on the following days:

11/06/2021

Dated November 11, 2021
at Chico, California

(Signature)

Legal No. **0006622478**

October 27, 2021

The Wyandotte Creek Groundwater Sustainability Agency (WCGSA), as required by the Sustainable Groundwater Management ACT (SGMA), has prepared a draft Groundwater Sustainability Plan (GSP) for the Wyandotte Creek Subbasin.

Water Code Section **10728.4**. reads in part:

A groundwater sustainability agency may adopt or amend a groundwater sustainability plan after a public hearing, held at least 90 days after providing notice to a city or county within the area of the proposed plan or amendment. The groundwater sustainability agency shall review and consider comments from any city or county that receives notice pursuant to this section and shall consult with a city or county that requests consultation within 30 days of receipt of the notice.

PLEASE TAKE NOTICE that the WCGSA will hold a Public Hearing on November 18, 2021, at 2:00 p.m. at the City of Oroville Council Chambers, 1735 Montgomery St., Oroville, CA regarding the draft GSP for the Wyandotte Creek Subbasin.

Pursuant to SGMA, representatives of the WCGSA are available to provide consultation with, and receive comments on the GSP from your organization should consultation be requested. Comments may also be provided in writing. The Board will consider public comments at the public hearing and adopt the GSP at the December 2021 WCGSA Board meeting.

The plan may be reviewed at the agency website – www.wyandotttecreekgsa.com.

The Board of Directors will allow oral comments, and will receive emailed comments, prior to the conclusion of the hearing.

For more information, please contact Kelly Peterson, Department of Water and Resource Conservation, at (530) 552-3595 or wyandottegsa@gmail.com.
11/06/2021

RECEIVED
NOV 29 2021
BY

JOINT POWERS AUTHORITY BOARD MEETING
Oroville City Council Chambers
1735 Montgomery Street
Oroville, CA. 95965

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

December 16, 2021
REGULAR MEETING
OPEN SESSION 2:00 PM
AGENDA

REQUESTS TO ADDRESS BOARD

If you would like to address the Board at this meeting, you are requested to complete the blue speaker request form (located on the wall by the agendas) and hand it to the Board Clerk, who is seated on the right of the Council Chamber. The form assists the Clerk with minute taking and assists the Board in conducting an orderly meeting. Providing personal information on the form is voluntary. For scheduled agenda items, *please submit the form prior to the conclusion of the staff presentation for that item.* Pursuant to Government Code Section 54954.2, the Board is prohibited from taking action except for a brief response from the Board or staff to statements or questions relating to a non-agenda item.

Attend In Person or by one of the methods listed below:

- Zoom Link: https://zoom.us/j/91028842432?pwd=TVh4SlFHbUhyTG9oeXFnejFWUjEwZz09
- By Phone – 1-669-900-6833 Passcode: 17351735
- Zoom Application: Meeting ID: 91028842432 Passcode: 17351735
- Email comments accepted until 12pm to publiccomment@cityoforoville.org

CALL TO ORDER / ROLL CALL

1. Pledge of Allegiance
2. Roll Call
   Board Members: Bill Connelly, Eric Smith, William Bynum, Kyle Daley, Bruce Wristen

   Staff Management Team: Butte County – Kelly Peterson, Christina Buck, Kamie Loeser, TWSD – Chris Heindell, Oroville – Matt Thompson, Harminder Basi

CONSENT CALENDAR

1. **The Board may approve the minutes of August 26, 2021, September 23, 2021, and November 18, 2021.** (Matt Thompson)

2. **Accept the attached financial report for the 2020-2021 fiscal year for the Wyandotte Creek GSA as of 12/7/21.** (Kelly Peterson)

REGULAR BUSINESS

3. **The Wyandotte Creek GSA Management Committee will provide information on the Final GSP for the Wyandotte Creek subbasin. The Board will also consider Resolution 2021-01 to adopt the Final GSP.** (Kamie Loeser)

4. **Consideration of a Letter of Support to CalWater for a Department of Water Resources Urban and Multibenefit Drought Program Grant Application for installation of a new well and treatment project in Oroville, California** (Kelly Peterson and David Kehn, CalWater)

REPORTS AND CORRESPONDENCE

5. Correspondence - Charles Johnck - Yuba Water Agency (In packet)

6. Management Committee Update

- Annual Report Update (Kelly Peterson – Verbal Report)
- Discussion of 2022 Meeting Schedule (Kelly Peterson - Verbal Report)

PUBLIC COMMENT- NON-AGENDA ITEMS

This is the time for the public to address the Board on items not listed on the agenda. The WC GSA Board is prohibited by State law from taking action on any item presented if it is not listed on the agenda. Comments will be limited to three minutes per person.

ADJOURN THE MEETING

The meeting will be adjourned.

Accommodating Those Individuals with Special Needs – In compliance with the Americans with Disabilities Act, the City of Oroville encourages those with disabilities to participate fully in the public meeting process. If you have a special need in order to allow you to attend or participate in our public meetings, please contact the Board Clerk at (530) 538-2535, well in advance of the regular meeting you wish to attend, so that we may make every reasonable effort to accommodate you. Documents distributed for public session items, less than 72 hours prior to meeting, are available for public inspection at City Hall, 1735 Montgomery Street, Oroville, California.

Recordings - All meetings are audio recorded.

Wyandotte Creek Groundwater Sustainability Agency Agenda Transmittal

Agenda Item: Agenda Item Number *Item 3.*

Subject: Consideration of a Resolution to Adopt the Final Groundwater Sustainability Plan (GSP) for the Wyandotte Creek Subbasin

Contact: Kamie Loeser **Phone: (530) 552-3590** **Meeting Date: 12-16-21** **Regular Agenda**

Department Summary:
The Sustainable Groundwater Management Act (SGMA) requires the Wyandotte Creek Subbasin Groundwater Sustainability Plan (GSP) to be submitted within the statutory deadline of January 31, 2022 (Water Code § 10720.7(a)(1); 23 CCR § 355.4(a)(1). The Wyandotte Creek GSA Board is considering adoption of the GSP through the approval of a Resolution to Adopt the Final Groundwater Sustainability Plan for The Wyandotte Creek Groundwater Subbasin.

Staff will present a summary of the next steps (post-adoption) and the timeline for the Department of Water Resources' review/response process once the GSP is adopted and submitted.

The Draft Wyandotte Creek Subbasin GSP was released for a 45-day public review period beginning on September 9, 2021 and ending October 24, 2021. As part of the public review process, a public workshop was held offering an in-person and a virtual attendance option on October 20, 2021. The purpose of the Workshop was to present and discuss each of the Chapters of the GSP, address clarifying questions, and provide comments to the Wyandotte Creek Management Committee and Geosyntec (consultant team) pertaining to the GSP. In addition, the Wyandotte Creek GSA Stakeholder Advisory Committee (WAC) met on November 4, 2021 to 1) review comments received on the GSP during the public review period as well as during the public workshop and 2) to make any recommendations to the Board regarding any changes, additions, or points of clarification for incorporation into the GSP, as appropriate, prior to finalizing the document for adoption by the Wyandotte Creek GSA Board. The GSA heard additional comments and considered final revisions during the Public Hearing of the GSP on November 18, 2021.

The GSP proposed for adoption for the Wyandotte Creek Subbasin can be reviewed here:
https://www.wyandottecreekgsa.com/groundwater-sustainability-plan-gsp-for-adoption

A Public Comment Summary Memo, identifying key comment topics and a Public Comment Tracking Table with responses is included as Appendix 1-E of the GSP. All of the comments received during the 45-day public comment period as well as the clarifying questions posed during public workshops are included in this appendix. The comment tracking table also identifies three letters submitted by members of the public (identified as P1 through P3) and three letters submitted by agencies and organizations (identified as A1 through A3). The comment letters are cross-referenced in the table and included in their entirety as part of the appendix.

The Wyandotte Creek GSA Management Committee in coordination with the consultant team reviewed all comments received and responded accordingly. Comments that resulted in edits, additions, or deletions to the GSP were documented in tracked changes for ease of review by the GSA Boards prior to adoption. This tracked changes document is also available on the website listed above.

Fiscal Impact: Not applicable

Staff Recommendation: The Management Committee is recommending that the Wyandotte Creek GSA Board adopt the Resolution to Adopt the Final Groundwater Sustainability Plan for the Wyandotte Creek Groundwater Subbasin and that this approval includes an understanding that the Management Committee may make minor typographical corrections and internal consistency edits to the document prior to submittal.

Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

RESOLUTION NO. 2021-01

RESOLUTION ADOPTING THE FINAL GROUNDWATER SUSTAINABILITY PLAN FOR THE WYANDOTTE CREEK GROUNDWATER SUBBASIN.

A. WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)); and

B. WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans ("GSPs"), which can be a single plan developed by one or more groundwater sustainability agency ("GSA") or multiple coordinated plans within a basin or subbasin (Wat. Code, § 10727); and

C. WHEREAS, SGMA requires a GSA manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Wyandotte Creek Subbasin (designated basin number 5-021.69); and

D. WHEREAS, the County of Butte, City of Oroville, and Thermalito Water and Sewer District each elected to become a GSA for the purposes of sustainably managing groundwater in the Wyandotte Creek Subbasin, within its jurisdictional and GSA boundaries, pursuant to the requirements of SGMA; and

E. WHEREAS, on September 18, 2018, the County of Butte, City of Oroville, and Thermalito Water and Sewer District GSAs entered into a Joint Powers Agreement to form the new Wyandotte Creek GSA; and

H. WHEREAS, pursuant to Water Code section 10728.4, Wyandotte Creek GSA held a noticed public hearing on November 18, 2021 to receive comments on the Draft Wyandotte Creek Subbasin GSP; and.

I. WHEREAS, the GSA reviewed, considered and responded to comments on the Wyandotte Creek Subbasin GSP; and

H. WHEREAS, on June 28, 2021, the GSA released the Notice of Intent pursuant to Water Code section 10728.4; and

I. WHEREAS, the GSAs released the final Wyandotte Creek Subbasin GSP on December 10, 2021; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Wyandotte Creek GSA finds as follows:

1. The above Recitals are true and correct and are incorporated herein as findings of the Board.

2. Board hereby approves and adopts the Final Wyandotte Creek Subbasin GSP as attached in Exhibit A.

3. Preparation and adoption of the Wyandotte Creek Subbasin GSP through this Resolution is not subject to the California Environmental Quality Act pursuant to Water Code section 10728.6.

4. The Boards authorizes the Butte County Department of Water and Resource Conservation on behalf of the Wyandotte Creek GSA to take such other actions, such as making minor typographical corrections and internal consistency edits, as may be reasonably necessary to submit the Final Wyandotte Creek Subbasin GSP to DWR by January 31, 2022, and implement the purpose of this Resolution."

PASSED, APPROVED, AND ADOPTED this 16th day of December, 2021 by the following vote:

AYES:

NAYS:

ABSTAIN:

ABSENT:

_____
Bill Connelly
Wyandotte Creek GSA, Chair

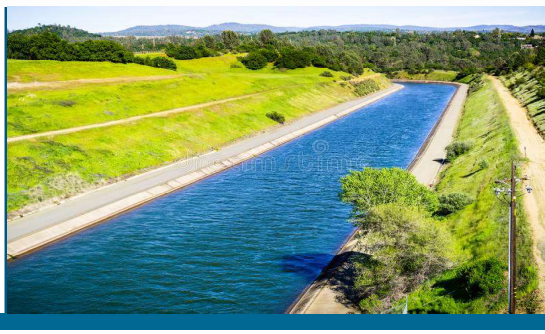
Attest:

_____ Date: _____
Kelly Peterson, Wyandotte Creek GSA Administrator

Wyandotte Creek Groundwater Subbasin

Groundwater Sustainability Plan

December 2021



Wyandotte Creek
GROUNDWATER SUSTAINABILITY AGENCY

PREPARED FOR

WYANDOTTE CREEK GROUNDWATER SUSTAINABILITY AGENCY

Groundwater Sustainability Plan

Wyandotte Creek Groundwater Subbasin

Prepared by

Geosyntec Consultants, Inc.
3043 Gold Canal Drive, Suite 100
Rancho Cordova, California 95670

Joseph Turner, P.G. 5125, C.Hg. 454
Senior Principal Hydrogeologist

Amer Hussain, P.E. 57343
Senior Principal Engineer

Project Number: SAC282

December 15, 2021

Note: Drafts of Section 2, Basin Setting, and portions of Section 4, Monitoring Networks were prepared by Davids Engineering, Inc. These draft sections have been updated during GSP development as additional information became available and modified based on responses to public comment.

