

SOLANO SUBBASIN

GROUNDWATER SUSTAINABILITY PLAN IMPLEMENTATION

Proposition 218 Charge Report

May 2022



City of
Vacaville GSA



Sacramento
County GSA



Solano Irrigation
District GSA



Solano
Subbasin GSA



Northern
Delta GSA

Reclamation District GSAs:
No. 3, No. 349, No. 554,
No. 556, No. 2111

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LIST OF ACROYNMS AND ABBREVIATIONS

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

APNs = Assessor’s parcel numbers

Collaborative = Solano, Vacaville, SID, Sac. County/North Delta GSAs

CASGEM = California State Groundwater Elevation Monitoring

County = County of Solano

DACs = Disadvantaged Communities

DWR = California Department of Water Resources

CY = Calendar 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

Subbasin = DWR delineated alluvial groundwater areas in SGSA boundary

SWRCB = State Water Resources Control Board

SGSA = Solano Groundwater Sustainability Agency

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Director Russ Lester Solano County Agricultural Advisory Committee

Director Kurt Balasek Solano Resource Conservation District

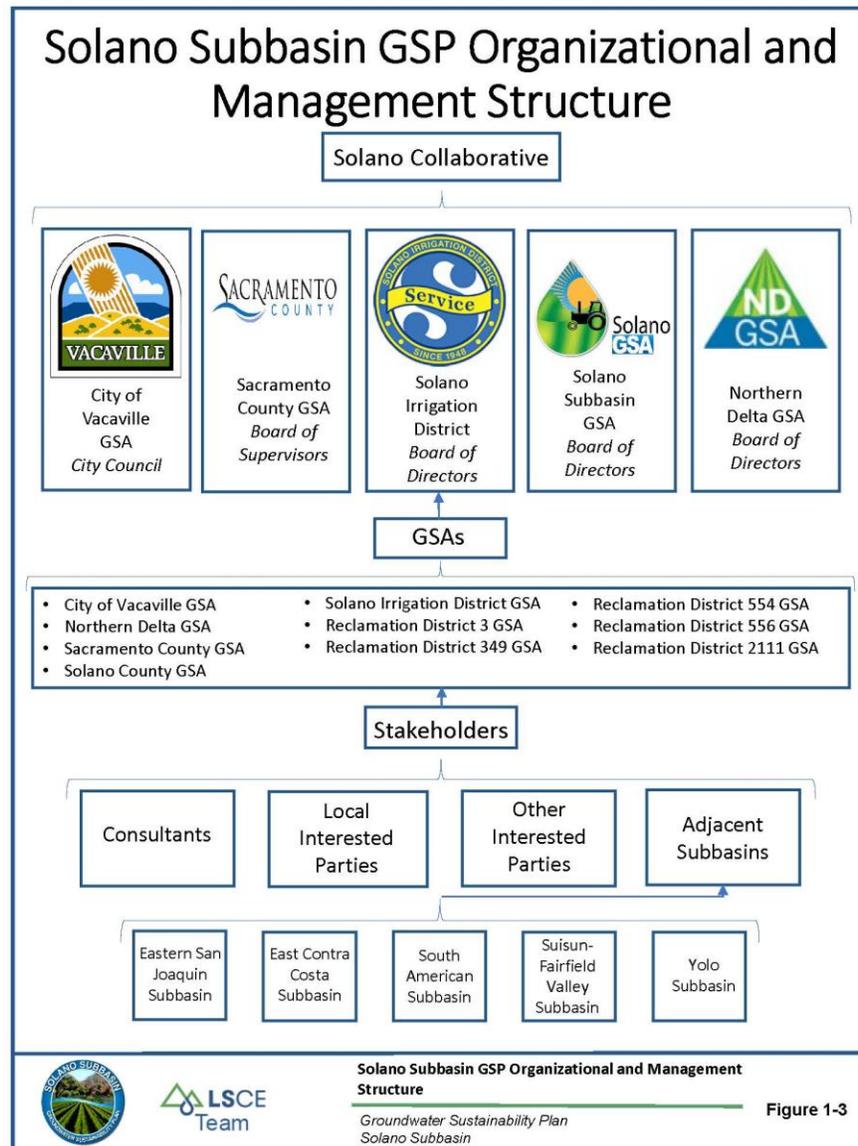
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SECTION 1: INTRODUCTION AND SUMMARY

The Solano Subbasin Groundwater Sustainability Agency (SGSA) is a multi-agency organization that was formed through adoption of a resolution on June 8, 2017 (see **Appendix A**), which established the SGSA as a cost-effective regional governance model to achieve SGMA compliance. The SGSA is the Groundwater Sustainability Agency (GSA) responsible for compliance with the 2014 Sustainable Groundwater Management Act (SGMA) in its Solano County service area boundary. The SGSA also serves as the fiscal agent on behalf of Subbasin GSAs in Solano County. Sacramento County is responsible for the portions of the Subbasin located in Sacramento County, including the process for meeting Subbasin cost share arrangements and coordinating with other stakeholders in Sacramento County. The SGSA role serving as the administrative program lead in the Subbasin within Solano County was deemed as the most cost-effective governance model for achieving SGMA compliance. The Subbasin governance is more clearly depicted in the graphic below.



Solano Subbasin governance is composed of a group of GSAs, collaborating through a Memorandum of Understanding (MOU): Solano, City of Vacaville, Solano Irrigation District, Sacramento County, and North Delta. The GSAs work together through the Solano Collaborative (a GSA governance structure) that makes decisions about the most cost-effective means to comply with SGMA while maintaining local control over the management of groundwater resources within the Subbasin.

The plan going forward is to continue with a similar GSA governance approach through an updated GSP implementation MOU, which all parties are expected to execute by June 2022. This approach will leverage the existing collaborative working relationships established through the GSP development phase, which was completed in January 2022. Ongoing collaboration provides economies of scale for sharing the cost of GSP implementation and SGMA compliance amongst the GSAs and stakeholders, while maintaining local control of its groundwater resources.

As a GSA, the SGSA (in coordination through the Solano Collaborative) may develop, adopt, and implement a Groundwater Sustainability Plan (GSP) or Plans (GSPs) for sustainable management of groundwater underlying the Subbasin boundary. The Solano Collaborative agreed to have SGSA serve as the fiscal agent during the GSP development phase using Proposition 1 and 68 grant funds with some local in-kind contributions until the GSP was prepared, adopted and submitted to DWR by the January 31, 2022 deadline for SGMA compliance. Thereafter, the Solano Collaborative would develop a long-term funding plan with each GSA responsible for covering its cost share as depicted in the updated GSP Implementation MOU. The SGSA is using a Proposition 218 process to provide a long-term funding source to fund its share of the overall GSP implementation costs. The proposed SGSA Charge is proposed to be initiated on December 10, 2022 through the Solano County Tax Roll to cover the everyday operations of the SGSA (including legal, technical, administrative, accounting, office, insurance, audits, and outreach materials) and GSP implementation costs (including annual monitoring and reporting, five-year GSP updates, Subbasin coordination and outreach, and grant funding services) required to achieve and maintain SGMA compliance for the Collaborative. The SGSA received Proposition 1 and 68 grant funding to develop the Solano Subbasin GSP; however, costs for GSP implementation that cannot be covered by grants will need to be covered by the proposed SGSA Charge. It is anticipated that any necessary management actions resulting from GSP implementation that cause a funding shortfall will be funded by other localized fees or assessments, cost sharing arrangements, or through additional outside grant funding sources.

The SGSA will continue to participate in ongoing GSA coordination and outreach activities to facilitate SGMA compliance and support groundwater management actions that benefit SGSA stakeholders and the Collaborative, while achieving long-term groundwater sustainability throughout the SGSA service area boundary. The SGSA will pursue outside funding sources to assist in securing additional grant funds to support cost-effective GSP implementation activities by the SGSA and its members. The SGSA will also participate in regional funding opportunities that benefit the SGSA as well as the Collaborative to reduce long-term SGMA compliance costs and achieve long-term groundwater sustainability objectives.

The Collaborative has developed a Five-Year Budget to cover the costs of SGMA compliance that includes both GSA operational and GSP implementation related costs. Considerable effort went into developing the Five-Year Budget during GSP development with input from the GSAs

to identify SGMA compliance costs. The maximum budget amount for the SGSA to achieve SGMA compliance (based on current requirements) is \$570,857 per year for GSP implementation related costs not covered by existing grant funding for a five-year period spanning calendar years 2023 through 2027 (calendar year beginning January 1, 2023). Based on the Collaborative funding needs, the SGSA Board of Directors is seeking to collect the proposed Charges in the SGSA service area to generate sufficient revenue to fund the SGSA operations for SGMA compliance and maintain local control as defined herein. Charges would cover GSP implementation costs beginning January 1, 2023 based on adoption and submittal of the Solano Subbasin GSP in accordance with the DWR GSP filing deadline of January 31, 2022. The proposed Charge would cover the ongoing SGSA operational and GSP implementation costs over the initial five-year implementation period with the other GSAs making annual payments to the SGSA (serving as fiscal agent) for their cost share as identified in the updated GSP Implementation MOU.

The proposed Charges are considered property-related service charges governed by Proposition 218 (as allowed by SGMA legislation) and are planned to apply on a cost of service per acre basis to lands within the SGSA boundaries within Solano County in the manner described in this Charge Report. SGMA provides authority for GSAs to charge fees or charges to support its operations to facilitate compliance with SGMA. Failure to adequately manage groundwater in the Subbasin may subject the Collaborative to intervention by the State Water Resources Control Board (SWRCB). If it intervenes, the SWRCB may impose annual fees within the SGSA ranging from \$100 per de minimis well (using less than 2 ac-ft of water per year), to \$300 per well plus up to \$55 per acre-foot of groundwater pumped per well, with no guarantee of assistance in bearing costs to address the groundwater issues for which it intervenes (see **Appendix B**). By collecting Charges, the SGSA will provide landowners with a more affordable and locally managed option for managing groundwater in the Solano Subbasin. The proposed 2023 SGSA Charge Roll is based on the SGSA's service area boundary for parcels on the 2022 tax rolls of Solano County. The tax roll lists property owners and their associated assessor's parcel numbers (APNs) that would be subject to the proposed Charges and is included as **Appendix C**. The complete roll will be submitted to the County Assessors upon adoption of the SGSA GSA Charges by the SGSA Board of Directors.

The Cities of Dixon and Rio Vista will have two options for paying their share of the proposed charges. For option 1 these agencies would opt to receive the SGSA Charge Roll Proposition 218 Notice (see **Appendix D**) for payment of charges through the property tax bill. Option 2 would exclude those agencies from the 2022 County Charge Roll and instead those agencies would pay the appropriate charges directly to the SGSA (serving as the Solano Collaborative fiscal agent) for those agencies that choose to enter into a specified Funding Agreement with the SGSA through the updated GSP Implementation MOU for GSP implementation. In the event these agencies choose to enter into Funding Agreements for proposed charges with the SGSA, payment of specified charges would be paid to the SGSA at the beginning of its calendar (beginning January 1, 2023 and every year thereafter through 2027). Agreements will be proposed between the SGSA and each of these listed entities with charges paid directly from each entity to the SGSA annually (each January). The Local Agency Formation Commission (LAFCO) boundaries and Solano County Fee Roll for each of these entities were used for assessable acreage and charge calculations. The SGSA 2022 Funding Agreement List is included as **Appendix E**.