ACKNOWLEDGEMENTS

Wyandotte Creek Groundwater Sustainability Agency
Member Agencies
City of Oroville, County of Butte, Thermalito Water and Sewer District

Wyandotte Creek Advisory Committee

Wyandotte Creek Management Committee

Cooperating Agencies

South Feather Water and Power Agency

Consultant Teams

GSP Completion
Geosyntec Consultants

Basin Setting Project
Davids Engineering, Inc.
GEI Consultants, Inc.
Woodard and Curran

Facilitation
Consensus Building Institute

In Remembrance of Byron Alan Clark, PE
(February 4, 1976 - April 3, 2021)
With thanks for his excellent leadership and foundational work
on the Basin Setting Project for the Wyandotte Creek Subbasin GSP

PREFACE

Development of the Wyandotte Creek Subbasin Groundwater Sustainability Plan (GSP), like many others throughout California, has coincided with one of the most severe and extensive droughts that has ever gripped the western United States. As of this writing in December 2021, as the final Wyandotte Creek Subbasin GSP is being assembled, drought conditions throughout most of California, including the Wyandotte Creek Subbasin (Subbasin), are classified as "exceptional", the most extreme classification defined by the U.S. Drought Monitor (USDM).[1] 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 USDM. All of these conditions are currently being experienced to some degree across California and, some of them within the Subbasin.

As of November 29, 2021, the County of Butte had received 44 reports of dry wells through the My Dry Water Supply Reporting System, and another approximately 20 from residents calling the Butte County Department of Water and Resource Conservation. While a number of the reported dry wells are in the foothills outside of the Subbasin, a handful lie within the Wyandotte Creek Subbasin. Most reported dry wells are used for domestic water supply. Counts of dry wells are likely to be low because some landowners choose not to report well problems to the county.

At the State level and as a result of the unprecedented dry conditions, Governor Gavin Newsom declared a drought emergency on April 21, 2021, which was subsequently expanded on May 10 to include new drought-impacted areas including the Sacramento-San Joaquin Delta Watershed. Most recently, on October 19, Governor Newsom issued a proclamation extending the drought emergency statewide. On August 20, the State Water Resources Control Board (SWRCB) issued surface water curtailment orders to approximately 4,500 water right holders in the Sacramento-San Joaquin Delta Watershed to protect drinking water supplies, prevent salinity intrusion into fresh water supplies, and minimize impacts to fisheries and the environment. Given the recent curtailments and an already bleak surface water supply condition, there is an increased reliance on groundwater in the region. Currently, all of California's 58 counties have declared drought emergencies, including Butte County.

The reported numbers of dry wells discussed above prompted mitigation and response actions by the county. The county is tracking the well water shortage reporting to identify localized areas where wells are going dry and/or where other groundwater issues may exist. The county is also supporting the public through local and regional programs offered through the county, such as providing an emergency potable water filling station. The county has also applied for drought

[1] The U.S. Drought Monitor (https://droughtmonitor.unl.edu/) is produced through a partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Center. Information for the State of California is available online at: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CA.

relief funding through the Department of Water Resources. At this time, prior to completion and adoption of the GSP, drought response efforts in the Subbasin are the responsibility of the county, cities, and other local agencies. At some point following adoption of the GSP, those responsibilities may be coordinated more closely with the GSA. Additional coordination with the county, cities, and local agencies would ensure preservation of public health and safety (the purview of the counties and cities) and groundwater sustainability for all beneficial users and uses (the purview of the GSA).

Technical work and related public involvement processes supporting development of the Wyandotte Creek Subbasin GSP began in earnest in 2018 and are nearing completion as of December 2021. Development of the GSP has utilized the best available science and tools, with the most sufficient and credible information and data available for the decisions being made and the time frame available for making those decisions. Current and historical groundwater conditions and water budgets have been evaluated for the Subbasin in alignment with the GSP regulations. The technical work is based primarily on historical records of surface water and groundwater conditions from 1970 through 2018 which includes the prior drought conditions from approximately 2007 to 2015, but not the current drought in 2020 to 2021.

Unfortunately, drought conditions in 2020 and 2021 have coincided with development of the GSP, a timing that has not permitted complete evaluation and inclusion of data from these years in the GSP at this time. Due to the schedule mandated by the Sustainable Groundwater Management Act (SGMA) for completion of GSPs by January 31, 2022, it has not been possible to include conditions that have manifested due to the current drought in development of the GSP. Records of drought-related conditions in 2020 to 2021 will not be systematically compiled, quality-controlled, and made publicly available until after the Wyandotte Creek Subbasin GSP has been adopted. However, those conditions will be factored into the required GSP annual reports and particularly the periodic (five-year) evaluations as they become available.

Ongoing management of the Subbasin under the GSP will follow an “adaptive management” strategy that involves active monitoring of Subbasin conditions and addressing any challenges related to maintaining groundwater sustainability by scaling and implementing projects and management actions (PMAs) in a targeted and proportional manner in accordance with the needs of the Subbasin. Notwithstanding the information noted above regarding the challenges with GSP preparation and the current drought, some of the planned projects contained within this GSP could be fast tracked to address impacts associated with the current drought. GSP annual reports provide an opportunity each year to review current Subbasin conditions. Using annual reporting information, the Wyandotte Creek GSA Board can assess the need for further PMAs. During the periodic five-year evaluations, the GSP will also be reviewed and revised, as needed and as more is known about the effects of current and future conditions.

The Wyandotte Creek GSA and the stakeholders within the Subbasin recognize that this GSP is not the finish line; it is the starting line for sustainable management of the Subbasin. As conditions within the Subbasin change, the GSA is committed to an open, transparent, and all-inclusive adaptive management strategy aimed at tackling the important local issues that they face. At the heart of SGMA is the power for locals to solve local problems with local resources. All parties in the Subbasin are committed to doing just that.

Geosyntec consultants

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ACRONYMS AND ABBREVIATIONS

µS/cm	microsiemens per centimeter
AB	Assembly Bill
ACS	American Community Survey
AEM	aerial electromagnetic
AFY	acre-feet per year
Agreement	Joint Powers Agreement
amsl	above mean sea level
BBGM	Butte Basin Groundwater Model
BCDWRC	Butte County Department of Water and Resource Conservation
bgs	below ground surface
BMOs	Basin Management Objectives
BMPs	Best Management Practices
C&E Plan	Communication and Engagement Plan
Cal Water	California Water Service
CASGEM	California Statewide Groundwater Elevation Monitoring
CCR	California Code of Regulations
CDEC	California Data Exchange Center
CDFW	California Department of Fish and Wildlife
CECs	Chemicals of Emerging Concern
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CNRA	California Natural Resources Agency
CRC	California Rice Commission
CVRWQCB	Central Valley Regional Water Quality Control Board
DACs	Disadvantaged Communities
DMS	data management system
Drought Plan	Butte County Drought Preparedness and Mitigation Plan
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EPA	Environmental Protection Agency

GAMA	Groundwater Ambient Monitoring and Assessment
GDEs	Groundwater Dependent Ecosystems
GIS	geographical information systems
GQTMWP	Groundwater Quality Trend Monitoring Work Plan
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HCM	Hydrogeologic Conceptual Model
HVA	High Vulnerability Area
iGDEs	potential groundwater dependent ecosystems
ILRP	Irrigated Lands Regulatory Program
IM	interim milestones
InSAR	Interferometric Synthetic Aperture Radar
IRWM	Integrated Regional Water Management
JPL	Jet Propulsion Laboratory
LID	Low Impact Development
MA	Management Area
MAF	million acre-feet
MCL	maximum contaminant level
mg/L	milligrams per liter
MGD	million gallons per day
MHI	median household income
MO	measurable objective
MT	minimum threshold
NASA	National Aeronautics and Space Administration
NCCAG	Natural Communities Commonly Associated with Groundwater
NEPA	National Environmental Policy Act
NR	Not yet reported
NRCS	Natural Resources Conservation Service (
OSWCR	Online System for Well Completion Reports
RMS	representative monitoring sites
SAGBI	Soil Agricultural Groundwater Banking Index

SB	Senate Bill
SBFCA	Sutter Butte Flood Control Agency
SDACs	Severely Disadvantaged Communities
SFWPA	South Feather Water and Power Agency
SGMA	Sustainable Groundwater Management Act
SI	Sustainability Indicators
SMC	sustainable management criteria
SOI	Sphere of Influence
SVWQC	Sacramento Valley Water Quality Coalition
SWRCB	State Water Resources Control Board
TAF	thousands of acre-feet
TAF/year	thousand acre-feet per year
TBD	to be decided
TDS	total dissolved solids
TNC	The Nature Conservancy
TSS	Technical Support Services
TWSD	Thermalito Water and Sewer District
URCs	Underrepresented Communities
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
WAC	Wyandotte Creek Advisory Committee
WDL	Water Data Library
Wyandotte Creek Subbasin	Wyandotte Creek Groundwater Subbasin

EXECUTIVE SUMMARY

Sustainability Goal:

To ensure that groundwater is managed to provide a water supply of adequate quantity and quality to support beneficial users of groundwater including but not limited to rural areas and other communities, the agricultural economic base of the region, and environmental resource uses in the Subbasin now and in the future.

Introduction

In 2014, the California legislature enacted the Sustainable Groundwater Management Act (SGMA) in response to continued overdraft of California's groundwater resources. SGMA provides for local control of groundwater resources while requiring sustainable management of the state's groundwater basins. Under the provisions of SGMA, local agencies must establish governance of their subbasins by forming Groundwater Sustainability Agencies (GSAs) within the authority to develop, adopt, and implement a Groundwater Sustainability Plan (GSP or Plan) for the subbasin. Under the GSP, GSAs must adequately define and monitor groundwater conditions in the subbasin and establish criteria to maintain or achieve sustainable groundwater management within 20 years of GSP adoption. Within the framework of SGMA, sustainability is generally defined as long-term reliability of the groundwater supply and the absence of undesirable results.

Critical Dates for the Wyandotte Creek Groundwater Subbasin	
2022	By January 31, submit GSP to Department of Water Resources (DWR)
2027	Evaluate GSP and update, if warranted
2032	Evaluate GSP and update, if warranted
2037	Evaluate GSP and update, if warranted
2042	Achieve sustainability for the Wyandotte Creek Subbasin

The Wyandotte Creek Groundwater Subbasin (Wyandotte Creek Subbasin) is identified by DWR as being in a medium priority subbasin. For medium priority basins, SGMA requires preparation of the GSP by January 31, 2022. The Wyandotte Creek GSA is the only GSA in the Wyandotte Creek Subbasin. The Wyandotte Creek GSA was formed through the execution of a Joint Powers Agreement (Agreement) by the County of Butte, City of Oroville, and the Thermalito Water and Sewer District (TWSD). The GSA Board is composed of five seats, each with equal and full voting rights, including Butte County, City of Oroville, TWSD, an agricultural groundwater user, and a domestic well user (non-agricultural).

The purpose of the Agreement was to create the Wyandotte Creek GSA to 1) to develop, adopt, and implement a GSP for the Wyandotte Creek subbasin to implement SGMA requirements and achieve the sustainability goals; and 2) involve the public and subbasin stakeholders through outreach and engagement in developing and implementing the GSP. The focus of the Agreement is to maximize local input and decision-making and address the different water demands and sustainability considerations in the urban and rural areas of the Wyandotte Creek Subbasin.

The agreement also defines two Management Areas (MAs) within the Wyandotte Creek Subbasin: Wyandotte Creek Oroville and Wyandotte Creek South. MA refers to an area within a subbasin for which a GSP may identify different minimum thresholds (MTs), measurable objectives (MOs), monitoring, and projects and management actions based on unique local conditions or other circumstances as described in the GSP regulations. The interests and vulnerability of stakeholders and groundwater uses in these MAs vary based on the nature of the water demand (agricultural, domestic, municipal), numbers and characteristics of wells supplying groundwater, and to some degree the hydrogeology and mix of recharge sources.