Parcels listed by the assessor as tax-exempt will not be included in the Charge Tax Roll, and therefore not included in assessable acreage and charge calculations. These parcels primarily include the exclusion of Federal, Tribal, and State-owned parcels.

The following Table 1-1 provides an example schedule of the proposed Charges to be collected to proportionally recover operating expenses calculated using the SGSA's budget on a cost per acre basis during the next five years. The actual Charges will be set annually by the Board, based on the budget needs, but it will not exceed the proposed maximum rate of \$2.79 per acre. The budgeted operations expenses are in 2022 dollars and include an inflation factor of 3% per annum based on the expected average Consumer Price Index (CPI) during the period. The maximum annual inflation factor to be applied to the Charges would not exceed the annual CPI for Solano County, with the actual inflation factor applied each year at the discretion of the SGSA Board through Calendar Year 2027. Operations expenses have not been projected beyond Calendar Year 2027. The Board will update its Charges for Calendar Year 2028 and beyond based on actual expenses experienced during the first five years of GSP implementation and projected expenses over the subsequent five-year period.

Table 1-1: SGSA Proposed Charges – For SGMA Compliance

Charge Cost Category	Calendar Year 2023	Calendar Year 2024	Calendar Year 2025	Calendar Year 2026	Calendar Year 2027
GSA Charge (\$/ac)	\$0.31	\$0.31	\$0.31	\$0.31	\$0.31
GSP Charge (\$/ac)	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Proposed Total Charge (\$/ac)	\$2.79	\$2.79	\$2.79	\$2.79	\$2.79

The SGSA operational and GSP implementation components comprise the total proposed Charge that covers the cost of SGMA compliance for the SGSA within its service area (and contributes to compliance for the Subbasin as a whole). Additional funds may be required to implement specific projects listed in the GSP. Project funding for these projects will come from other funding sources and be the responsibility of the project proponent(s) to identify funding sources and secure necessary funding for project implementation. The SGSA will assist project proponents with grant funding opportunities if available to improve groundwater management or lower future SGSA operations costs. Project funds could come from supplemental funding and/or local fees or assessments greater than the maximum fees recommended in this report, and approval by the landowners in a future Proposition 218 election will likely be required for those fees or assessments.

The SGSA is seeking to implement an annualized charge in the maximum amount shown in Table 1-1 above, specifically \$2.79 per acre for all assessable parcels. The budgeted operations expenses are in 2022 dollars and includes an inflation factor of 3% expected during the period. The components that make up the total are shown in the table and explained further in this report.

Note that the proposed Charge applied by the SGSA is expected to be the same from year to year but will not exceed the maximum amount unless an increase is approved through a subsequent Proposition 218 proceeding. **The necessary funding for the SGSA will be reviewed annually by the Board and, depending on the funds projected to be needed for the year, may be adjusted up to the maximum assessment rate.** The proposed maximum annual rate allows the SGSA to apply the Charge to be stable throughout the five-year period without any increases in operating expenses and fund special activities without having to incur the expense of routinely repeating the Proposition 218 process.

The assessment process is being conducted in accordance with provisions of Proposition 218, as reflected in Article XIII D of the California Constitution and Sections 53750 through 53756 of the State's Government Code. These constitutional and statutory provisions implement Proposition 218, which established specified mandatory procedures that local agencies must follow.

Under the Proposition 218 process, once the SGSA Board determines the need to establish new charges, landowners must be notified and given the opportunity to protest before they are established. The SGSA Board of Directors will hold a public hearing at which all landowners affected by the proposed Charge may participate and are entitled to protest the proposed Charge. At the public hearing, the SGSA will consider and address comments and questions from owners of land that would be subject to the proposed SGSA Charge. Landowner protests received at the Board Meeting prior to and by the close of the public hearing will then be counted and the protest results will be certified. If written protests are submitted accounting for a majority of the total assessed parcels, the SGSA will not adopt the proposed Charge. Absent a majority protest, the SGSA is authorized to adopt the proposed Charge at its public adoption hearing starting at 5 p.m. on July 14, 2022, to be held at the SGSA Board Room, 810 Vaca Valley Parkway, Suite 203, Vacaville, CA 95688.

Proposition 218 Process – Stakeholder Outreach

The SGSA plans to conduct public and stakeholder outreach prior to taking action on the proposed SGSA Charges on July 14, 2022. This may include public meetings, providing key information posted on the SGSA website, availability of Frequently Asked Questions (FAQ) information, and other outreach deemed appropriate to inform and involve those affected by the Charge (see Fact Sheet in **Appendix F**). A Virtual Town Hall meeting was held on May 3, 2022 to discuss GSP implementation and long-term funding needs for SGMA compliance. This will supplement the outreach and notification required for a Proposition 218 charge process, including sending all affected parcel owners of the proposed charges and noticing of planned charge adoption at least 45-days prior to SGSA Board consideration for approval. The proposed SGSA Charge will also be reviewed and/or discussed through other SGSA venues, including Collaborative outreach activities and SGSA Board communications before consideration for adoption by the SGSA.

SECTION 2: REPORT PURPOSE

This Charge Report is prepared to describe the basis for the SGSA's proposed Charge to each assessable parcel within the SGSA jurisdiction, unless covered by a SGSA Charge Funding Agreement. The proposal is for the SGSA to collect revenue in the form of that which will be used to cover everyday operations and SGMA compliance related costs of the SGSA. These operations include administration, legal services, technical services, funding services, insurance, consulting, office, outreach materials, accounting, annual monitoring and reporting, GSA coordination, five-year GSP updates to the Department of Water Resources (DWR), and potentially special studies on an as needed basis during GSP implementation. The cost of SGMA compliance characterized in this Report is based on current SGMA legislation requirements.

Sustainable Groundwater Management Act

On September 16, 2014, the Governor of California signed into law a three-bill legislative package (Senate Bill 1168, Assembly Bill 1739 and Assembly Bill 1319) that provided a state-wide framework for sustainable groundwater management for basins in California with a focus on those subbasins with a higher priority for formalized local and regional groundwater plans. These laws are collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA defines sustainable groundwater management as the *management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results*. Undesirable results are defined in SGMA as any of six primary effects caused by groundwater conditions occurring throughout the basin:

Table 2-1: SGMA Legislation Primary Effect Descriptions

Groundwater Effects (1-6)	SGMA Legislation Primary Groundwater Effect Descriptions
1	Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply
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
6	Depletions of interconnected surface water that have significant and unreasonable adverse impacts on

These potential undesirable results are the focus of SGMA and must be addressed in GSPs prepared by GSAs. GSPs will need to focus on assessing, monitoring, and mitigating undesirable results from groundwater use. Some of these undesirable results, such as sea water intrusion, are not applicable to the SGSA area, while others, such as lowering of groundwater levels and

reduction in groundwater storage are significant issues in some areas and will need to be addressed. Each of these undesirable results has been investigated and prioritized as part of the GSP development process. The GSP also includes measurable objectives and implementation actions to achieve and maintain groundwater basin sustainability in the Subbasin. SGMA requires the development and implementation of GSPs that document the proposed plans and programs for achieving groundwater basin sustainability within a prescribed 20-year window. During the GSP implementation phase, GSAs are required to adopt programs to facilitate measures outlined in the GSP, update the GSP every five years, conduct regular GSA coordination activities, and provide DWR with annual updates on the progress of achieving sustainability based on annual monitoring and reporting requirements for each GSP. The SGSA has received Proposition 1 and 68 grant funding to cover a majority of the work to develop the GSP; however, costs for GSP implementation that cannot be covered by SGMA grants will need to be funded through the proposed SGSA Charge. It is anticipated that any necessary management actions resulting from GSP implementation that cause a funding shortfall will be funded by other local and regional cost sharing and funds, or through other grant funding programs.

SGSA's Authority to Levy Assessments

The SGSA is a multi-agency organization that was formed through the Solano Subbasin SGMA compliance formation process in 2017 with DWR subbasin boundary amendments thereafter to facilitate cost-effective SGMA compliance for all GSAs with the Solano Subbasin in Solano County. A copy of the GSA formation resolution establishing the SGSA can be found in **Appendix A**. A description of its members follows.

SGSA Member Agencies

Membership:

- City of Dixon (Appointed by City)
- City of Rio Vista (Appointed by City)
- Solano County (Appointed by County)
- Dixon Resource Conservation District (Appointed by District)
- Solano Resource Conservation District (Appointed by District)
- Maine Prairie Water District (Appointed by District)
- Reclamation District 2068 (Appointed by District)

Non-Signatory Membership:

- California Water Service Company
- Solano County Farm Bureau

The SGSA is the single GSA responsible for the compliance and implementation of the provisions of SGMA for a portion of the DWR-defined Solano Subbasin in Solano County. **Appendix A** contains the adopted resolution establishing the SGSA to serve as the primary GSA for its service area within the Subbasin with three other GSAs (City of Vacaville, Solano Irrigation District, and North Delta (RD 501)) responsible for SGMA compliance within their

respective service areas within the Solano County. A portion of the Solano Subbasin is located within Sacramento County with the Sacramento GSA responsible for SGMA compliance for the portion within their County. GSA responsibility for SGMA compliance is as follows:

Table 2-2: DWR Solano Subbasin – GSA Delineations

DWR GW Subbasin #	DWR GW Subbasin Name	GSAs	Total Area (Acres)
5-021.66	Solano Subbasin	SGSA	210,291
5-021.66	Solano Subbasin	City of Vacaville	14,712
5-021.66	Solano Subbasin	Solano ID	43,339
5-021.66	Solano Subbasin	North Delta	11,793
5-021.66	Solano Subbasin	Sac County	49,181

The Solano Subbasin is located in both Solano and Sacramento Counties with the responsible GSAs listed as cited in Table 2-2 above. The GSAs coordinated on the development of a single Subbasin GSP with responsibility for their respective Subbasin service area boundaries; the GSP approved by the GSAs was submitted to DWR by the January 31, 2022 regulatory deadline. There is a cooperating agreement (MOU) between the GSAs which was initially prepared to cover the GSP development phase of SGMA compliance. An updated GSP Implementation MOU is expected to be approved by the GSAs by June 2022. GSP implementation responsibility is demarcated as follows: each GSA is responsible for covering their GSA administration costs, and the GSAs jointly share the GSP implementation costs on a regional basis based on the relative groundwater use in each GSA. The SGSA may develop, adopt, and implement sustainable management of groundwater underlying the SGSA service area and take actions as necessary to ensure SGMA compliance for all landowners within its service area. The SGSA will also coordinate with member and participating agencies to secure project related funding upon GSP approval and readiness to proceed with project implementation by project partners.

The SGSA will rely on the proposed charges for the initial five years of GSA operations and SGMA compliance. The SGSA will update its long-term funding plan at least every five years to operate the GSA at the lowest possible costs while achieving the goals and objectives of the GSP and member agencies. The SGSA has been deemed the exclusive local GSA for its service area with powers to comply with SGMA in its jurisdiction.