SGMA requires development of a GSP that achieves groundwater sustainability in the Wyandotte Creek Subbasin by 2042. A pragmatic approach to achieving sustainable groundwater management requires an understanding of 1) historical trends and current groundwater conditions in the subbasin, based on evaluating six sustainability indicators (SIs) that include groundwater levels, groundwater storage, groundwater quality, land subsidence, depletion of interconnected streams, and seawater intrusion and 2) what must change in the future to ensure sustainability without causing undesirable results (described and defined in Chapter 3) or negatively impacting beneficial uses and users of groundwater, including groundwater dependent ecosystems (GDEs).

The GSP is organized as follows and the various components of each chapter are summarized further below:

1. Chapter 1: Plan Area. This chapter includes agency information, description of the Plan Area, and applicable programs and data sources used to prepare the GSP as well as a description of beneficial users and uses within the Basin and a summary of stakeholder communications and engagement.
2. Chapter 2: Basin Setting. This chapter discusses the Hydrogeologic Conceptual Model (HCM), groundwater conditions and water budget.
3. Chapter 3: Sustainable Management Criteria. This chapter discusses undesirable results, identifies the minimum thresholds, and measurable objectives for each of the six SIs.
4. Chapter 4: Monitoring Network. This chapter describes the methods used to monitor the SIs.
5. Chapter 5: Project Management Actions. This chapter describes projects and management actions that will achieve sustainability within the Subbasin.
6. Chapter 6: Plan Implementation. This chapter describes how the GSA will partner with other groundwater users to implement the GSP to achieve groundwater sustainability.

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 five management actions that can be implemented to focus on reduction of groundwater demand. Although current analysis indicates that groundwater pumping offsets and/or recharge on the order of 1,000 acre-feet per year (AFY) may be required to achieve

sustainability, additional efforts are needed to confirm the level of pumping offsets and/or recharge required to achieve sustainability. These efforts include collecting additional data and a review of the Wyandotte Creek Subbasin groundwater model, along with other efforts as outlined in the GSP.

GSP Area

The Wyandotte Creek Subbasin is in Butte County within the Sacramento Valley, as shown in Figure ES-1. The Wyandotte Creek GSA jurisdictional area is defined by the boundaries of the Wyandotte Creek Subbasin in DWR's 2003 Bulletin 118 as updated in 2016 and 2018. Figure ES-2 shows the boundaries of the Wyandotte Creek Subbasin and the two MAs.

Outreach Efforts

A stakeholder engagement strategy was developed to solicit and discuss the interests of all beneficial users of groundwater in the Wyandotte Creek Subbasin and Plan Area. The strategy included monthly meetings of the Wyandotte Creek GSA Management Committees (made up of staff from the member agencies) and the Wyandotte Creek Advisory Committee (WAC), and a website where all announcements, meeting dates, times, and materials were posted.

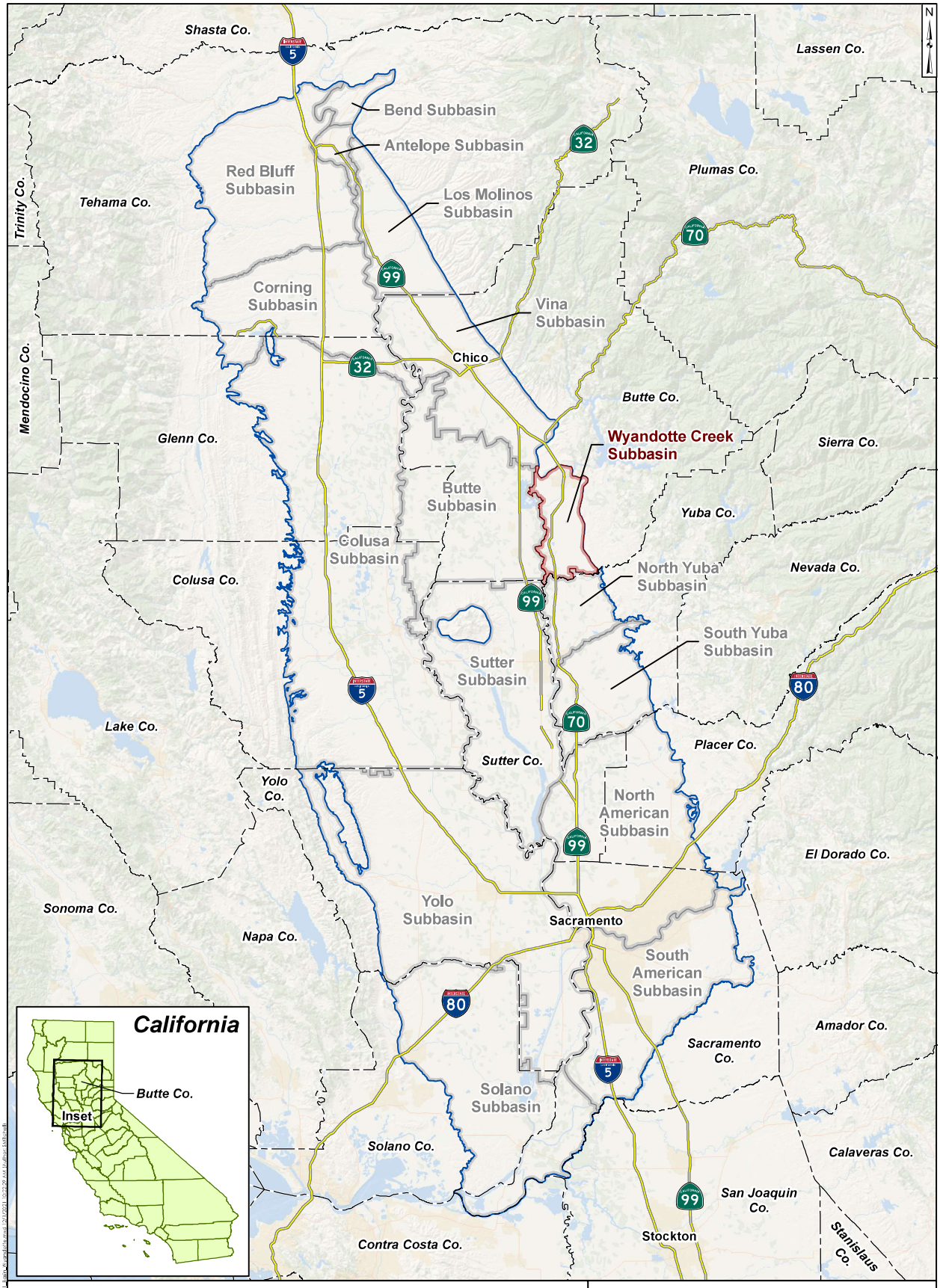
The Wyandotte Creek GSA also prepared and implemented a Communication and Engagement Plan (C&E Plan) to encourage involvement from diverse social, cultural, and economic elements of the population of the Wyandotte Creek Subbasin, in addition to meeting SGMA requirements for intrabasin coordination.

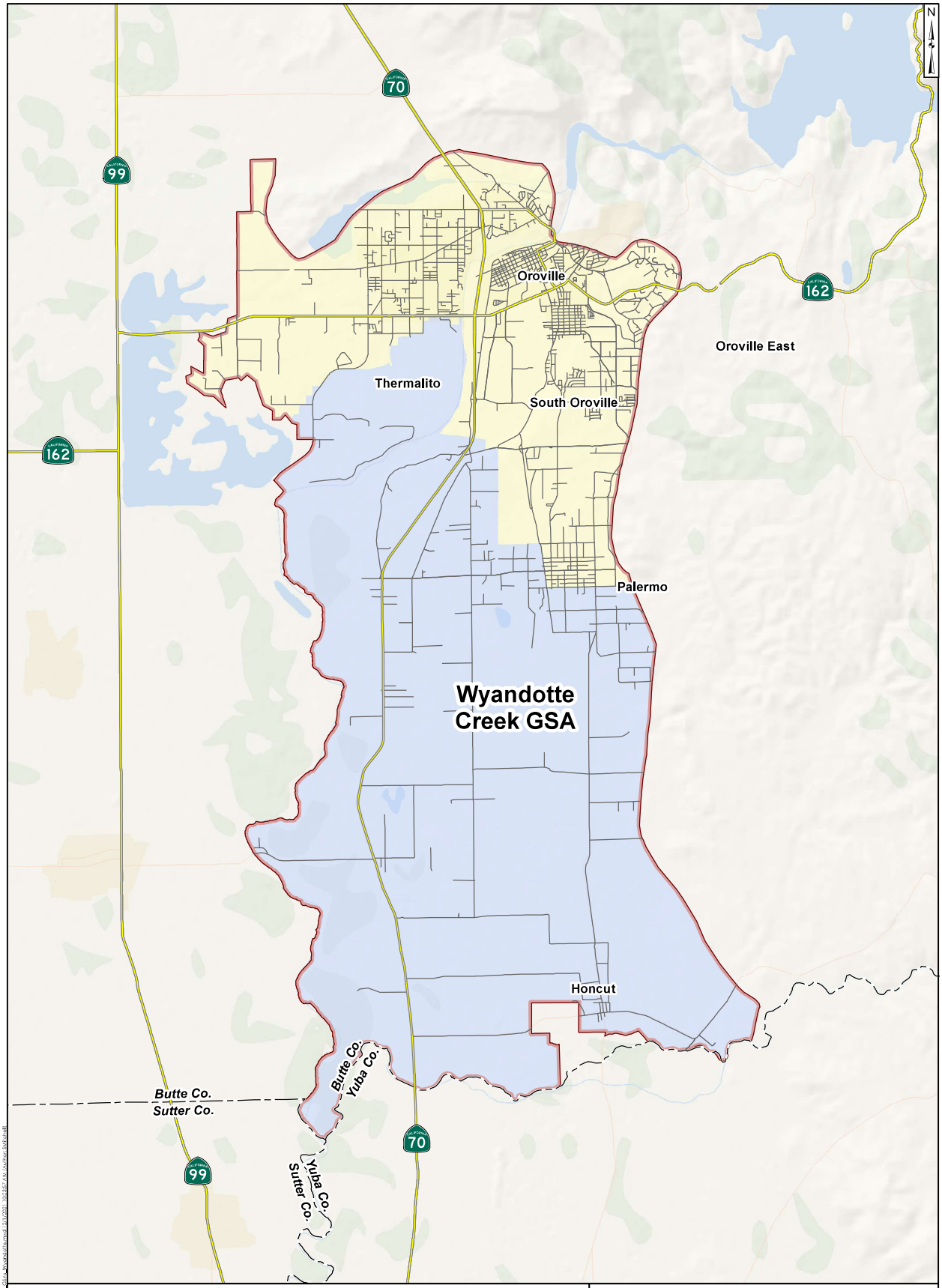
In addition, various chapters of the GSP were available for preliminary review and comment prior to the final draft version released on December 15, 2021. Comments received on preliminary draft chapters were incorporated as deemed appropriate and helped guide and shape the final draft document.

Basin Setting

The Wyandotte Creek Subbasin lies in the eastern central portion of the Sacramento Groundwater Basin. It is bounded on the west by the Feather River and Thermalito Afterbay; in the south by the Butte-Yuba County line (except for Ramirez Water District which is fully within the North Yuba Subbasin); and on the north and east by the edge of the alluvial basin as defined by DWR Bulletin 118 - Update 2003 (DWR, 2003). It is surrounded by the Butte Subbasin to the west, the Wyandotte Creek Subbasin to the north, the North Yuba Subbasin to the south and the foothills to the east (Figure ES-2). The lateral boundaries of the Wyandotte Creek Subbasin are jurisdictional in nature, and it is recognized that groundwater flows across each of the defined boundaries to some degree.

Continental sediments of the Tuscan and Laguna Formation compose the major fresh groundwater-bearing formations in the Wyandotte Creek Subbasin. The base of these continentally derived formations is generally accepted as the base of fresh water in the northern Sacramento Valley. Locally, the base of fresh groundwater fluctuates depending on local changes in the subsurface geology and geologic formational structure. The base of fresh water is known to be shallower along the eastern portion of the basin.