Pursuant to Chapter 8 (commencing with Section 10730) of Part 2.74 of Division 6 of the Water Code, a GSA may impose fees, including, but not limited to, permit fees and fees on groundwater extraction or other regulated activity, to fund the costs of a groundwater sustainability program, including, but not limited to, preparation, adoption, and amendment of a

GSP, and investigations, inspections, compliance assistance, enforcement, and program administration, including a prudent reserve.

SGSA's State Intervention Alternative

If local GSAs are unable or unwilling to sustainably manage their portion of the groundwater Subbasin, the SWRCB may step in to protect the groundwater resources using a process called state intervention. The SWRCB is responsible for setting and collecting fees to recover the costs associated with state intervention and has established a fee structure as shown in **Appendix B**. The SWRCB fee schedule, if applied to the SGSA area, would cost overlying users of groundwater significantly more than current estimates under the local control option.

As illustrated in **Appendix B**, the SWRCB can and will intervene and implement the requirements of the SGMA legislation in the SGSA service area boundary (as well as other areas of the State) if locals are unable or unwilling to comply with the law. In such a case, the Subbasin would be considered a "Probationary Basin" by the SWRCB and directly charge the intervention fees to each groundwater extractor (landowner). The SWRCB fees would be as follows:

- Base Filing Fee: \$300 per well, plus \$40 per acre-foot (AF) per year (Probationary Basin) or \$55 per AF per year (Interim Plan), plus costs for needed studies.
- De minimis wells (less than or equal to 2 AF per year) would be charged \$100 per year.

For perspective on these costs, if the SWRCB determines the basin to be a Probationary Basin and a landowner has 40 acres with one well and the demand is 3.0 AF per acre. The associated annual SWRCB fees would be \$300 (filing fee) plus \$4,800 (3.0 AF/acre x 40 acres x \$40/AF) for a total of \$5,100 per year. If the SWRCB determined the basin needed an Interim Plan, the annual cost would go to \$6,900. Over the next five years, the 40-acre landowner would pay \$25,500 to \$34,500 based on SWRCB designation, without achieving the benefit of any project development to help comply with SGMA.

By comparison, under the rates and schedule proposed for the SGSA through this Charge Report, this same landowner would pay a maximum of \$111.60 per year (40 acres x \$2.79/acre) and \$558 over a five-year period, plus an annual inflation factor. From a cost and regulation standpoint, the desire is to prevent state intervention while maintaining local control in a cost-effective manner. As such, the purpose of the SGSA is to fully comply with SGMA on behalf of its landowners to avoid state intervention or excessive groundwater-related fees.

Proposition 218 Requirements

In November 1996, the California voters approved Proposition 218, the *Right to Vote on Taxes Act*, which added Article XIII D to the California Constitution. Proposition 218 imposes certain requirements relative to the imposition of certain assessments, fees, and charges by local agencies. There are two processes for approval of revenue generation under Proposition 218 – Section 4 is for land-based assessments (per acre charge), and Section 6 is for fees or charges on a unit basis (i.e., per acre foot pumped).

For this initial five-year budget, the SGSA Board of Directors would approve applying charges under Section 6 of Proposition 218 for GSA operations. Since the SGSA does not currently have pumping data for individual parcels, charges proportional to extractions would not be practical, applicable, or withstand legal challenges to the Proposition 218 process. Therefore, collecting fees on a cost per acre basis fulfills the proportionality requirement by differentiating operational vs. GSP implementation costs with the cost allocation based on level of service required for SGMA compliance.

In general, before a local agency can levy new charges subject to Section 6 of Proposition 218, the Agency (or SGSA) must comply with the following Proposition 218 requirements to achieve SGMA compliance in a reasonable fashion, while only charging customers for proposed fees that are necessary to achieve the goals and objectives of the SGSA and its members as follows:

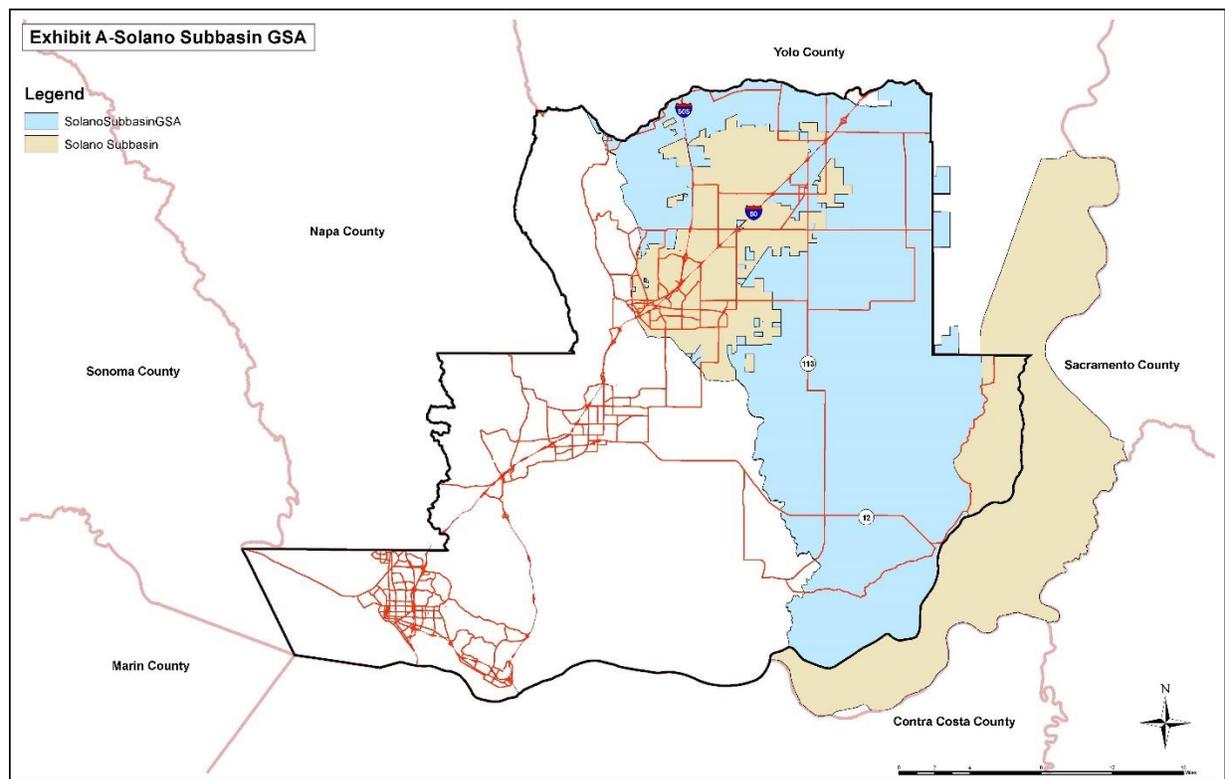
1. Revenues derived from the fee or charge must not exceed the funds required to provide the property-related service;
2. Revenue from the fee or charge must not be used for any purpose other than that for which the fee or charge is imposed;
3. No fee or charge may be imposed for general governmental services, such as police, fire, ambulance, or libraries, where the service is available to the public in substantially the same manner as it is to property owners;
4. The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership must not exceed the proportional cost of the service attributable to the parcel; and,
5. The fee or charge may not be imposed for service, unless the service is actually used by or immediately available to, the owner of the property in question.

This Report is limited to the proposed assessments to fund the SGSA's annual operations and to comply with the requirements of the SGMA legislation forecast over the next five years. The SGSA will monitor DWR SGMA compliance requirements and policy direction to achieve SGMA compliance for its members at the lowest possible cost. To achieve SGMA compliance in the Subbasin, all GSAs serving a portion of the Subbasin must be in compliance with SGMA. The proposed charge will enable the SGSA to meet SGMA requirements in their service area boundary.

SECTION 3: SGSA BACKGROUND INFORMATION

The SGSA was established in 2017 (see **Appendix A**) and is located in the Sacramento Valley Groundwater Basin – Solano Subbasin (5-021.66) in the central portion of the Sacramento Valley and encompasses a total area of approximately 211,000 acres within the SGSA jurisdiction. There are approximately 280,000 acres in the Solano Subbasin within Solano County with a significant portion in the SGSA jurisdiction that was a participant in the development and preparation of the Solano Subbasin GSP. The location of the SGSA is illustrated in **Figure 3-1**. The SGSA is within Solano County with the four (4) other GSAs serving the remaining portion of the Subbasin in Solano County designated by DWR’s basin prioritization policy as defined in DWR Bulletin No. 118. More information is available at <https://www.solanogsp.com/solano-subbasin/>.

Figure 3-1: SGSA Subbasin Service Area Boundaries



Solano County has a population of approximately 454,000 with a diversified economy. Agriculture is an important major producing industry in the SGSA service area dependent on both surface and groundwater. Top crops include tomatoes, nursery products, vegetables, walnuts, hay/alfalfa, cattle/calves, sunflower seeds, grapes/wine, milk, wheat, and miscellaneous fruit and vegetable crops. There are a few areas in the SGSA service area that are identified by DWR as disadvantaged communities (DACs). The SGSA boundary service area includes Solano County, the cities of Dixon and Rio Vista, Maine Prairie Water District and Dixon and Solano Resource Conservation Districts. The City of Vacaville is located within the City of Vacaville GSA service area.

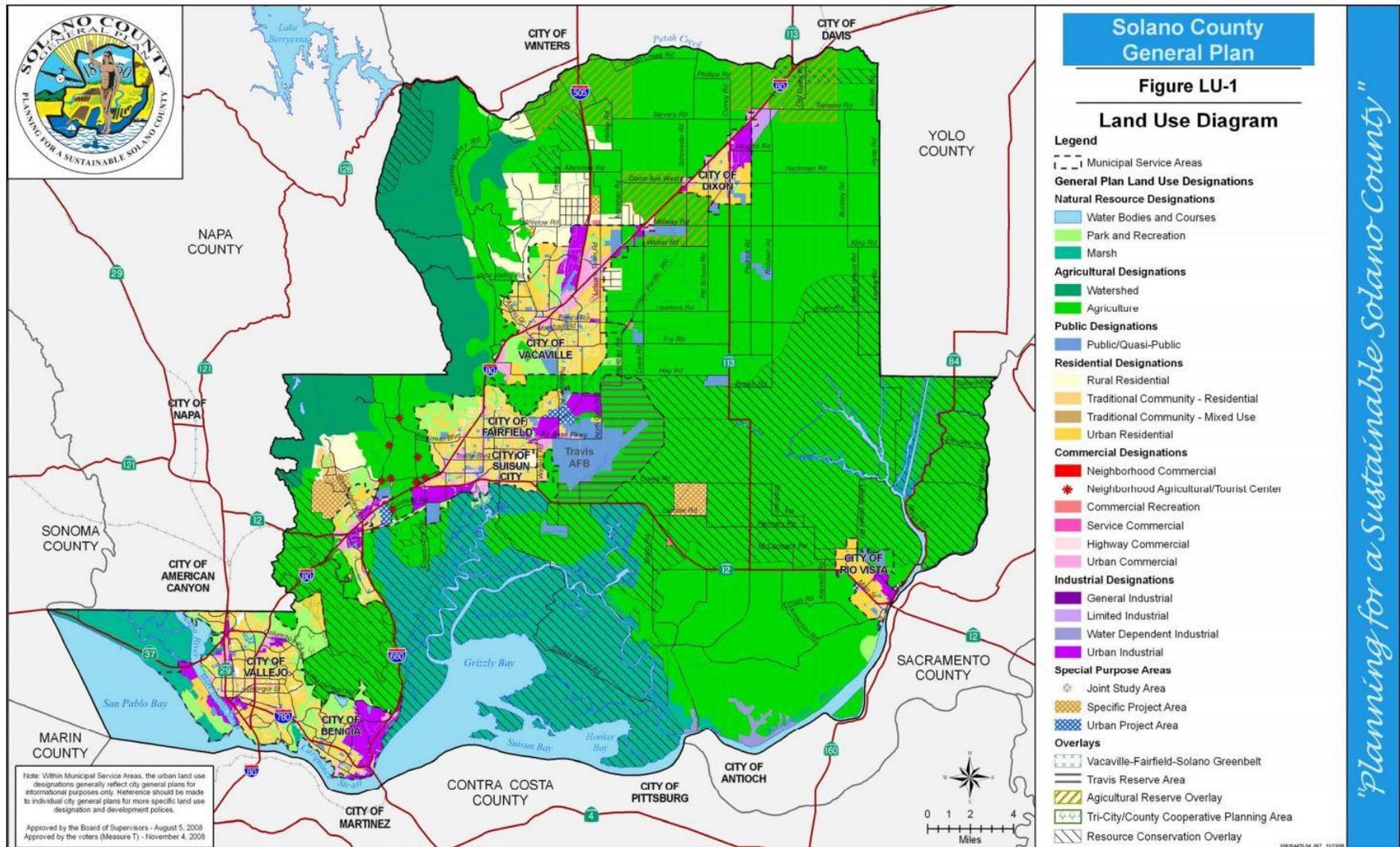
SGSA Service Area Climate Description

The climate of Solano County can vary within a moderate range between the valley and Bay Area influence, depending primarily on location with more Bay Area coastal influences in the western portion of the County. Hot, dry summers and temperate winters generally characterize the weather patterns in the County region, while Bay Area influenced areas experience slightly cooler, dry summers and temperate winters. The average maximum temperature in July is approximately 89 degrees with average low temperatures of approximately 59 degrees. The average maximum temperature in January is approximately 59 degrees with average low temperatures of approximately 42 degrees. The average annual rainfall in the County is approximately 25 inches with the majority of rainfall occurring during the December through March period. The documented high and low annual rainfall amounts are approximately 50 and 10 inches respectively. There are about 260 sunny days per year with summer high temperatures above 90 degrees. January low temperatures are typically in the range of 30 to 40 degrees. The warm summer climate allows for an active and diverse agricultural economy with multiple crops to thrive. Water supplies in the County are from both surface and groundwater sources to meet agricultural, urban, and environmental water supply needs.

SGSA Service Area Demographics Description

The demographics in the region include a 2020 population of approximately 454,000 and Household Median Income of approximately \$84,638 with about 9% of the population living in poverty. The median age is 38 years old. The population grew by approximately 0% from the previous year. The labor force is approximately 215,000 with a 7% unemployment rate. There are jobs in the agricultural, government, retail, technology, manufacturing, health care, school district and other service industries. A land use map for the Solano County region is below as an excerpt from its General Plan.

Figure 3-2: Solano County Region Land Use Map



Solano County is comprised of 910 square miles (582,255 acres), including about 830 square miles of land and about 80 square miles of water. Land area is divided into two topographic sections. The western quarter extends into the foothills of the coastal range. This area is characterized by steep slopes, which become more gently rolling in the eastern portion. The remainder of the County is part of the Sacramento Valley, which is characterized by level topography, with some isolated areas of low rolling hills. Other significant features include the Suisun Marsh, which has an area of more than 30 square miles, and the Napa-Sonoma Marsh area, with an area of more than 60 square miles, some of which is in Solano County. The unincorporated area of the County includes approximately 773 square miles (494,437 acres). Approximately 81,678 acres of the county, or 14 percent of the total land area, is in cities (Table LU-1). Solano County's cities include Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo. Because of Solano County's commitment to focus development within urban areas, about 95 percent of the County's population lives in the cities. In 2000, only 19,322 of Solano County's 394,542 residents lived in the unincorporated area.

The County has historically required that development requiring water and sewer service be incorporated within one of the County's cities. Based on this policy, most residential, commercial and industrial development in the county has been in incorporated areas.

Existing land uses in Solano County are demarcated between unincorporated (86%) and incorporated (14%) lands. The largest land use categories are agriculture (56%), Marsh (11.1%), Water (8.8%), and Watershed (6.3%). Residential, commercial, and industrial areas comprise less than 2% of total land use. About 20 percent of the unincorporated land area is some type of undeveloped natural resource land. This includes marsh and watershed lands in the southern and western portions of the County comprising 101,307 acres. Over 329,000 acres of land are in agricultural use, approximately 70 percent of the unincorporated land area. Agricultural land is concentrated in the eastern portion of the County and in smaller areas scattered throughout the County. Watershed lands are also in agricultural use.

Residential land uses occupy approximately 6,878 acres developed mostly at rural residential densities of one dwelling unit per 2.5 or more acres. Rural residential development has been concentrated in the area north of Vacaville in the English Hills, Allendale and Olive School areas, along Leisure Town Road east of Vacaville, in the Tolenas area of unincorporated Suisun City, and the Green Valley area north of Fairfield. Residential estate use at densities of one unit per ¼ to 1 acre exist in the Green Valley, Rockville Corners, Willotta Oaks, Old Town Cordelia, Elmira, Birds Landing and Collinsville area. A small amount of the unincorporated county's residential land is used for urban density residential single family and multifamily development, including apartment buildings, duplexes, triplexes and similar housing types located in unincorporated areas in Vallejo.

Industrial land uses account for about 2,125 acres of land area in the unincorporated county. Most of the existing industrial development in Solano County is within cities. Approximately 641 acres are in commercial land use, which includes retail, commercial services, and service stations. Smaller commercial developments are located in the unincorporated county areas to serve the needs of local residents and visitors. Highway-oriented commercial development represents the predominant commercial land use in the unincorporated area with the majority of such land located along Interstate 80.

Other uses of land in the county include public use (such as schools, cemeteries, and federal lands), which accounts for about 1,517 acres, park and recreation land (791 acres), and vacant land, which includes about 1,011 acres.

SGSA Service Area – Single GSA Governance Approach

The SGSA will serve as the single GSA for managing groundwater in the Solano Subbasin in coordination with the other Subbasin GSAs. Part of the responsibility of the SGSA (in compliance with SGMA) is to conduct regular groundwater GSA coordination meetings during GSP implementation that would be supported by the proposed charge structure. The SGSA would coordinate with stakeholders within the GSA and other GSAs in the Subbasin. The Solano Subbasin GSP was prepared by the GSAs, including the SGSA, and submitted to DWR by the January 31, 2022 deadline. The SGSA will assist with and facilitate GSP implementation within and between the GSAs to achieve the GSP sustainability goal within twenty (20) years of implementation (by 2042). DWR classified medium and high priority subbasins must comply with the provisions of SGMA. Working collaboratively through the single SGSA governance model will allow members to cost-effectively achieve SGMA compliance and maintain local control over groundwater use and management decision-making and policy.

Projects that are recommended in the adopted Solano Subbasin GSP will be planned and implemented by the lead applicant(s) and through regional collaboration as needed to accomplish SGSA groundwater management objectives. The SGSA members will collaborate and coordinate on projects of mutual interest and maximize outside funding sources to deliver projects in a cost-effective manner and reduce long-term SGSA costs of service. Project funding will be accounted for and managed in a separate budget than the SGSA's by the lead applicant or regional partnership unless otherwise agreed to. The SGSA will coordinate with the other Subbasin GSAs to assist in securing project level funding in a timely and cost-effective manner. The SGSA will maintain a list of GSP projects and work within its portion of the Subbasin and prioritize its project funding list accordingly to take advantage of grant funding sources as they become available. The SGSA will continue to apprise its members of upcoming grant funding opportunities and assist in securing funds for shovel ready projects and actions that can reduce long-term SGMA compliance costs for members.

SECTION 4: SGSA FINANCIAL INFORMATION

The SGSA is a relatively new organization and has obtained funding for administrative and GSP development related activities from inception to date primarily through secured grant funds and some in-kind voluntary contributions from member agencies. SGSA member agencies agreed to have the GSA lead the initial GSP development phase of the work and establish a functioning GSA to position the members for SGMA compliance once the grant funded GSP was prepared, approved by the GSAs, and submitted to DWR in January 2022. For the initial five years of GSP implementation, the SGSA is counting on the proposed charges to support GSA operations and GSP implementation SGMA compliance actions. There have been approximately \$100,000 of in-kind agency contributions to date to supplement existing grant funded activities to ensure adequate staffing to complete the work on schedule given SGMA compliance schedule targets. In addition, there have been in-kind staff and GSP partner staffing contributions to ensure that the GSP was completed and submitted to DWR by January 31, 2022. As discussed above, the primary purpose of the SGSA is to organize and represent the landowners for the purposes of SGMA compliance while maintaining local control over groundwater policy and management. The SGSA's administrative activities are expected to continue annually to complete annual monitoring and reporting requirements and complete the Five-Year GSP update, which will be coordinated between each GSAs who participated in the approved GSP. It is also planned that in the initial several years of GSP implementation additional technical evaluations may be undertaken to better understand Subbasin groundwater characteristics, address data gaps, and refine preferred projects the SGSA members can implement to improve long-term groundwater resource sustainability for the region. The SGSA will also be coordinating with all GSAs in the Subbasin on a regular basis during GSP implementation consistent with the requirements of SGMA. The technical report evaluations and GSP development actions are intended to prioritize water resource actions that help reliably meet long-term agriculture, urban, and environmental groundwater supply needs within the Subbasin sustainable yield.

The SGSA projected Five-Year Annual Budget (Budget) is based on the GSA members using the single SGSA governance model to serve the SGSA service area in Solano County and coordinate with other GSAs in the Subbasin as required to update their GSP on a five-year basis. The SGSA Budget would be funded through the proposed charges and all budget revenues and expenditures would be held in a special account that can only be used for approved SGSA activities related to GSA operations and GSP implementation costs. The Budget is presented over the initial five-year implementation period of the SGSA post-GSP development on annual budget cycle of January 1 through December 31 on an annual basis. Any annual rate increase would be effective January 1 of the specified year.

The GSA administration and GSP implementation costs were developed through a collaborative effort of the GSAs with SGMA compliance responsibilities. ERA Economics, working with the LSCE Team, prepared a technical memorandum (TM) to memorialize the agreed upon GSA cost estimates for SGMA compliance and cost allocation approach for sharing joint regional costs based on the best available estimate of groundwater use in each GSA service area. This information will be updated in the future based on the actual costs for GSP implementation, any revisions to the cost allocation formula, the availability of grant funds to offset GSA administration or GSP implementation joint regional costs, or modifications to annual GSA revenue requirements as a result of any changes to the SGMA legislation requirements

constituting SGMA compliance for GSAs in the Subbasin. The GSAs will continue to work together to comply with SGMA and the lowest possible cost to their respective GSA stakeholders. The SGSA will need the proposed Charge in place to serve as a dedicated revenue source to cover their costs for SGMA compliance during the first five years of GSP implementation broken down by Fiscal Year. The draft TM is included in **Appendix G**.