Shasta Co.
Lassen Co.
Bend Subbasin
Antelope Subbasin
Red Bluff Subbasin
Plumas Co.
Tehama Co.
Trinity Co.
Los Molinos Subbasin
Corning Subbasin
Vina Subbasin
Chico
Mendocino Co.
Butte Co.
Glenn Co.
Wyandotte Creek Subbasin
Sierra Co.
Butte Subbasin
Yuba Co.
Colusa Subbasin
Colusa Co.
North Yuba Subbasin
Nevada Co.
South Yuba Subbasin
Sutter Subbasin
Lake Co.
Placer Co.
Sutter Co.
Yolo Co.
North American Subbasin
El Dorado Co.
Sonoma Co.
Yolo Subbasin
Sacramento
Napa Co.
South American Subbasin
Amador Co.
Sacramento Co.
Solano Subbasin
Solano Co.
Calaveras Co.
San Joaquin Co.
Stockton
Contra Costa Co.
Stanislaus Co.
California
Butte Co.
Inset
N
Legend
Groundwater Basin[1]
Sacramento Valley Groundwater Basin
Groundwater Subbasins[1]
Wyandotte Creek Groundwater Subbasin
Other Sacramento Valley Groundwater Subbasins
Roads[2]
Highways
Boundaries[2]
County boundaries
Notes:
1) California Department of Water Resources (CA DWR).
2) TIGER/Line, U.S. Census Bureau.
20 10 0 20 Miles
Sacramento Valley Groundwater Basin
Wyandotte Creek Subbasin GSP
Geosyntec consultants
Project No.: SAC282
December 2021
Figure ES-1



Groundwater Sustainability Agencies
Wyandotte Creek Subbasin GSP

Geosyntec consultants

Project No.: SAC282 | December 2021

Figure **ES-2**

Groundwater flows from the north and from foothill recharge areas in the east toward the subbasin's southeastern corner. Because of the influence of Thermalito Afterbay and the Feather River, groundwater elevations in the north are generally stable between the spring and fall observation periods, while elevations in the south tend to be lower in the fall than the spring, a pattern typical of valley floor locations distant from major sources of recharge. The location of the Wyandotte Creek Subbasin along with surface water features is shown in Figure ES-3.

Existing Groundwater Conditions

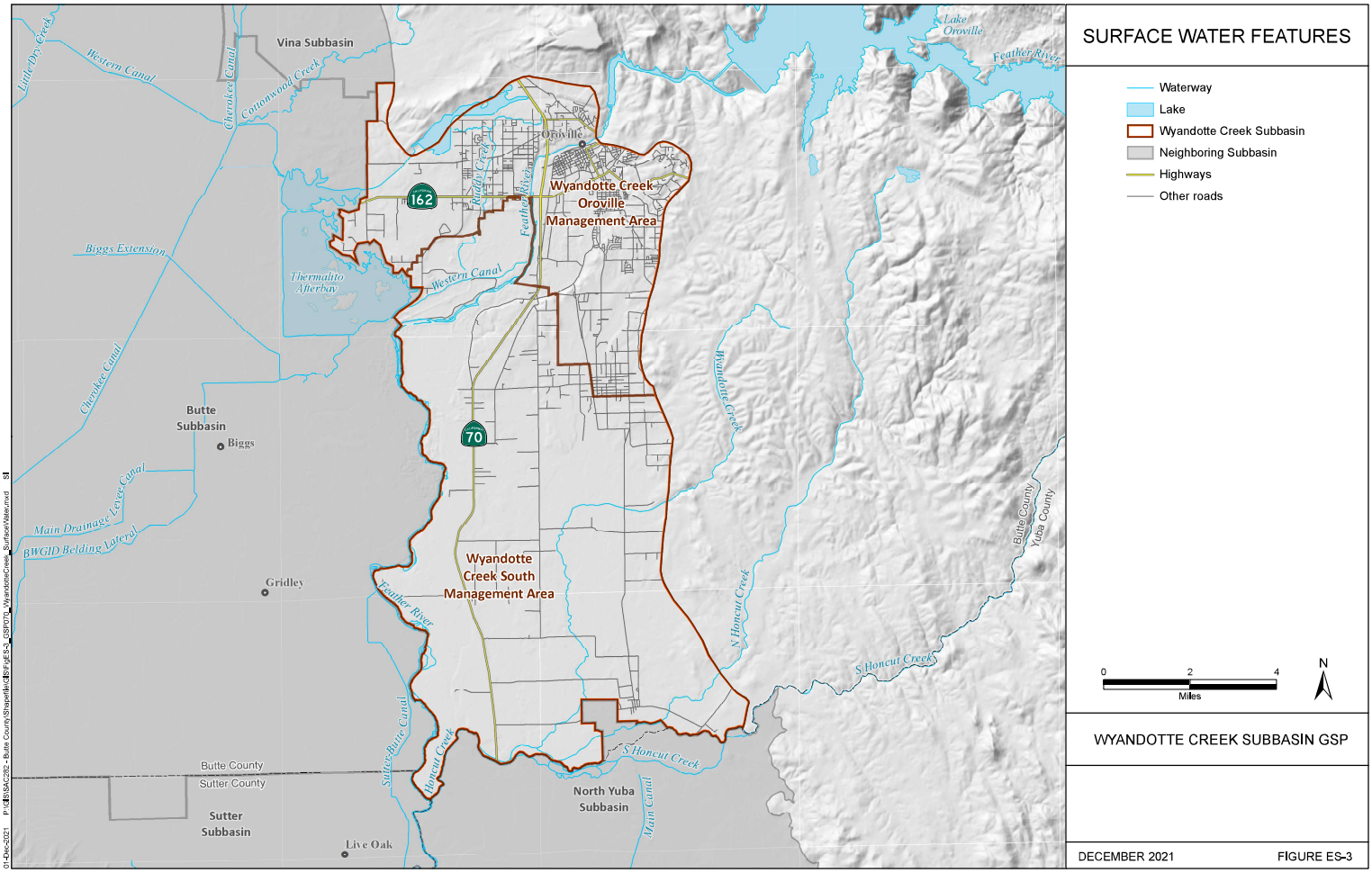
Groundwater conditions in the Wyandotte Creek Subbasin are regularly monitored and are described in reports produced by Butte County since 2001. These documents and other reports portray a subbasin that has adequate groundwater resources to meet demands under most hydrologic conditions. However, comparison of the reports illustrates how in the period between their issuance, groundwater conditions have tightened, and as forces ranging from population growth to climate change play out, the value of well-informed water management policies and practices is likely to increase. In short, while groundwater conditions in the Wyandotte Creek Subbasin remain stable, maintaining this posture in the future may become less the result of a state of nature and more the reward for thoughtful management.

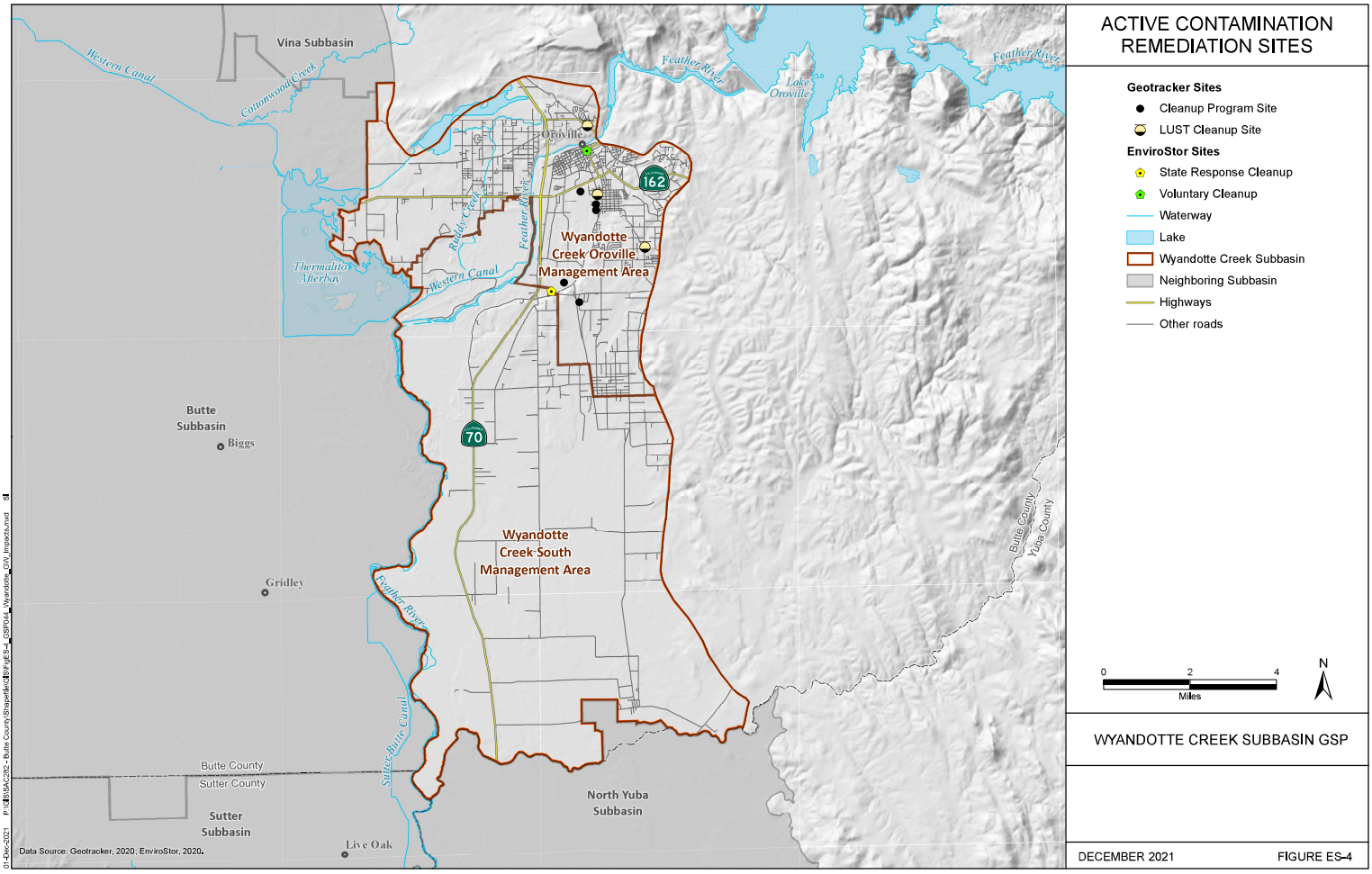
Groundwater levels in the Wyandotte Creek Subbasin indicate that groundwater elevations are relatively stable. Groundwater quality in the basin is good except in areas where anthropogenic sources have impacted the groundwater. Figure ES-4 shows the locations of known impacted groundwater from these sources.

Groundwater storage in Wyandotte Creek Subbasin is relatively stable. The Feather River and Thermalito Afterbay stabilize storage volumes by providing recharge to the Wyandotte Creek Subbasin. The total fresh groundwater in storage was estimated at about 2.1 million-acre-feet (MAF) in 2018. The amount of groundwater in storage has decreased by approximately 0.14 percent per year between 2000 and 2018. As such, it is highly unlikely the Wyandotte Creek Subbasin will experience conditions under which the volume of stored groundwater poses a concern. However, the depth to access that groundwater across the Wyandotte Creek Subbasin may pose a concern.

Land subsidence has not historically been an area of concern in the Wyandotte Creek Subbasin and there are no records of land subsidence caused by groundwater pumping in the Wyandotte Creek Subbasin. Seawater intrusion is not applicable to the Wyandotte Creek Subbasin due to distance from the Delta and Pacific Ocean.

Surface waters can be hydraulically interconnected with the groundwater system, where the stream baseflow is either derived from the aquifer (gaining stream) or recharged to the aquifer (losing stream). If the water table beneath the stream lowers as a result of groundwater pumping, the stream may disconnect entirely from the underlying aquifer. Within the floodplain of the Feather River there is a continuous saturated zone that connects the shallowest aquifer to the river. The connectivity between shallow and deeper aquifer zones will dictate the overall connectivity to the River.