The SGSA’s projected Five-Year Budget is allocated into Operational Costs associated with maintaining the GSA as a functioning organization to meet SGMA compliance requirements. The budget projections also include GSP implementation related costs primarily for annual monitoring and reporting, five-year GSP updates, and Subbasin coordination activities required for SGMA compliance. The proposed charges will enable the SGSA to meet SGMA compliance requirements in the most cost-effective manner on both a short- and long-term basis.

Table 4-1: Solano Subbasin GSA Five-Year Budget (2023-2027)

Charge Cost Category	Calendar Year 2023	Calendar Year 2024	Calendar Year 2025	Calendar Year 2026	Calendar Year 2027
GSA Admin. Budget					
GSA Administration	\$0	\$0	\$0	\$0	\$0
Legal Costs	\$10,000	\$10,000	\$5,000	\$5,000	\$5,000
GSP Updates (Review)	\$10,000	\$10,000	\$10,000	\$10,000	\$20,000
SGSA Monitoring	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500
Contingency	\$11,650	\$11,650	\$11,650	\$11,650	\$12,650
Admin. Sub-total	\$63,150	\$63,150	\$58,150	\$58,150	\$69,150
GSP Implem. Costs	\$413,711	\$530,807	\$524,349	\$532,959	\$540,708
TOTAL SGSA Costs	\$476,861	\$593,957	\$582,499	\$591,109	\$609,858
Annual Avg. Costs	\$570,857	\$570,857	\$570,857	\$570,857	\$570,857
GSA Administration included in joint regional costs for SGSA fiscal agent role. Total SGSA Costs includes Admin. Plus regional share of GSP implementation costs allocated using best available estimate of total GSA groundwater use (SGSA uses 86% of total groundwater use by all GSAs).					

SGSA Operational Budget Overview

The SGSA will provide staffing to support ongoing GSA operations, including administration and GSP compliance actions over the initial five-year implementation period post-GSP development and adoption by the Board of Directors. The SGSA operations budget is comprised of primary legal, technical, funding, and administrative (staffing responsibilities) service components which will include staff administration and Subbasin coordination tasks associated with an active GSA maintaining SGMA compliance. The SGSA staff will report to the Board of Directors and be assigned to, but not limited to, the following tasks:

1. Coordinate meetings, prepare and distribute agenda packets, attend SGSA Board meetings, establish action items, and brief the Board on all relevant issues in a timely manner;
2. Create, supervise and coordinate accounting, technical, legal and administration services, hydrogeological, and similar technical work necessary to accomplish the SGSA directives;
3. Conduct educational, outreach, and collaborative activities (within and between the GSAs);
4. Coordinate the annual collection and maintenance of general SGSA watershed information necessary to comply with SGMA, including land ownership, land use types and acreage, surface water deliveries, groundwater usage, key climate factors and data, and GSP management objective assessment tracking;
5. Facilitate timely completion of Annual Monitoring and Reporting requirements to maintain SGMA compliance;
6. Facilitate timely completion of Five-Year GSP Update requirements to maintain SGMA compliance; and
7. Pursue outside grant funding sources that reduce SGMA compliance costs.

The SGSA will achieve SGMA compliance for its members to maintain local control of groundwater resources in its service area boundary with no State intervention or fees.

Alternative Charge Options – Considered by The Board

The SGSA Board of Directors would prefer to have an option to the recommended charge during the public hearing scheduled for July 14, 2022. Two other charge options were considered. One option included moving the SGSA Five-Year GSP update costs as far out as possible over the initial 2023-2027 charge period to still meet the January 2027 GSP Update DWR compliance submittal date. This option resulted in charges that were substantially higher in years 3 and 4, which are considered unacceptable to those paying the charge. The other Option was to consider a conceptual tiered charge for those using no groundwater. While data are not available to currently implement such an option, it was determined to be unnecessary. Because the Solano Subbasin GSP determines that the Subbasin is currently sustainable, all parcels benefit equally from GSP implementation to comply with SGMA and avoid State intervention. In the future, if projects or management actions are deemed necessary to achieve sustainability, a charge could

be developed that is more closely aligned with water use within the Subbasin, consistent with Proposition 218 principles.

A viable option for the Board to consider involves revising the revenue needs based on preliminary SGMA compliance costs generated by the GSAs. This would involve using the Total SGSA Costs (vs. the Annual Average Costs) as the revenue needs to serve as the basis for generating a proposed charge based on the revised Five-Year revenue needs in Table 4-2 below. This option would allow the SGSA charges to be ramped up over the five-year period to ease the transition into the new charges for SGMA compliance although maximum charges would be higher than the recommended charge at the end of the charge period (2027), as illustrated in Table 6-2.

Table 4-2: Solano Subbasin GSA Five-Year Budget (2023-2027) Option

Charge Cost Category	Calendar Year 2023	Calendar Year 2024	Calendar Year 2025	Calendar Year 2026	Calendar Year 2027
GSA Admin. Budget					
GSA Administration	\$0	\$0	\$0	\$0	\$0
Legal Costs	\$10,000	\$10,000	\$5,000	\$5,000	\$5,000
GSP Updates (Review)	\$10,000	\$10,000	\$10,000	\$10,000	\$20,000
SGSA Monitoring	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500
Contingency	\$11,650	\$11,650	\$11,650	\$11,650	\$12,650
Admin. Sub-total	\$63,150	\$63,150	\$58,150	\$58,150	\$69,150
GSP Implem. Costs	\$413,711	\$530,807	\$524,349	\$532,959	\$540,708
TOTAL SGSA Costs	\$476,861	\$593,957	\$582,499	\$591,109	\$609,858
Annual Avg. Costs	\$570,857	\$570,857	\$570,857	\$570,857	\$570,857
GSA Administration included in joint regional costs for SGSA fiscal agent role.					
GSP implementation costs allocated using best available estimate of total GSA groundwater use (SGSA uses 86% of total groundwater use by all GSAs).					

More information on this option is presented in Section 6 referenced as the best option available to the proposed Charges.

SECTION 5: SGSA MANAGEMENT BENEFITS

For the activities covered in this initial Five-Year Budget, the SGSA proposes to levy charges equally to all assessable acreage based on the sum of SGSA administrative costs and SGSA GSP implementation related costs as required to achieve SGMA compliance. The rationale is that the existence of the SGSA provides the benefit of SGMA compliance to all landowners within its boundaries and maintains local control with no State imposed fees. Although some properties might not presently utilize groundwater, all parcels have overlying groundwater rights. The information generated by the development of the Solano Subbasin GSP will inform the landowners about the available water supply to their land on a current and future basis, the potential for additional groundwater recharge, and allow them to be directly represented through the SGSA as it proceeds to meet the requirements of SGMA over the 2042 planning horizon.

This section provides the breakdown of the benefits that are to be attributed to landowners within the SGSA service area boundaries if the proposed charges are approved. Table 5-1 summarizes the acreages used in the analyses.

Table 5-1. Acreage Subject to SGSA Charge

SGSA GSA Solano Sub-basin	SGSA Five-Year Budget Operational/GSP Costs	SGSA Five-Year Budget Data Source
Total Solano County	280,134 acres	Solano Subbasin GSP
Total Federal Lands	2,203.86 acres	Solano Subbasin GSP
Total State Lands	2,821.13 acres	Solano Subbasin GSP
Vacaville GSA	14,711.63 acres	Solano Subbasin GSP
SID GSA	43,338.72 acres	Solano Subbasin GSP
North Delta GSA	11,793 acres	Solano Subbasin GSP
NET ASSESSABLE ACRES	205,265.66 acres	
Net acreage = Total SGSA – exempt parcels (e.g. Federal & State Lands) (source: Solano County Assessor’s Office provided boundary and parcel data)		

The lands have been identified that are subject to the proposed charge and would fund the required SGSA Five-Year Budget. The Operational and GSP Implementation Costs are applicable to all parcel owner acreages listed in Table 5-1 as reflected in net assessable acres above to all who will have an adopted 2022 GSP funded through the Proposition 1 and 68 programs. The proposed 2022 SGSA Charge Roll is based on the SGSA net assessable acreage located within portions within the SGSA, 2022 tax rolls of Solano County. The tax roll list of property owners and their associated APNs that would be subject to the proposed Charges are included as **Appendix C**. The complete roll will be submitted to the County Assessor upon implementation of the SGSA Charge by July 31, 2022.

The SGSA service area boundary includes the Cities of Dixon and Rio Vista, as well as Solano County, Maine Prairie Water District, Reclamation District 2068, and the Dixon and Solano Resource Conservation Districts. The City of Vacaville is located within the City of Vacaville GSA service area boundary. All property owners subject to the proposed Charges would pay the County through their property tax bill for specified charges. Cities may opt to pay the SGSA directly for their share of the SGSA costs based on applicable net assessable acres through a Funding Agreement with the SGSA. If so, these Cities would not be included in the Charge Roll in-lieu of the GSA Charge Funding Agreements between the SGSA and the entity for charges to be paid directly from each entity to the SGSA annually each January. The Solano County Assessor's Office verified Solano County GIS boundaries for each of these entities were used for assessable acreage and charge calculations. The SGSA will maintain a Funding Agreement List and update as necessary to ensure that all parcels subject to the proposed charge pay their fair share of the SGSA's total Five-Year Budget amount. **Appendix E** contains a current Funding Agreement List.

Parcels listed by the assessor as tax-exempt will not be included in the Charge Roll, and therefore are not included in assessable acreage and charge calculations. These parcels include primarily Federal and State-owned parcels per SGMA legislation.

SECTION 6: SGSA PROPOSED FEES

This section describes the SGSA’s proposed Charge for funding SGSA operational and GSP implementation costs over the initial five-year period (CY2023 through CY2027) post-GSP adoption in January 2022. The Charge would cover the associated legal, technical and administrative costs, as well as GSP compliance costs associated with annual monitoring and reporting, subbasin coordination, funding, and five-year GSP updates. Based on the services to be provided by the SGSA, the SGSA proposes to levy charge to all assessable parcels within the service area boundary of the SGSA that are identified on the tax rolls of Solano County.

In conformance with this Charge Report, the SGSA would seek Charge revenues to fund its GSA operational and GSP related implementation costs associated with SGMA compliance for all parcels in the SGSA service area boundary. Section 4 presents the proposed SGSA Five-Year Budget and total charges needed to fund the SGSA efforts over the next five years and the methodology for setting charges in proportion to cost of service based on available information. Proposition 218 requires that charges levied to each parcel owner be proportional to the cost of service attributable to that customer. The costs of administering the GSA on behalf of the parcels within the SGSA includes the legal, technical and administrative costs for landowners in the SGSA service area boundary and are proportional to the number of acres covered by the SGSA with all parcels equally benefitting from the SGSA’s single GSA low-cost governance model, SGMA compliance, and local control attributes (no State Intervention or imposed fees). Therefore, collecting the operational and GSP implementation portions of the Charge based on a cost per acre basis fulfills the proportionality requirement. As the SGSA currently does not have actual groundwater pumping volume data for individual parcels, or exact water sources data, charges proportional to extractions or water source would not be practical, applicable, or defensible under Proposition 218 requirements.