SURFACE WATER FEATURES
Waterway
Lake
Wyandotte Creek Subbasin
Neighboring Subbasin
Highways
Other roads
Vina Subbasin
Butte Subbasin
North Yuba Subbasin
Sutter Subbasin
Wyandotte Creek Oroville Management Area
Wyandotte Creek South Management Area
Oroville
Biggs
Gridley
Live Oak
Butte County
Sutter County
Lake Oroville
Feather River
Western Canal
Cherokee Canal
Cottonwood Creek
Little Dry Creek
Biggs Extension
Thermalito Afterbay
Main Drainage Levee Canal
BWGID Belding Lateral
Reddy Creek
Wyandotte Creek
N Honcut Creek
S Honcut Creek
Sutter-Butte Canal
Main Canal
Butte County
Yuba County
162
70
0
2
4
Miles
N
WYANDOTTE CREEK SUBBASIN GSP
DECEMBER 2021
FIGURE ES-3


ACTIVE CONTAMINATION REMEDIATION SITES
Geotracker Sites
Cleanup Program Site
LUST Cleanup Site
EnviroStor Sites
State Response Cleanup
Voluntary Cleanup
Waterway
Lake
Wyandotte Creek Subbasin
Neighboring Subbasin
Highways
Other roads
Vina Subbasin
Western Canal
Cohonowood Creek
Feather River
Lake Oroville
Oroville
162
Wyandotte Creek Oroville Management Area
Thermalito Afterbay
Butte Subbasin
Biggs
70
Wyandotte Creek South Management Area
Gridley
Butte County
Yuba County
Sutter-Butte Canal
Butte County
Sutter County
Sutter Subbasin
North Yuba Subbasin
Live Oak
0
2
4
Miles
N
WYANDOTTE CREEK SUBBASIN GSP
DECEMBER 2021
FIGURE ES-4
Data Source: Geotracker, 2020; EnviroStor, 2020.

In the upland areas outside of the Feather River floodplain, there are creeks that flow seasonally and dry up in late summer or are dry for an entire year during dry conditions. In this case, the upland creeks may not be influenced by "high groundwater connectivity" and the presence of an undesirable result is not clear cut with respect to surface water depletion. The streams dry up regardless of the groundwater condition, and streams that are already dry are not considered interconnected surface water. However, the upland streams are an important source of recharge to the aquifer, so the health of these stream channels and their adjacent riparian zones is important to groundwater sustainability. This has been identified as a data gap and will be addressed as part of the GSP implementation.

Potential impacts of the depletion of interconnected surface water were discussed by stakeholders during technical discussions covering the fundamentals of groundwater-surface water interactions and mapping analysis of potential groundwater dependent ecosystems (iGDEs) prepared by Butte County Department of Water and Resource Conservation (BCDWRC). Potential impacts identified by stakeholders were:

- Disruption to GDEs
- Reduced flows in rivers and streams supporting aquatic ecosystems and water right holders
- Streamflow changes in upper watershed areas outside of the Wyandotte Creek GSA boundary
- Water table depth dropping below the maximum rooting depth of Valley Oak (*Quercus lobata*) or other deep-rooted tree species
- Cumulative groundwater flow moving toward the Feather River from both the Wyandotte Creek Subbasin and surrounding GSAs on both the east and west side of the river

The Wyandotte Creek Subbasin acknowledges that overall function of the riparian zone and floodplain is dependent on multiple components of the hydrologic cycle that may or may not have relationships to groundwater levels in the principal aquifer. For example, hydrologic impacts outside of the Wyandotte Creek Subbasin, such as upper watershed development or fire-related changes in run-off, could result in impacts to streamflow, riparian areas, or GDEs that are completely independent of any connection to groundwater use or conditions within the Wyandotte Creek Subbasin.

Sustainable Management Criteria

SGMA introduces several terms to measure sustainability. The sustainability goal is the culmination of conditions resulting in a sustainable condition (absence of undesirable results) within 20 years. The sustainability goal for the Wyandotte Creek Subbasin is:

> *to ensure that groundwater is managed to provide a water supply of adequate quantity and quality to support beneficial users of groundwater including but not limited to rural areas and other communities, the agricultural economic base of the region, and environmental resource uses in the Subbasin now and in the future.*

SIs refer to any of the effects caused by groundwater conditions occurring throughout the Wyandotte Creek Subbasin that, when significant and unreasonable, cause undesirable results. The six SIs identified by DWR are:

1. Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon
2. Significant and unreasonable reduction of groundwater storage
3. Significant and unreasonable seawater intrusion
4. Significant and unreasonable degraded water quality
5. Significant and unreasonable land subsidence that substantially interferes with surface land uses
6. Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

Undesirable results are the significant and unreasonable occurrence of conditions that adversely affect groundwater use in the Wyandotte Creek Subbasin, including reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses of the Wyandotte Creek Subbasin's groundwater. Categories of undesirable results are defined through the SIs.

MT are numeric values for each SI and are used to define when undesirable results occur. Undesirable results occur if MTs are exceeded in an established percentage of sites in the Wyandotte Creek Subbasin's representative monitoring network. MO are a specific set of quantifiable goals for the maintenance or improvement of groundwater conditions. The margin of operational flexibility is the range of active management between the MT and the MO. Interim milestones (IM) are targets set in 5-year increments over the implementation period of the GSP offering a path to sustainability. Figure ES-5 illustrates these terms using the groundwater level SI.

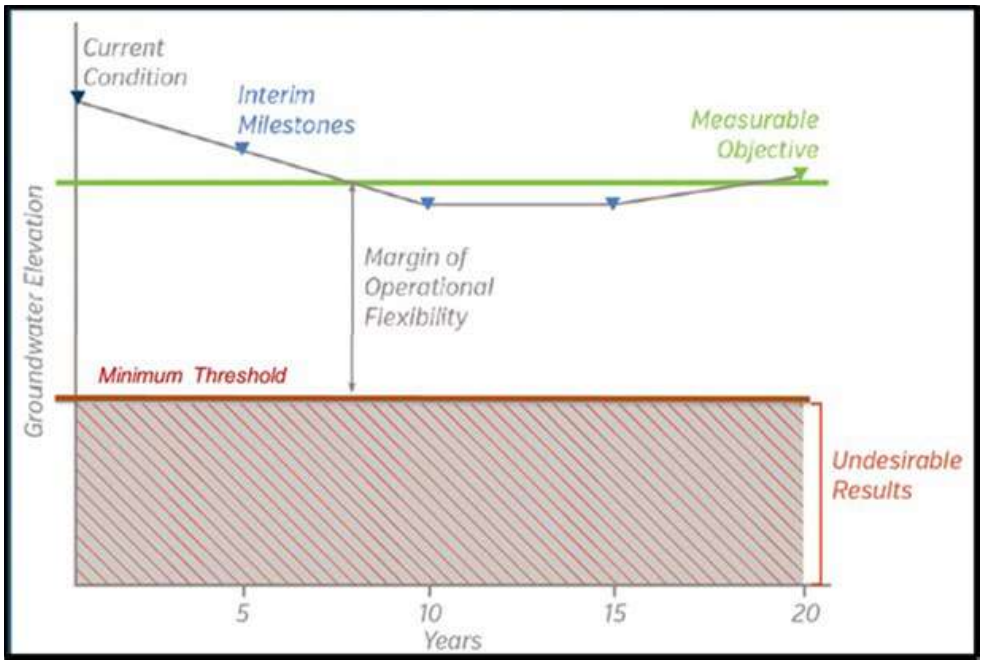


Figure ES-5: Illustration of Terms Used for Describing Sustainable Management Criteria Using the Groundwater Level Sustainability Indicator

A total of nine representative wells were identified for measurement of groundwater levels in the Wyandotte Creek Subbasin and six representative wells were identified for groundwater quality monitoring. The GSP uses groundwater quality data as a basis for evaluating conditions from saline water below the fresh water and uses groundwater level data as the basis for evaluating conditions for groundwater levels, groundwater storage, and subsidence. The GSP has identified a data gap for development of sustainable management criteria (SMC) for depletion of interconnected surface waters and has provided a framework for evaluation of this SI. However, for this GSP, the SMC developed for groundwater levels are used as a proxy for interconnected surface water in an interim manner until data gaps are addressed. As such, the representative monitoring wells described above provide the basis for measuring the five relevant SIs across the Wyandotte Creek Subbasin.

MTs and MOs were developed for each of the representative wells. Figure ES-6 shows a typical relationship of the MTs, MOs, and historical groundwater level data for a sample groundwater level representative monitoring well.

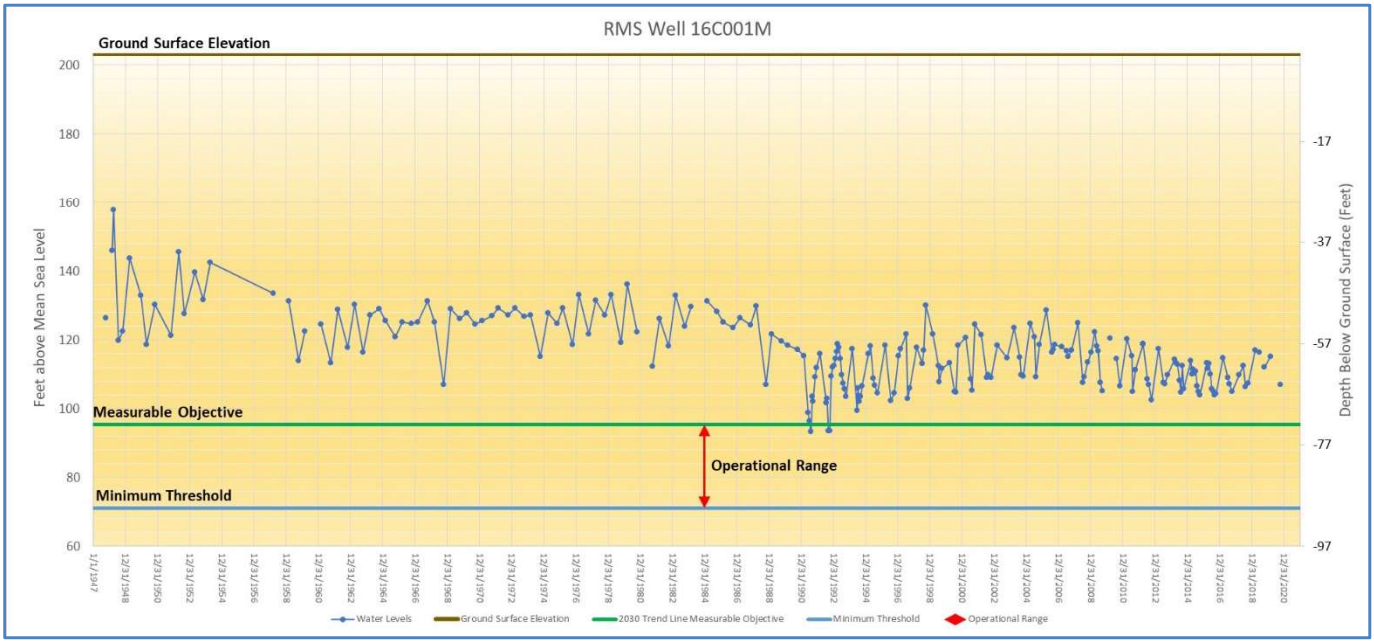


Figure ES-6: Representative Monitoring Site for Groundwater Levels with Relationship of Measurable Objectives, Minimum Thresholds, and Operational Range

MTs for groundwater levels were developed with reference to domestic well depths. The MT for all representative monitoring site (RMS) wells was based on the 15th percentile of total well depth for domestic wells completed after 1980. 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, the GSP has identified these data as a data gap that will be further investigated as part of the GSP implementation.

To establish the MO, the water-level hydrograph of observed groundwater levels at each RMS well was evaluated. The historical record at these locations shows cyclical fluctuations of groundwater level over a four- to seven-year cycle. The MO for groundwater levels at each RMS well was set at the trend line for the dry periods (since 2000) of observed short-term climatic cycles extended to 2030. Figure ES-7 shows an example of this trend line for an RMS well. Table ES-1 shows the MTs and MOs for groundwater levels at each of the RMS wells.