The proposed Charge includes the GSA operational and GSP implementation costs necessary for SGMA compliance that would be proportional to the number of acres covered in meeting the annual operational budget target over the five-year charge period for the benefit of all landowners within the SGSA service area boundary and is presented in Table 6-1. Calendar Year 2027 represents the maximum charge allowed (\$2.79 per acre) during the initial five-year funding period.

Table 6-1. Recommended SGSA Charges

Charge Recommended	Calendar Year 2023	Calendar Year 2024	Calendar Year 2025	Calendar Year 2026	Calendar Year 2027
Operational Budget	\$570,857	\$570,857	\$570,857	\$570,857	\$570,857
Proposed Charge (\$/ac)	\$2.79	\$2.79	\$2.79	\$2.79	\$2.79

The best option for the SGSA Board to consider would be to approve the charge presented below that ramps up the budget throughout the five-year period allowing for moderate annual increases in the charge schedule with a lower starting point for the year 1 charge. This option would also meet the annual operational budget target over the five-year period and the Charge would be proportional to the number of acres covered in meeting annual GSP implementation costs over the five-year rate period for the benefit of all landowners in the SGSA service area boundary and is presented in Table 6-2 below. Calendar Year 2027 represents the maximum operational charge allowed (\$2.98 per acre) during the initial five-year funding period.

Table 6-2. Best Option SGSA Charges

Charge Best Option	Calendar Year 2023	Calendar Year 2024	Calendar Year 2025	Calendar Year 2026	Calendar Year 2027
Operational Budget	\$476,861	\$593,957	\$582,499	\$591,109	\$609,858
Proposed Charge (\$/ac)	\$2.33	\$2.90	\$2.90	\$2.90	\$2.98

The proposed SGSA Charge is the combination of the GSA Operational and GSP Implementation portions of the Charge adjusted for cost allocation based on relative groundwater use by each GSA.

Table 6-3. GSA & GSP Implementation Cost Elements For SGSA Charges

Charge Cost Category	Calendar Year 2023	Calendar Year 2024	Calendar Year 2025	Calendar Year 2026	Calendar Year 2027
GSA Admin. (\$/ac)	\$0.31	\$0.31	\$0.31	\$0.31	\$0.31
GSP Charge (\$/ac)	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Proposed Total Charge (\$/ac)	\$2.79	\$2.79	\$2.79	\$2.79	\$2.79

The SGSA is seeking to implement an annualized charge in the maximum amount shown in Table 6-3, specifically \$2.79 per acre for all assessable parcels. The budgeted operational expenses are in 2022 dollars and will include an inflation factor indexed to the Consumer Price Index, currently estimated to be approximately 3% in Solano County, for the subsequent four years. Note that the Charge applied by the SGSA may vary from year to year but will not exceed the maximum amount unless an increase is approved through a subsequent Proposition 218 proceeding. **The necessary funding for the SGSA will be reviewed** annually by the Board and, depending on the projected funding level needed for the year, may be approved up to the maximum assessment rate. The proposed maximum annual charge allows the SGSA to apply

Charges to pay for anticipated increases in operating expenses and actions required to achieve SGMA compliance for members without having to incur the expense of routinely repeating the Proposition 218 process.

The Board has the option of adopting the proposed Charges for the full five-year duration or can adopt the first few years of a given charge schedule then return to approve additional charges in the years remaining during the initial five-year GSP implementation period at a later date.

SGSA Service Area – Assessment Roll

Appendix C is the proposed 2022 SGSA Charge Roll. This roll serves as the basis for providing notice to each landowner in the SGSA service area boundary whose land will be subject to the Charge, identifying each landowner, the parcels they own as reflected in County records, and the acreage for each parcel. The protest is directly related to the number of owners of parcels subject to the SGSA Charge. The Charge will apply unless written protests accounting for a majority of the total assessed parcels are submitted at the public hearing. **Appendix D** includes the Public Notice, which would be distributed all parcels subject to Charge. The Protest Form will be available at the SGSA Office included in the proposed charge meeting Proposition 218 outreach and communication protocols.

SGSA Conclusion

The primary objective of the SGSA Board of Directors regarding revenues is to ensure that its expenditures are truly necessary and reasonable for the stated purposes, and that those costs are allocated in a fair and equitable manner amongst the net assessable acres in its service area boundary. Based on the revenue objectives, the SGSA's proposal is to fund its annual operational and GSP implementation related future activities identified in this five-year budget for the benefit of all parcels within the SGSA that pay the Charge. Absent the creation of the SGSA (or a similar entity) and funding by the proposed charge, the SGSA landowners would have no direct representation or cost-effective means for complying with SGMA requirements. Without such representation, the SWRCB would take corrective action as provided by SGMA to achieve compliance at a higher cost without local control. However, with this proposed charge, properties will receive SGMA compliance benefits with local and better representation than the SWRCB can provide for substantially lower costs than if no GSA were formed. If no GSA were formed, the landowners would pay much higher fees and be left subject to regulation and oversight by the SWRCB with no guarantee that costs for addressing groundwater issues would be shared by the State.

SECTION 7: SGSA IMPLEMENTATION PROCEDURES

Based on legal and policy review of the procedural options available to the SGSA's Board of Directors, it has been determined that the proposed charge structure offers an equitable Procedure, consistent with the precedent established from previously adopted similar charges by other GSAs in California for SGMA compliance purposes. The SGSA's proposed charge would generate revenues for its operations (including legal, technical, and administrative costs) and GSP implementation costs associated with SGMA compliance. In addition, having the SGSA serve as the GSA serving its portion of the Subbasin located within Solano County is the lowest cost GSA governance approach available to its members. The SGSA intends to proceed with a protest hearing complying with the provisions of Article XIII D of the California Constitution to allow for the adoption of the proposed Charge.

The SGSA Board of Directors will be asked to: (a) approve and accept the Charge Report; (b) set a public hearing on the proposed charges; and (c) authorize a Proposition 218 effort to mail (i) notices to these landowners informing them of the proposed charges, and (ii) instructions for protest. At the public hearing, the SGSA will state its intentions and justifications for pursuing a Proposition 218 effort, take into consideration any objections received to the proposed Charge, and count any acceptable written protests received as of the close of the public hearing. If written protests, following all protest procedures, are submitted and received from a majority of the total assessed parcels by the close of the hearing, the SGSA may not adopt the charge. Absent a majority protest, the SGSA will adopt the proposed charge to comply with SGMA and maintain local control over groundwater management decisions.

The SGSA shall maintain a record of the Report, protest notice and received protests, public outreach and notifications, and meeting agendas and minutes for all pre-charge adoption actions consistent with Proposition 218 procedures and to document SGSA process transparency for the benefit of all stakeholders.

During the initial five-year Proposition 218 charge period (CY2023 through CY2027) the SGSA will keep charges as low as possible based on actual expenses associated with SGSA operations and GSP implementation activities as required to maintain compliance with SGMA requirements. Proposition 218 establishes maximum Charges the SGSA may charge during the initial five-year period. The proposed Charges are planned to be consistent throughout the charge period with no planned annual charge adjustments not to exceed the maximum rate in the fifth year of the charge schedule. The SGSA will maintain the Charges within the maximum level as required to achieve and maintain compliance with SGMA requirements. The Board will review the proposed Charges annually and determine if any Charge adjustments are necessary based on actual expenditures to date and projected expenses over the initial five-year implementation period.

The SGSA will provide members and stakeholders with updated Five-Year Budget financial information regarding the revenues and expenditures associated with SGSA Charge collections and SGMA compliance status. Subbasin coordination and grant funding efforts will be documented and updated on a regular basis. The SGSA will conduct periodic financial audits to ensure efficient use of Charges and maintain transparency to members and stakeholders.

SECTION 8: SGSA REFERENCES

The SGSA referenced and used information from the following sources to prepare this Charge Report for the SGSA and its members. All documents referenced are available as indicated on the website links below.

Solano Subbasin Groundwater Sustainability Agency

[Solano GSA Board of Directors - scwa2.com](http://scwa2.com)

Bulletin No. 118, California's Groundwater, 2003 and 2016 Interim Update

California Department of Water Resources

2014 Sustainable Groundwater Management Act (including Fee related provisions)

California Department of Water Resources

Solano County Assessor's Office, Parcel/Tax Data Year 2022, provided April 2022.

Solano County Crop Report

[Solano County - 2019-2028](http://solanocounty.ca.gov)

Solano Subbasin – 2022 Groundwater Sustainability Plan

Solano Subbasin website: <https://www.solanogsp.com>

Department of Water Resources Disadvantaged Communities Mapping Tool

<https://gis.water.ca.gov/app/dacs/>

Proposition 218, Local Agency Guidelines for Compliance, 2007 Update

Association of California Water Agencies

Proposition 26 and 218, Local Agency Implementation Guide, 2019 Update

League of California Cities

APPENDIX A

Solano Subbasin GSA – Resolution Establishing The GSA (2017)



RESOLUTION 2017-01

**A RESOLUTION OF THE SOLANO GROUNDWATER SUSTAINABILITY AGENCY
ELECTING TO SERVE AS A GROUNDWATER SUSTAINABILITY AGENCY
FOR A PORTION OF THE SOLANO SUBBASIN**

WHEREAS, the Sustainable Groundwater Management Act of 2014, Part 2.74 of Division 6 of the California Water Code (SGMA), was signed into law on September 16, 2014; and

WHEREAS, SGMA requires that each California groundwater basin or subbasin be managed by a Groundwater Sustainability Agency (GSA), or multiple GSA's, and that such management be implemented pursuant to approved Groundwater Sustainability Plan (GSP) or multiple GSPs; and

WHEREAS, the Solano Groundwater Sustainability Agency (Agency) is a joint powers agency, formed pursuant to the provisions of Government Code §6500, et seq. as a public agency separate from its members; and

WHEREAS, the signatory members of the Agency are the CITY OF DIXON, CITY OF RIO VISTA, SOLANO COUNTY, DIXON RESOURCE CONSERVATION DISTRICT, SOLANO RESOURCE CONSERVATION DISTRICT, MAINE PRAIRIE WATER DISTRICT, and RECLAMATION DISTRICT 2068; and

WHEREAS, there are non-signatory members of the Solano GSA, CALIFORNIA WATER SERVICE COMPANY and SOLANO COUNTY FARM BUREAU, that have entered into Memoranda of Agreement with the Solano GSA agreeing to be bound to the terms of the Joint Powers Agreement; and

WHEREAS, the Agency is a Local Agency within the definition of Water Code § 10721(n), eligible to serve as a GSA pursuant to Water Code § 10723, because it possesses water supply and water management responsibilities within a groundwater basin as defined by Bulletin 118; and

WHEREAS, the Agency overlies a subbasin of the Sacramento Valley Groundwater basin known as the Solano Subbasin (No. 5-021.66), an unadjudicated groundwater basin overlying portions of Solano County (Basin); and

WHEREAS, notice of a public hearing to consider whether the Solano GSA should become a GSA for the Basin, a copy of which is attached hereto as **EXHIBIT A**, was published in the Daily Republic of Fairfield, the Dixon Tribune, the River News Herald of Rio Vista, and the Vacaville Reporter, on May, XX, 2017 and May, XX, 2017, pursuant to Government Code § 6066, as required by Water Code § 10723(b); and

WHEREAS, a good faith effort to notify the Basin's other potential GSA's, that are not part of this GSA, of the Agency's intent to become the GSA for the Basin, was conducted; and

WHEREAS, the Agency held a public hearing on June 8, 2017, at which its Board of Directors considered whether the Agency should become a GSA for a portion of the Basin; and

NOW, THEREFORE, BE IT RESOLVED, ORDERED, AND DIRECTED THAT:

1. The Agency hereby elects to be the Groundwater Sustainability Agency for that portion of the Solano Subbasin within Solano County depicted in the map attached hereto as **EXHIBIT B**.
2. Within 30 days of the date of this Resolution, the Secretary is directed to submit a notice of intent to the Department of Water Resources, pursuant to Water Code § 10723.8(a).
3. The Secretary shall, after complying with Water Code § 19727.8, begin the process of developing the Solano GSA's Groundwater Sustainability Plan for the Basin in accordance with all applicable statutes and regulations.
4. The Secretary shall create and maintain a list of persons interested in receiving notices concerning the Agency's SGMA process pursuant to Water Code § 10723.4.
5. The Secretary shall provide regular progress reports on the SGMA implementation process to the Board.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the Agency on the 8th day of June, 2017, by the following vote:

AYES: Directors Bogue, Richardson, Vasquez, Thomson, Caldwell, Bei, Crossley, Roteveel, and Martinez

NOES:

ABSTAIN:

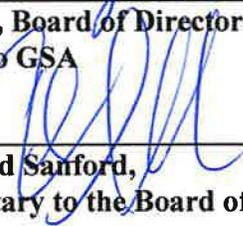
ABSENT: Mahoney

DATED: June 8th, 2017



**Chair, Board of Directors
Solano GSA**

ATTEST

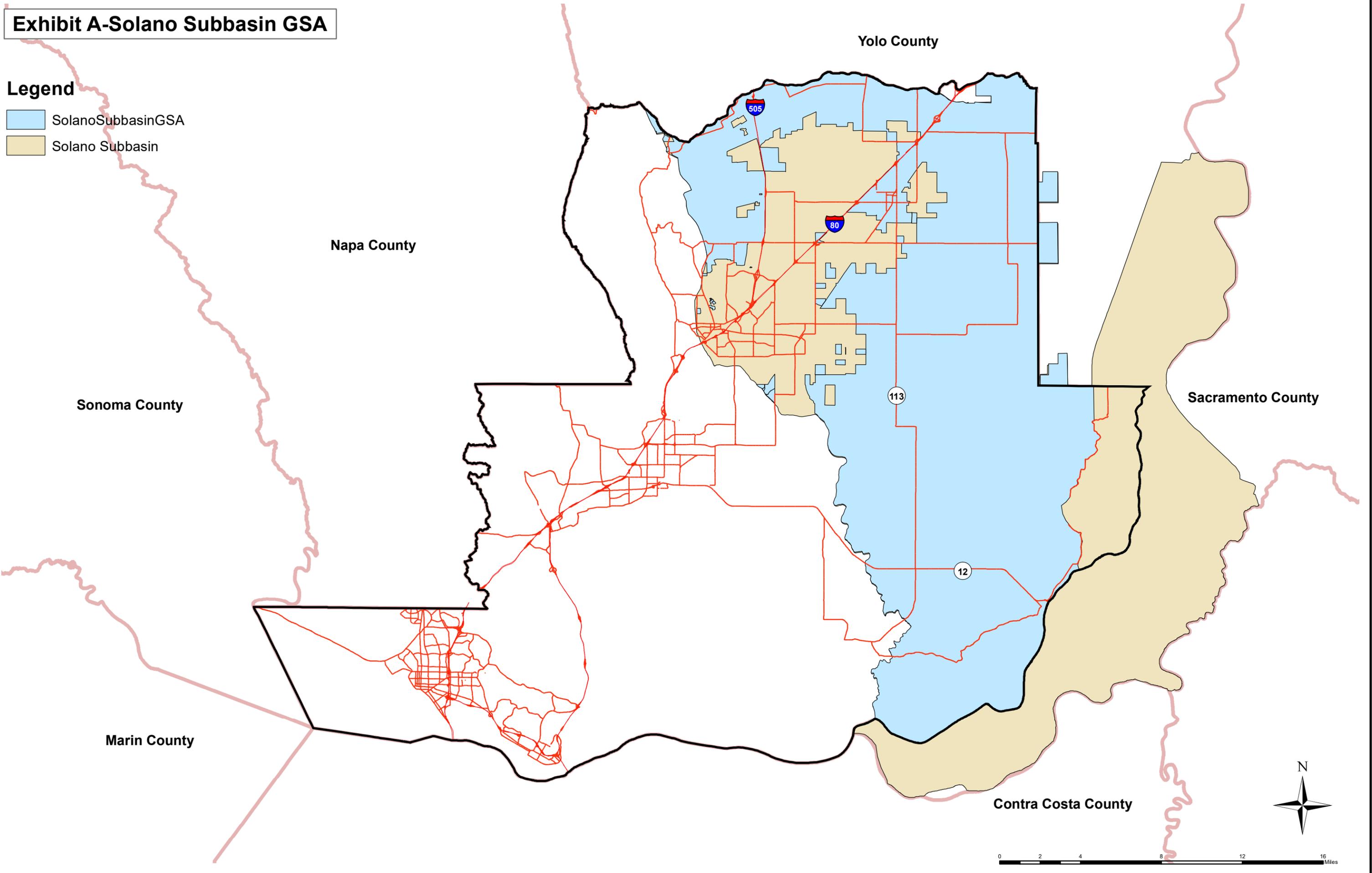


**Roland Sanford,
Secretary to the Board of Directors**

Exhibit A-Solano Subbasin GSA

Legend

-  SolanoSubbasinGSA
-  Solano Subbasin



APPENDIX B

Solano Subbasin GSA – SWRCB Intervention Policy



Emergency Regulation for Implementation of the Sustainable Groundwater Management Act

On May 16, 2017, the State Water Resources Control Board (State Water Board or Board) [adopted](#) an emergency regulation to implement State Water Board provisions of the Sustainable Groundwater Management Act (SGMA).

SGMA and State Intervention

In 2014, Governor Edmund G. Brown Jr. signed SGMA, which creates a framework for sustainable, local groundwater management for the first time in California history. SGMA requires the formation of local groundwater sustainability agencies (GSAs) in California's high- or medium-priority groundwater basins or the submittal of an alternative that demonstrates a basin is already sustainable.¹ GSAs are required to develop groundwater sustainability plans that make basins sustainable within 20 years of implementation. If locals are unable or unwilling to sustainably manage their basin, the State Water Board is authorized to intervene. State intervention is triggered by one of the following events:

- July 1, 2017 No GSA or Alternative for entire basin
- February 1, 2020 Basin is in critical overdraft and there is no plan or DWR fails plan
- February 1, 2022 No plan or DWR fails plan and basin is in long-term overdraft
- February 1, 2025 DWR fails plan and basin has significant surface water depletions

Beginning July 1, 2017, portions of basins not within the service area of a GSA are considered unmanaged.² Any person that extracts groundwater from an unmanaged area must submit annual reports to the State Water Board.³ If locals fail to form a GSA, fail to develop an adequate sustainability plan, or fail to implement the plan successfully, the Board may designate the basin probationary and directly manage groundwater extractions.⁴ Any person who extracts groundwater from a probationary basin must submit annual reports to the State Water Board, although the Board has discretion to exclude certain extractors from reporting.⁵

Annual reports are due to the Board by December 15 of each year for extractions made during the previous water year (October 1 - September 30). A report must be submitted for each well and must identify well owner information, well location, well capacity, monthly extraction volumes, and place(s) and purpose(s) of use. Extraction volumes must be measured by a method satisfactory to the Board.⁶

Electronic Filing of Reports

The emergency regulation includes a requirement that groundwater extraction reports be filed electronically, as authorized by SGMA⁷. The State Water Board is developing a web-based electronic reporting system for the preparation and submission of reports of groundwater extraction.

The reporting system will increase the reliability and standardization of information collected, and will ensure that information is maintained in a form that will be a resource to local agencies when groundwater management is returned to local control.

The reporting system will ease the burden of preparing reports by 1) providing resources to identify groundwater extraction information; 2) identifying information on behalf of extractors; and 3) providing mapping resources in lieu of well owners acquiring maps or consulting services to satisfy requirements for locational information.

State Water Board Fees

Any person that files an extraction report must pay a filing fee to cover the Board's SGMA-related costs.⁸ The emergency regulation specifies these fees, as required by SGMA,⁹ and allows the Board to update the fees as necessary to reflect changing conditions and programmatic costs. These fees will not apply in basins where local implementation of SGMA is successful.

Fees for the 2017 Water Year

In an effort to prioritize GSA formation and well registration, and to avoid undue burden to unmanaged extractors, the State Water Board adopted simplified fees for the 2017 Water Year, as detailed below:

- The annual fee for reports due by December 15, 2017 is a flat fee of \$300.
- The late fee for reports due by December 15, 2017 is \$100 for each month late up to a maximum of \$1200 (inclusive of the \$300 flat fee).
- If a GSA forms between July 1, 2017 and September 30, 2017, extractors within the GSA service area are considered unmanaged for the 2017 water year and must report to the Board by December 15, 2017, but the annual fee is waived.

Fees for the 2018 Water Year

The fees are tied to the "level" of state intervention occurring in a basin. Each level is associated with particular types of activities increasing staff workloads and other costs.

1. **Unmanaged Area:** An unmanaged area is a portion of a basin not within the service area of a GSA. Extractors in unmanaged areas must submit annual reports to the Board.¹⁰ Board staff will have to identify unmanaged extractors, collect and review reports, verify extraction data, and evaluate the impact of unmanaged extractors on groundwater conditions in a basin.
2. **Probationary Basin:** If local failure triggers state intervention, the Board may designate the basin "probationary."¹¹ Extractors in probationary basins are required to submit annual extraction reports to the Board.¹² In addition to the workload associated with locating extractors in a basin and managing reports, Board staff will have to evaluate basin conditions and investigate potential solutions for unsustainable conditions.
3. **Interim Plan:** In certain cases, the Board will need to directly manage extractions in a basin. In those instances, the Board must develop an interim plan that contains corrective actions, a timeline to make the basin sustainable, and a monitoring plan to ensure corrective actions are working.¹³

Annual Fees for Groundwater Extraction reports

Fee Category	Annual Fee Amount	Applicable Parties
Base Filing Fee	\$300 per well	All extractors required to report
Unmanaged Area Rate	\$10 per acre-foot, if metered	Extractors in unmanaged areas
	\$25 per acre-foot, if unmetered	
Probationary Basin Rate	\$40 per acre-foot	Extractors in probationary basins
Interim Plan Rate	\$55 per acre-foot	Extractors in probationary basins where the Board determines an interim plan is required.
De minimis Fee	\$100 per well	Parties that extract, for domestic purposes, two acre-feet or less per year from a probationary basin, if the Board decides the extractions will likely be significant.
Late Fee	25% of total fee amount per month late	Extractors that do not file reports by the due date.