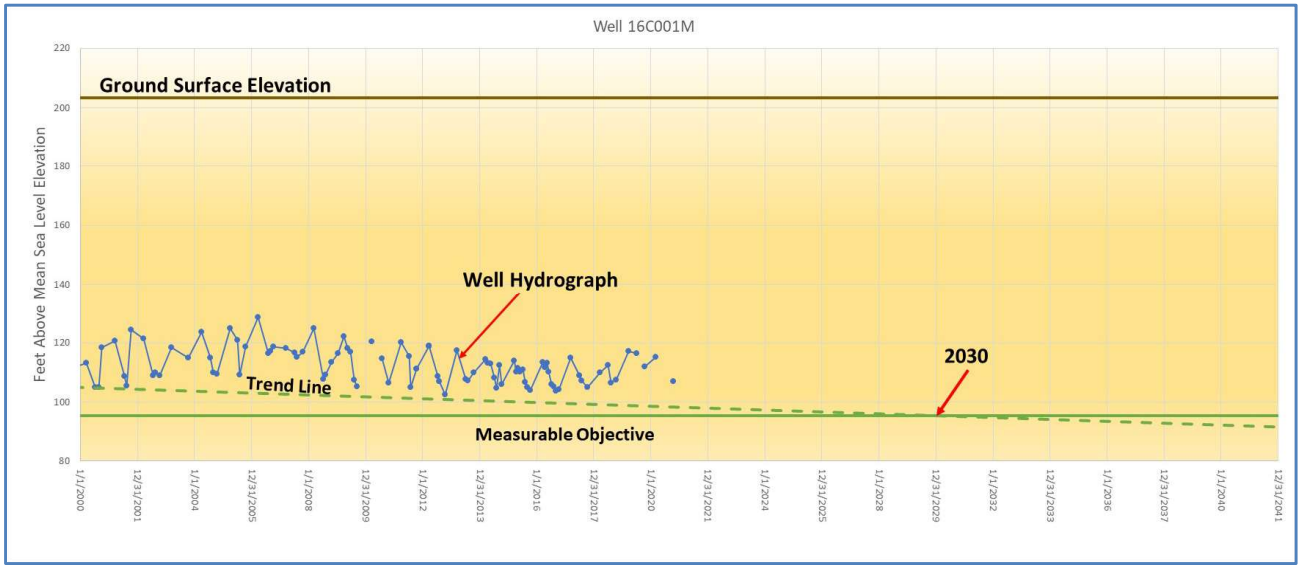


Figure ES-7: Illustration of Long-Term Trend Using Historical Water Levels Extended to 2030 for Development of Measurable Objective

Table ES-1: Groundwater Levels Sustainable Management Criteria by Representative Monitoring Site in Feet Above Mean Sea Level

RMS Well ID	MT	MO	IM		
			2027	2032	2037
Wyandotte Creek Subbasin – Oroville Management Area					
16Q001M	85	133	134	133	133
32P001M	78	107	108	106	106
CWS-03	102	133	135	132	132
Wyandotte Creek Subbasin – South Management Area					
13B002M	35	47	48	46	46
09N002M	35	49	51	47	47
25N001M	37	52	53	52	52
08M001M	59	86	87	85	85
16C001M	71	95	96	95	95
31F001M	76	99	101	98	98

MTs and MOs for water quality were defined by considering two primary beneficial uses at risk of undesirable results related to salinity: drinking water and agriculture uses. MTs are 1,600 micro-siemens per centimeter (µS/cm) for each representative monitoring well, consistent with the upper limit of the California Secondary Maximum Contaminant Level (MCL) for electrical conductivity. MOs are 900 µS/cm for each representative monitoring well, consistent with the California Secondary MCL for electrical conductivity.

Data needed to develop the SMC for interconnected surface waters includes definition of stream reaches and associated priority habitat, streamflow measurements to develop profiles at multiple time periods, and measurements of groundwater levels directly adjacent to stream channels, first

water bearing aquifer zone, and deeper aquifer zones. These data are not available and are a data gap for the GSP. Further evaluation of this SMC is needed to avoid undesirable results to aquatic ecosystems and GDEs. To that end, an Interconnected Surface Water SMC framework has been developed for the GSP. As such, for this GSP the groundwater levels SMC are used by proxy and the MT and MO for interconnected surface water is the same as for groundwater levels.

The MTs and MOs for groundwater levels are also used for the land subsidence and groundwater storage SIs, as both are strongly linked to groundwater levels. The groundwater levels MTs are found to be protective of land subsidence and groundwater storage.

Water Budgets

The groundwater evaluations conducted as a part of GSP development have provided estimates of the historical, current, and projected groundwater budget conditions. The current analysis was prepared using the best available information and through use of the Butte Basin Groundwater Model (BBGM). The BBGM began in 1992 and has been updated over time to simulate historical conditions through 2018. To prepare water budges for this GSP, historical BBGM results for water years 2000 to 2018 have been relied upon and four additional baseline scenarios have been developed to represent current and projected conditions utilizing 50 years of hydrology. It is anticipated that as additional information becomes available, the model will be updated, and more refined estimates of annual pumping and overdraft can be developed.

Based on these analyses, at projected groundwater pumping levels, the long-term groundwater pumping offset and/or recharge required for the Wyandotte Creek Subbasin to achieve sustainability is approximately 1,000 AFY. Groundwater levels are expected to continue to decline based on projections of current land and water uses. Projects that offset groundwater pumping and/or increase recharge will help the Wyandotte Creek Subbasin reach sustainability.

The projected Wyandotte Creek Subbasin water budget was also evaluated under climate change conditions, which simulate higher demand requiring increased groundwater pumping despite more precipitation and streamflows. The climate change scenario used for the analysis was based on the 2030 and 2070 central tendency climate change datasets provided by DWR to support GSP development. The overdraft modeled under climate change conditions is simulated to increase above projected conditions without climate change. Figure ES-8 illustrates the cumulative change in groundwater storage for current and future conditions.

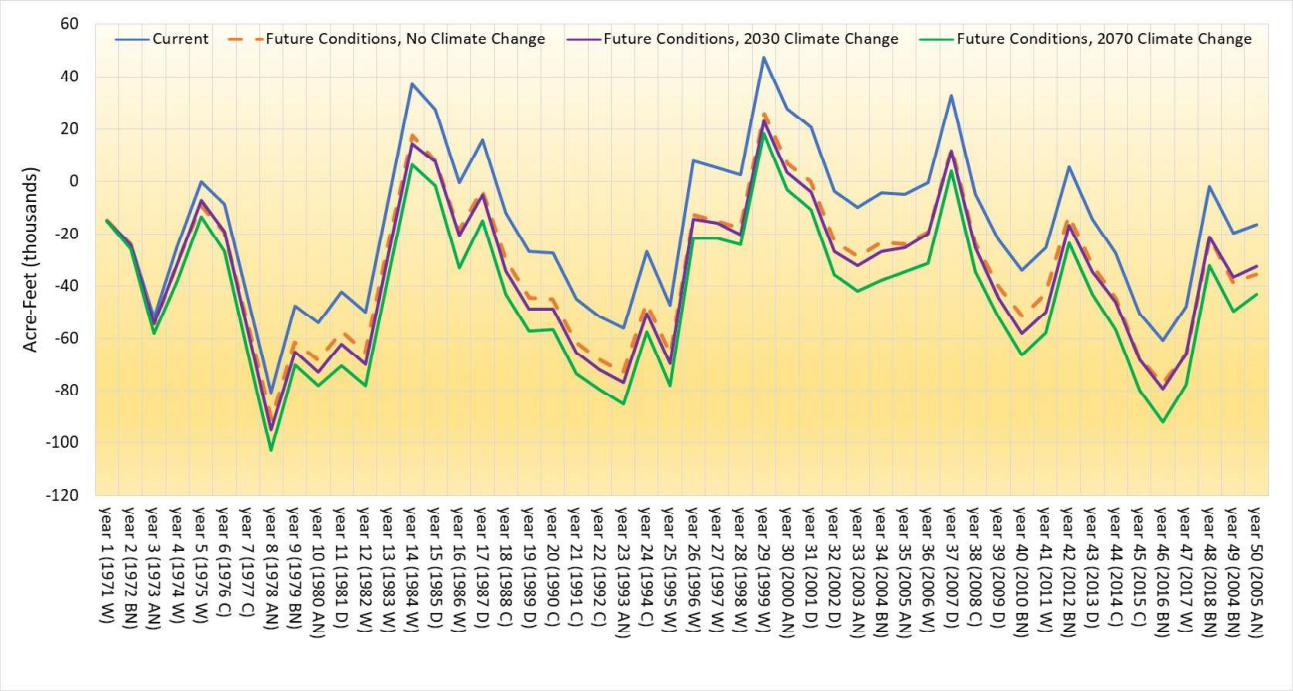


Figure ES-8: Cumulative Change in Groundwater Storage for Current and Future Conditions Baseline Scenarios

Monitoring Networks

The GSP outlines the monitoring networks for the six SIs. The objective of these monitoring networks is to monitor conditions across the Wyandotte Creek Subbasin and to detect trends toward undesirable results. Specifically, the monitoring network was developed to do the following:

- Monitor impacts to the beneficial uses or users of groundwater
- Monitor changes in groundwater conditions relative to MOs and MTs
- Demonstrate progress toward achieving MOs described in the GSP

There are five monitoring networks in the Wyandotte Creek Subbasin: a representative network for water levels; a broad network for water levels; a representative network for water quality; a broad network for water quality; and a broad network for land subsidence. Representative networks are used to determine compliance with the MTs, while the broad networks collect data for informational purposes to identify trends and fill data gaps. The two monitoring networks for water quality will additionally be used to develop an electrical conductivity isocontour to monitor for potential intrusion for underlying saline waters and water levels data will inform depletions of interconnected surface water.

The monitoring networks were designed by evaluating data from Butte County's existing Basin Management Objective (BMO) program, the United States Geological Survey (USGS), and participating GSAs. The monitoring network consists largely of wells that are already being used

for monitoring in the Wyandotte Creek Subbasin. Figure ES-9 shows the location of groundwater monitoring wells for the representative monitoring networks.

Wells in the monitoring networks will be measured on a semi-annual schedule. Historical measurements will be entered into the Wyandotte Creek Subbasin Data Management System (DMS), and future data will also be stored in the DMS. A summary of the wells in the monitoring networks is shown in the table below. There are also three stream gauges monitored within the Wyandotte Creek Subbasin

Summary of Monitoring Network Wells	
Representative Networks	**Well Count**
Groundwater Level	9
Groundwater Quality	8
Broad Network	
Groundwater Levels	13
Groundwater Quality	2
Subsidence	6

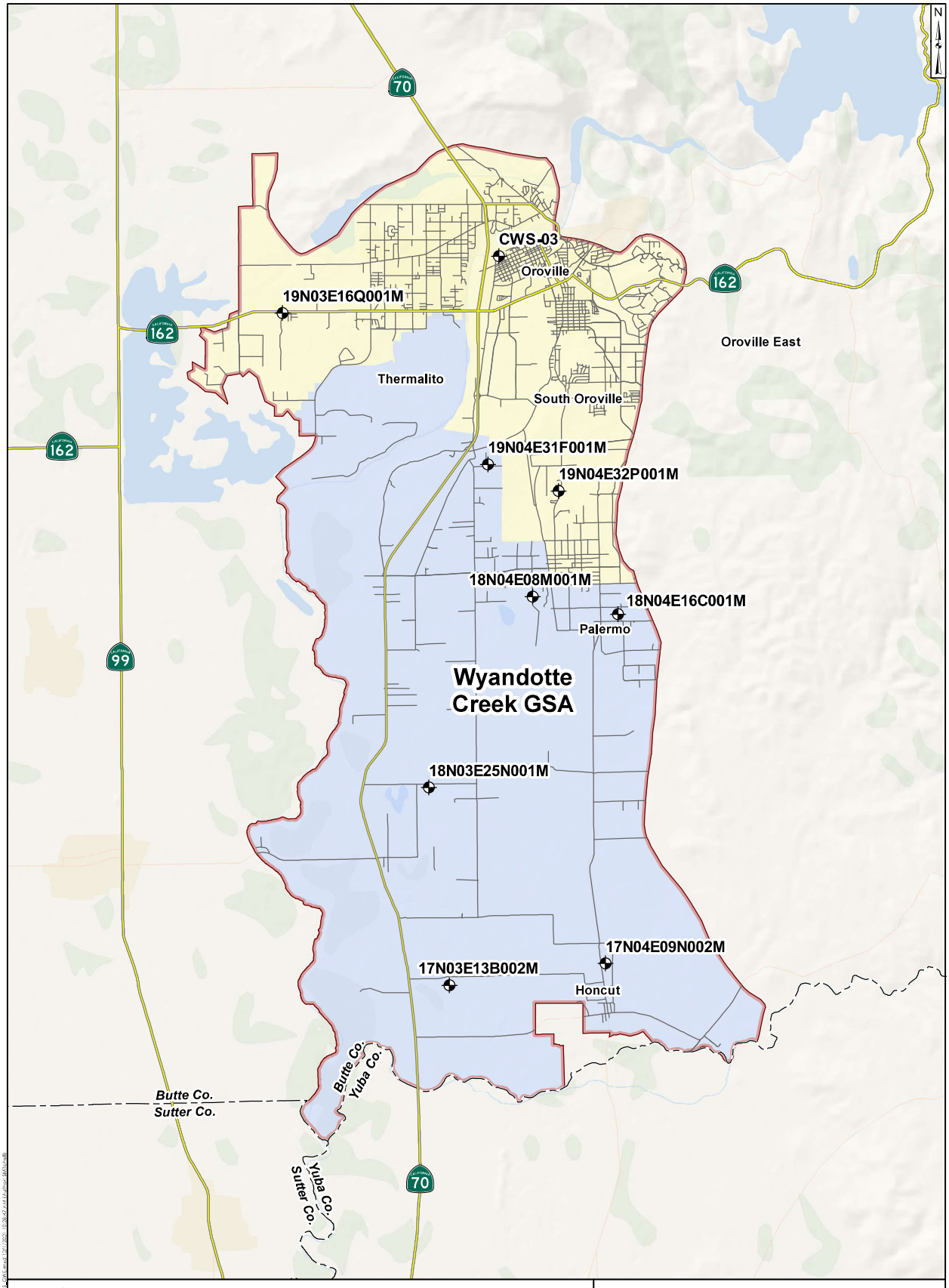
Data Management System

The DMS that will be used is a geographical relational database that will include information on water levels, land elevation measurements, and water quality testing. The DMS will allow the GSAs to share data and store the necessary information for annual reporting.

The DMS will be on local servers and data will be transmitted annually to form a single repository for data analysis for the Wyandotte Creek Subbasin's groundwater, as well as to allow for preparation of annual reports. GSA representatives have access to data and will be able to ask for a copy of the regional DMS. The DMS currently includes the necessary elements required by the regulations, including:

- Well location and construction information for the representative monitoring points (where available)
- Water level readings and hydrographs including water year type
- Land based measurements
- Water quality testing results
- Estimate of groundwater storage change, including map and tables of estimation
- Graphs with Water Year type, Groundwater Use, Annual Cumulative Storage Change

Additional items may be added to the DMS in the future as required. Data will be entered into the DMS by the GSA.



Legend

Groundwater Sustainability Agency (GSA)[1]
- Wyandotte Creek GSA

Wyandotte Creek Subbasin Management Areas
- Wyandotte Creek Oroville
- Wyandotte Creek South

Roads[2]
- Highways
- Other roads

RMS GWE Monitoring Wells
- Well

Boundaries[2]
- County boundaries

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

2 1 0 2 Miles

Groundwater Level RMS Wells
Wyandotte Creek Subbasin GSP

Geosyntec consultants

Project No.: SAC282 | December 2021

Figure **ES-9**

Projects and Management Actions

Each of the projects are in various stages of development ranging from planned to those still in the conceptual phase. Thus, each of the projects have a different level of development. The GSA will maintain a list of proposed projects and track their development status. The GSA will use this list to help secure funding as opportunities become available. Projects presented in this Plan will remain a part of the potential projects that the GSA may choose to implement, however as other projects are identified, those will be added to the list. The projects currently being considered are listed below and are listed from planned to conceptual.

Planned:

- Residential Conservation
- Agricultural Irrigation Efficiency
- FloodMAR
- Oroville Wildlife Area Robinson's Riffle Project
- Streamflow Augmentation
- TWSD Water Treatment Plant Capacity Upgrade
- Water Loss Monitoring
- Palermo Clean Water Consolidation Project

Potential:

- Intra-Basin Water Transfer
- Agricultural Surface Water Supplies
- Well Upgrades
- Fuels Management for Watershed Health
- Removal of Invasive Species

Conceptual:

- Recharge Well (Injection Well)
- Extend Orchard Replacement

Management Actions

GSAs have a variety of tools to use to achieve sustainable groundwater management. Projects focus primarily on capture, use, and recharge of surface water supplies while management actions focus on groundwater demand.

Section 5.3 presents several management actions that the GSA may consider during GSP implementation. It is expected that the GSA will further develop and modify management

actions in response to stakeholder input and available information. The management actions identified in this GSP include:

- General Plans Updates
- Domestic Well Mitigation
- Well Permitting Ordinance
- Landscape Ordinance
- Expansion of Water Purveyors' Service Area

Plan Implementation

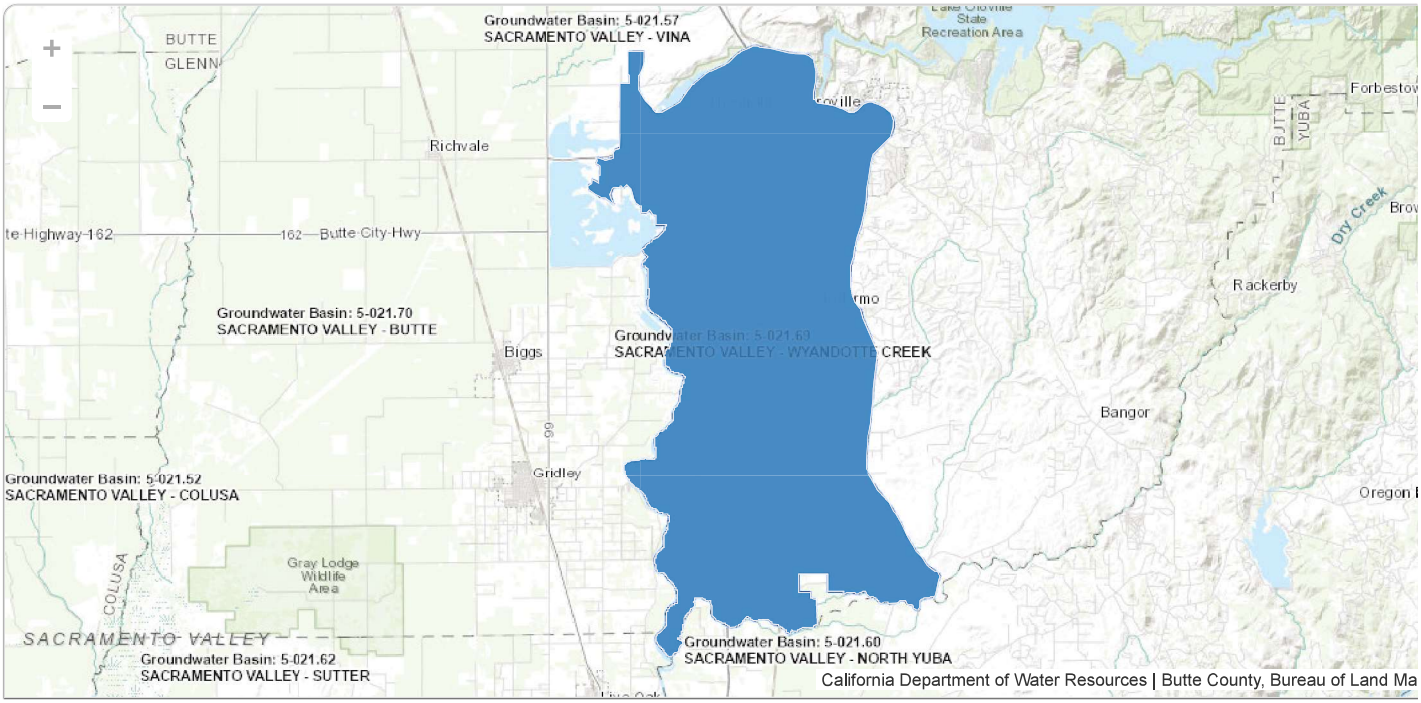
The adoption of the GSP is official start of plan implementation for the Vina Subbasin. The GSAs will continue their public outreach efforts and work to secure funding to implement projects and management actions. The estimated budgets and implementation schedule for the proposed projects and management actions are presented in Chapter 6.

Implementing the Wyandotte Creek Subbasin GSP will require numerous management activities that will be undertaken by the GSAs, including:

- Monitoring conditions relative to applicable SIs at specified frequency and timing
- Entering updated monitoring data into the Wyandotte Creek Subbasin DMS
- Refining the Wyandotte Creek Subbasin model and water budget planning estimates
- Preparing annual reports summarizing the conditions of the Wyandotte Creek Subbasin and progress towards sustainability and submitting them to DWR
- Updating the GSP once every five years
- Overseeing and monitoring projects, management actions, and collection of data identified as "data gaps" within the GSP
- Identify funding sources
- Coordinating with neighboring subbasins

Groundwater Sustainability Plan

5-021.69 WYANDOTTE CREEK



Base Information

DATE SUBMITTED

01/28/2022

DATE POSTED

02/07/2022

END OF PUBLIC COMMENT PERIOD DATE

04/23/2022

Public Comments

GSP INITIAL NOTIFICATION(S)

Wyandotte Creek GSA (Exclusive)

PLAN MANAGER

Christina Buck (Butte County Department of Water and Resource Conservation)
308 Nelson Ave
530-552-3593
cbuck@buttecounty.net

LIST OF GSA(S) THAT COLLECTIVELY PREPARED THE GSP

Wyandotte Creek GSA (Exclusive)

NOTICE ANNOUNCING THE PLANNED ADOPTION OF THE GSP

Notice Date: 06/28/2021
Notice to Oroville.pdf (127.6kB)
Notice to Butte County.pdf (127.3kB)

NOTICE OF THE PUBLIC HEARING

Public Hearing Date: 11/16/2021
WC Public Hearing Notice Enterprise Record.pdf (387.2kB)

Plan Content

Supporting Information

References

Monitoring Site

ATTACHMENT 2

Wyandotte Creek GSA – Funding Mechanism Summary

LSCE

ATTACHMENT 2 – Long Term Funding Mechanisms

Mechanism Evaluation

Other Charges

Proposition 218

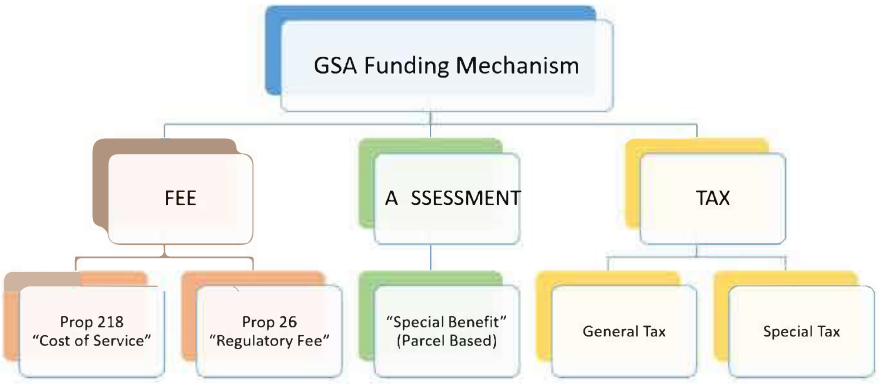
Proposition 26

Local Contributions – Not A Sustainable Option For Member Agencies

The Wyandotte Creek GSA legal counsel has determined that a long term Fee Option (see orange boxes below) would be the best funding mechanism to pursue for a sustainable funding source to achieve SGMA compliance and maintain local control over local groundwater resources.

PRMO

Available Options for Long Term Funding

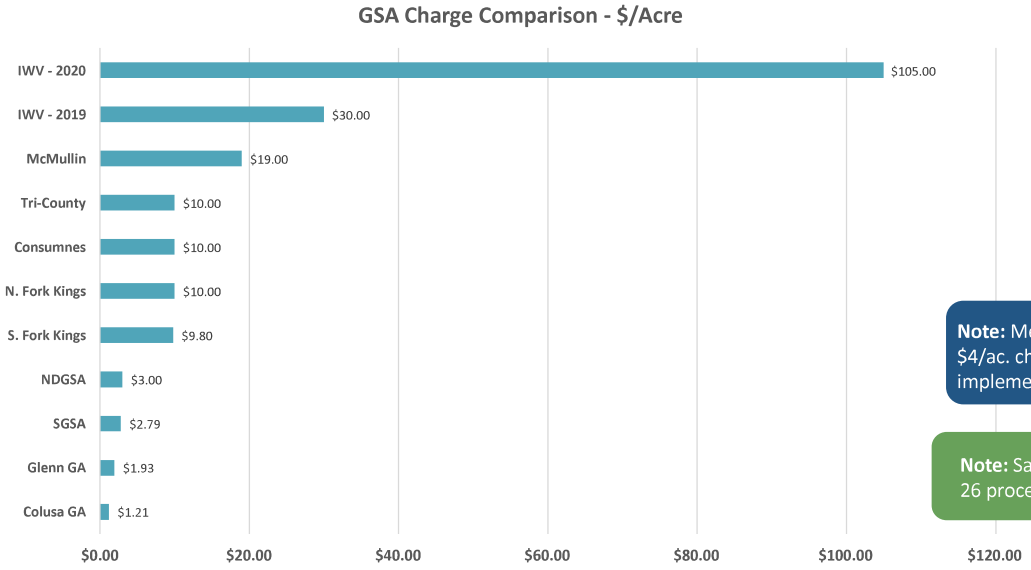


Prop. 218 is most common GSA charge method to date.
Includes customer notification and protest vote process.

- Due to Constitutional limitations imposed through California's Propositions 13, 218, and 26, there are strict distinctions between, and regulations associated with, fees, special assessments, and taxes.
- Taxes and assessments require voter approval.
- Property-related fees and assessments under Proposition 218 are subject to noticing, a majority protest proceeding, and when required, a subsequent ratification election.
- However, fees, as well as other charges, are identified as exempt from the definition of a tax under Proposition 26, and thus can be adopted by the governing body of the Agency imposing the fee.

LSCE

Comparing Approaches Across the State



Note: Merced approved a Prop. 218 $4/ac. charge, which has not been implemented to date.

Note: Santa Rosa Plain approved a Prop. 26 process with a $40/ac-ft charge.

IWV = Indian Wells Valley

The Wyandotte Creek GSA needs a long-term funding source to sustain the GSA.

LSCE

California

PROPERTY TAX
INFORMATION

Proposition 218 gave taxpayers the right to vote on all local taxes, and requires taxpayer approval of property related assessments and fees.

www.californiataxdata.com

100 Pacifica, Suite 470

Irvine, California 92618

Tel 949-789-0660

Fax 949-788-0280

What is Proposition 218?

Background

In November 1996, California voters passed Proposition 218, the "Right to Vote on Taxes Act". This constitutional amendment protects taxpayers by limiting the methods by which local governments can create or increase taxes, fees and charges without taxpayer consent. Proposition 218 requires voter approval prior to imposition or increase of general taxes, assessments, and certain user fees.

The Environment Prior to Proposition 218

Proposition 13 dramatically changed the California property tax landscape after its passage in 1978. The result was a severe limitation on ad valorem property taxes (property taxes based on assessed value of property). Consequently, local governments had to look elsewhere to find money to fund public services and improvements. These agencies turned to benefit-based assessments, special taxes and user fees, which were not subject to Prop. 13 limitations. However, this resulted in increasing property tax bills, the main concern that Prop. 13 attempted to control.

Proposition 218 Tax Reform

Prop. 218 radically changes the way in which local governments raise revenues by ensuring taxpayer approval of charges and increases to existing charges. Voters are also given the ability to repeal or reduce charges by voter initiative.

Specific Features of Proposition 218

The primary changes put in place by Proposition 218 are explained below.

1. **Voter Approval on Taxes.** Prop. 218 requires all local governments, including charter cities, to get majority voter approval for new or increased general taxes.

2. **Limits on Use of "General Taxes".** Proposition 218 restricts the use of general taxes, which require majority voter approval, to general purpose governments (i.e. cities and counties). School districts are specifically precluded from levying a general tax.

3. **Stricter Rules on Benefit Assessments.** Benefit assessments by definition must be calculated based on the benefit received by the parcel as a result of the project financed. Prop. 218 created stricter rules for initiating or increasing benefit assessments. Now, an agency must determine the specific benefit the project will have on individual parcels. A general enhancement to property values can no longer serve as the benefit.

4. **Increased Notification and Protest Requirements.** Proposition 218 will require that agencies put all assessments, charges and user fees out to a vote prior to creation or increase. In most cases, the vote will require individual notices be mailed to affected property owners. A formal protest hearing is also required to move forward with the charge or increase.

5. **Restrictions on Use of Fees.** Proposition 218 prohibits local governments from imposing fees on property owners for services that are available to the public at large (like garbage collection and sewer service). In any case, fees charged to property owners may not exceed the cost of providing the service.

6. **Government Owned Property No Longer Exempt.** Proposition 218 requires government agencies to pay their fair share of a benefit assessment, if the property receives benefit from the project or service financed.

7. **Initiative Power To Repeal.** Prop. 218 gives voters the power to reduce or repeal any existing local tax, assessment, or charge through the initiative process.

California Tax Data

The Leader in Property Tax Disclosure Since 1986

Proposition 26 – Long Term Funding Mechanism Summary

Proposition 26 was passed by voters in 2010, providing a broad constitutional definition of the term "tax", which was necessary in the wake of Proposition 218's limitations on local taxes. Proposition 26 is best understood in the context of Propositions 13 and 218.

Proposition 218 was passed by California voters in 1996, adding Articles XIII C and XIII D to the State Constitution. The purpose of this legislation was primarily to address the effects of Proposition 13, passed in 1978, which limited the ability of local governments to impose taxes. While Proposition 218 outlined substantive and procedural guidelines for the imposition of taxes, benefit assessments, and property related fees, the definition of the term "tax" was not succinctly defined.

Proposition 26, as included in Article XIII C of the California Constitution, defines a tax as "any levy, charge, or exaction of any kind imposed by a local government," with certain exceptions. Among these exceptions are:

(1) A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege to the payor.
(2) A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product to the payor.
(3) A charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.

Article XIII C goes on to stipulate that the governing agency must establish that any charges imposed by a government agency are not taxes:

The local government bears the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity.

Regulatory Fees

The three exceptions listed above provide the basis for a regulatory fee on estimated groundwater extraction. The Santa Rosa Plain GSP provides a benefit or service to groundwater users in the Subbasin. Additionally, costs incurred by the GSA's groundwater sustainability program are regulatory costs, as they represent the regulation of groundwater in the Subbasin.

This Fee Study provides the rationale for how the fee program for the Santa Rosa Plain GSA will comply with the requirements of Article XII A, including the fees charged to groundwater extractors in the Subbasin:

1. Are not taxes.
2. Will not generate more revenue than the reasonable cost of the governmental activity.

3. Are allocated to the payor in a manner that bears a reasonable relationship to the benefits received from the governmental activity.

For a GSA to utilize the Proposition 26 regulatory fee or charge mechanism legal counsel must determine if this funding mechanism approach is suitable for a particular GSA based on the facts available at the time a GSA related fee or charge is being established which must be based on an activity (e.g. a wellhead and well extraction charge). This determination would consider if the GSA has the necessary complete and factual information available to levy such a fee or charge to the payor in a manner that bears a reasonable relationship to the benefits received from the governmental activity.

Public Meeting Adopting Rates and Fees
In accordance with Water Code§ 10730 (b), a public meeting must be held at which oral or written presentations may be made. In addition, notice of the meeting must be 1) published in the local newspaper at least twice in the weeks preceding the meeting, and 2) posted on the Agency's website. The GSA must also make available all data upon which the proposed fee is based at least 20 days prior to the public meeting. Those subject to rates or fees do not receive a direct notification via mail prior to GSA Board consideration of a Proposition 26 regulatory fee. And there is no public meeting prior to Board consideration of such a fee whereby those subject to the fee have an opportunity to vote on or levy a formal vote (e.g. protest) prior to GSA Board approval of such fees.

<u>Example Fee – Santa Rosa Plain GSAs (approved in 2022)</u>
$300/well + $40/acre-foot of groundwater extraction.

Note: Santa Rosa Plain approved Prop. 26 fee approach in 2019 with original long term GSA fee approval.

The Wyandotte Creek GSA legal counsel would need to determine if Prop. 26 fees or charges are suitable for application in the Wyandotte Creek Subbasin.

ATTACHMENT 3

Wyandotte Creek GSA – Draft Proposition 218 Charge Report: Table of Contents

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Appendix B – State Intervention Fee Structure

Appendix C – WCGSA 2022 County Tax Charge Roll

Appendix D – WCGSA 2023 Proposition 218 Protest Form

Appendix E – WCGSA List of Funding Agreements

LIST OF ACROYNMS AND ABBREVIATIONS

AF = acre-feet (generally equivalent to 325,851 gallons)

APNs = Assessor's parcel numbers

WCGSA = Wyandotte Creek Groundwater Sustainability Agency

CASGEM = California State Groundwater Elevation Monitoring

County = County of Butte

DACs = Disadvantaged Communities

DWR = California Department of Water Resources

FY = Fiscal Year

GSA = Groundwater Sustainability Agency

GSP = Groundwater Sustainability Plan

IRWMP = Integrated Regional Water Management Plan

JPA = Joint Powers Agreement/Authority

LAFCO = Local Agency Formation Commission

SGMA = Sustainable Groundwater Management Act

Sub-basin = DWR delineated alluvial groundwater areas in WCGSA boundary

SWRCB = State Water Resources Control Board

ACKNOWLEDGEMENTS

WCGSA Program Manager Staff

Kamie Loeser, Director, Water Resources Dept.

Christina Buck, Assistant Director

WCGSA Board of Directors

Directors

City of Oroville:

- Primary - Janet Goodson
- Alternate - Eric Smith

County of Butte:

- Primary - Bill Connelly (Chair)
- Alternate - Tod Kimmelshue

Thermalito Water & Sewer District:

- Primary -Bruce Wristen
- Alternate - Scott Koch

Domestic User:

- Primary - William Bynum (Vice Chair)
- Alternate - Rick Wulbern

Agricultural User:

- Primary - Kyle Daley
- Alternate - Vacant

Consultant Assistance: Luhdorff and Scalmanini Consulting Engineers (LSCE)

ATTACHMENT 4

Wyandotte Creek GSA – Service Area Information For Charge Options Evaluation

LSCE

Attachment 4: WCGSA Subbasin Service Area Information

WCGSA Charge Option Evaluation	WCGSA Subbasin - Acreage
Total - All	56,884.50
Total - Federal	0.00
Total - State	5,443.10
Total - Tribe	32.80
Total (exclude State, Federal and Tribal)	51,408.60
Irrigated	26,192.37
Non-Irrigated	25,216.23
Orchards	8,703.70
Non Orchards	5,410.07
City of Oroville	6,756.20
Thermalito Water & Sewer District	5,322.40
Butte County - Exclude Public/Tribal lands	39,340.80
WCGSA Charge Option Evaluation	**WCGSA Subbasin - Parcels**
Total - All	12,624
Total - Federal	0
Total - State	133
Total - Tribe	7
Total (exclude State, Federal and Tribal)	12,484
Irrigated	10,402
Non-Irrigated	2,082
Orchards	453
Non-Orchards	308
City of Oroville	6,162
Thermalito Water & Sewer District	3,479
Butte County - Exclude Public/Tribal lands	2,941