In addition to the fees detailed above, the Board has the authority to order extractors in a probationary basin to prepare and submit technical or monitoring program reports. Therefore, the costs associated with these reports are not currently included in the emergency regulation.¹⁴

Metered Extraction Discount

To be eligible for the \$10 per acre-foot unmanaged area rate, extractors must measure groundwater extraction volumes with a meter that meets the following criteria:

- The meter must be equipped with a totalizer and permanently attached to the well.
- No water use can occur between the point of extraction and the meter.
- The meter must be calibrated by a qualified individual to be accurate to within \pm five (5) percent by volume upon installation and at least once every five years.
- The meter must be accessible for reading, inspection, testing, repair and replacement.
- The meter must be available for inspection by the State Water Board.

Extractors are responsible for the installation and maintenance of meters and all related costs.

Fee Examples

1. The following table highlights how the different levels of state intervention would impact the annual fees required of a hypothetical 50-acre farm that extracts 175 acre-feet of groundwater (3.5 acre-feet per acre) each year from a single well:

Intervention Level	Rate per acre-foot	Total fee	Cost per acre
Unmanaged Area (metered)	\$10	\$2,050	\$41
Unmanaged Area (unmetered)	\$25	\$4,675	\$94
Probationary Basin	\$40	\$7,300	\$146
Interim Plan	\$55	\$9,925	\$199

2. The following table highlights how the different levels of state intervention would impact the annual fees required of a hypothetical municipal water supplier or industrial user extracting 5,000 acre-feet per year from a single well:

Intervention Level	Rate per acre-foot	Total fee
Unmanaged Area (metered)	\$10	\$50,300
Unmanaged Area (unmetered)	\$25	\$125,300
Probationary Basin	\$40	\$200,300
Interim Plan	\$55	\$275,300

Annual Fees when a GSA Forms or Dissolves after September 30, 2017

Typically, annual fees are based on the volume of groundwater extracted during the entire previous water year. There is an exception for extractors in areas where a GSA forms after September 30, 2017. These extractors are required to report for the entire water year, but the annual fee is limited to extractions made during the months the extractors were unmanaged. For example, if a GSA forms on March 15, 2018, extractors in that area will only be charged for extractions made during the entire months of October 2017 through March 2018. On the other hand, if a GSA rescinds its formation notice and an extractor is no longer within the management of a GSA after September 30, 2017, the fee will be based on extractions made during the entire previous water year.

De minimis Extractors

SGMA defines a de minimis extractor as “a person who extracts, for domestic purposes, two-acre feet or less per year.”¹⁵ A person who extracts two acre-feet or less per year for a non-domestic purpose is not considered a de minimis extractor. Domestic purposes do not include commercial activities. A person who extracts more than two acre-feet per year from a parcel is not a de minimis user. De minimis users are exempt from reporting in unmanaged areas. However, the State Water Board may require de minimis extractors to report in a probationary basin if necessary.¹⁶ The emergency regulation clarifies how the term “domestic purposes” will be interpreted when determining if an extractor is de minimis.

Stakeholder Input

The State Water Board held outreach meetings and presented fee schedule proposals at local events to get a better understanding of stakeholder concerns and solicit feedback on how to best structure the annual fees. A draft of the emergency regulation was released for public comment on March 10, 2017 and followed by a workshop on March 21, 2017. The emergency regulation incorporates input provided by a wide range of stakeholders including local governments, water suppliers, businesses, and individuals.

Interim Plans and Groundwater Sustainability Plans

State intervention is intended to temporarily protect groundwater resources until local authorities can demonstrate their ability and willingness to manage groundwater sustainably. An interim plan is not intended for permanent management of a basin. Local efforts to address the deficiencies that caused state intervention will need to be funded by local agencies while groundwater extractors also pay State Water Board fees; this will likely result in a scenario of extractors paying both local and state fees.

State Water Board Flexibility

SGMA provides the State Water Board with three means of flexibility in the intervention process. The provisions described below will affect the applicability of the state intervention fees.

1. Areas in compliance with the sustainability goal will be excluded from probation.¹⁷
2. Extractors may be excluded from probationary reporting and related fees.¹⁸
3. Successful elements of a local sustainability plan will be incorporated into an interim plan.¹⁹

SGMA Information and Resources

State Water Board: www.waterboards.ca.gov/gmp

Department of Water Resources: www.water.ca.gov/groundwater/sgm

(This fact sheet was updated on May 17, 2017)

Contact

Jessica Bean, Groundwater Management Program

Email: groundwater_management@waterboards.ca.gov

Phone: 916-322-6508

References

-
- 1 Basin prioritization information available at water.ca.gov/groundwater/sgm/SGM_BasinPriority.cfm
 - 2 Areas included as part of an alternative to a GSP or adjudication are not considered unmanaged.
 - 3 Water Code Section 5202(a)(2)
 - 4 Water Code Sections 10735.2 and 10735.8
 - 5 Water Code Section 10735.2(c)
 - 6 Water Code Sections 5202 and 5203
 - 7 Water Code Section 348
 - 8 Water Code Section 5202(f)
 - 9 Water Code Section 1530
 - 10 Water Code Section 5202(a)(2)
 - 11 Water Code Section 10735 et. seq.
 - 12 Water Code Section 5202(a)(1)
 - 13 Water Code Section 10735.8
 - 14 Water Code Section 10736.6
 - 15 Water Code Section 10721(e)
 - 16 Water Code Section 10735.2(c)(2)
 - 17 Water Code Section 10735.2(e)
 - 18 Water Code Section 10735.2(c)
 - 19 Water Code Section 10735.8(e)

APPENDIX C

Solano Subbasin GSA – Draft Solano County Tax Roll



APPENDIX D

Solano Subbasin GSA – Proposition 218 Notice



SOLANO SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY NOTICE OF PROPOSED CHARGE

In compliance with California State Law, a **public hearing will be held: July 14, 2022 at the Solano County Water Agency, 810 Vaca Valley Parkway, Suite 203, Vacaville, CA 95688** to consider a proposal by the Solano Subbasin Groundwater Sustainability Agency (SGSA) to adopt a **new charge in the amount of \$2.79 per acre annually**, plus inflationary adjustments, for the 2023 Calendar Year and the subsequent four calendar years (Charge), for implementation of the Groundwater Sustainability Plan (GSP) required by the State of California pursuant to the Sustainable Groundwater Management Act (SGMA).

Background:

The SGSA is a joint powers agency formed to comply with the requirements of SGMA for that portion of the Solano Groundwater Subbasin underlying the CITY OF DIXON, CITY OF RIO VISTA, SOLANO COUNTY, DIXON RESOURCE CONSERVATION DISTRICT, SOLANO RESOURCE CONSERVATION DISTRICT, MAINE PRAIRIE WATER DISTRICT, and RECLAMATION DISTRICT 2068. The SGSA is also comprised of non-signatory members including CALIFORNIA WATER SERVICE COMPANY and SOLANO COUNTY FARM BUREAU who participate through an MOU consistent with the provisions of the joint power agency. As required by SGMA, the SGSA adopted a GSP in 2022, and must now implement that plan as required by law to prevent the State of California from stepping in to manage the groundwater basin.

Long-Term Funding:

In order to immediately ensure SGMA compliance, the SGSA members were largely grant funded during GSP development from 2017 through 2021, including the costs to prepare the GSP and identify SGMA compliance costs. At this time, an updated long-term funding plan is being implemented to cover SGSA actions required for SGMA implementation and compliance, including, but not limited to legal, technical and administration services (including consultant services, insurance, office and outreach materials, and accounting), annual monitoring and reporting to the State, preparation of required updates to the GSP, and required coordination among GSAs in the Subbasin. The SGSA has received Proposition 1 and 68 grant funding to cover a majority of the work to establish the SGSA and develop the 2022 GSP. However, costs for initial GSP implementation and SGMA compliance can't be covered by grants and will need to be covered by the proposed charge. The SGSA will continue to obtain outside funding sources to the extent possible to keep their GSP implementation and SGMA compliance costs as low as possible.

The proposed charge is a property-related fee governed by Proposition 218 and the California constitution. SGMA provides authority for the SGSA to impose charges to support SGMA compliance. The SGSA retained Luhdorff and Scalmanini Consulting Engineers (LSCE) to review the best options to fund GSP implementation over the next five years, and LSCE explained the charge in its May 2022 Proposition 218 Charge Report.

The proposed charge is required to cover the cost of implementation of the GSP to ensure that the Solano Subbasin is sustainable over the long term, as required by SGMA. Ensuring sustainability will allow the SGSA to maintain local control, and **avoid extremely expensive and intrusive State intervention and operation of the Subbasin, which would result in much higher charges**. If the State Water Resources Control Board intervenes in the Solano Subbasin, it may impose annual fees ranging from \$100 per domestic well, to \$300 per agricultural well, plus up to \$55 per acre-foot pumped per well, plus require annual reporting of extractions to the State. See https://www.waterboards.ca.gov/water_issues/programs/gmp/docs/intervention/intervention_fs.pdf for more complete information. Implementing the proposed charge provides landowners with a more affordable and locally managed option for managing the Solano Subbasin while maintaining SGMA compliance.

Proposed Charges:

The proposed per-acre charge to fund ongoing implementation of the GSP and compliance with SGMA would impose a maximum charge of **\$2.79 per acre** (in 2022 dollars, indexed for inflation, for the subsequent four years). The proposed charge, if approved, will become effective for the 2023 calendar year (beginning January 1, 2023), with the first payment due by April 15, 2023. **The actual amount of the proposed charge will not exceed the maximum per acre charge specified above, plus the indexed inflation factor, absent a subsequent Proposition 218 proceeding.**

For more information, including the Charge Report summarizing the findings, please visit the SGSA website at [Solano GSA Board of Directors - scwa2.com/](http://SolanoGSABoardofDirectors-scwa2.com/).

Public Hearing:

Under the California State Constitution, owners of land subject to the proposed charge have the right to protest its adoption. If you have received this notice, one or more parcels under your ownership will be subject to the proposed charge. In the event of a majority protest, the charge will not be instituted. If the identified parcel has more than one record owner or renter, only one written protest will be counted. Each protest must (1) be in writing, (2) state that you are against the proposed charge, (3) provide the parcel APN, and (4) include the original signature of the record owner or renter submitting the protest. A protest form may be obtained at the below address, but the protest need not be on a protest form if it contains the information set forth above.

Written protests must be submitted by mail to: Solano Subbasin Groundwater Sustainability Agency, c/o Chris Lee, SGSA Manager, 810 Vaca Valley Parkway, Suite 203, Vacaville, California 95688, or in person at the public hearing on July 14, 2022, so long as they are received prior to the close of the public hearing. **Protests submitted by e-mail, fax, or other electronic means will not be accepted.**

There are multiple ways to obtain additional information about this topic:

- Call the SGSA at **(707) 451-6090**.
- View more information online at [Solano GSA Board of Directors - scwa2.com/](http://SolanoGSABoardofDirectors-scwa2.com/)
- For more information about SGMA, see the California Department of Water Resources website: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>

APPENDIX E

Solano Subbasin GSA – User Agreements Through MOU



Appendix E

**Proposed 2022 Solano Subbasin
Groundwater Sustainability Agency
SGMA Compliance Charge Funding Agreements
(referenced to GSP Implementation MOU)**

1. City of Dixon
2. City of Rio Vista

APPENDIX F

Solano Subbasin GSA – Public Outreach





Solano Subbasin Groundwater Sustainability Plan

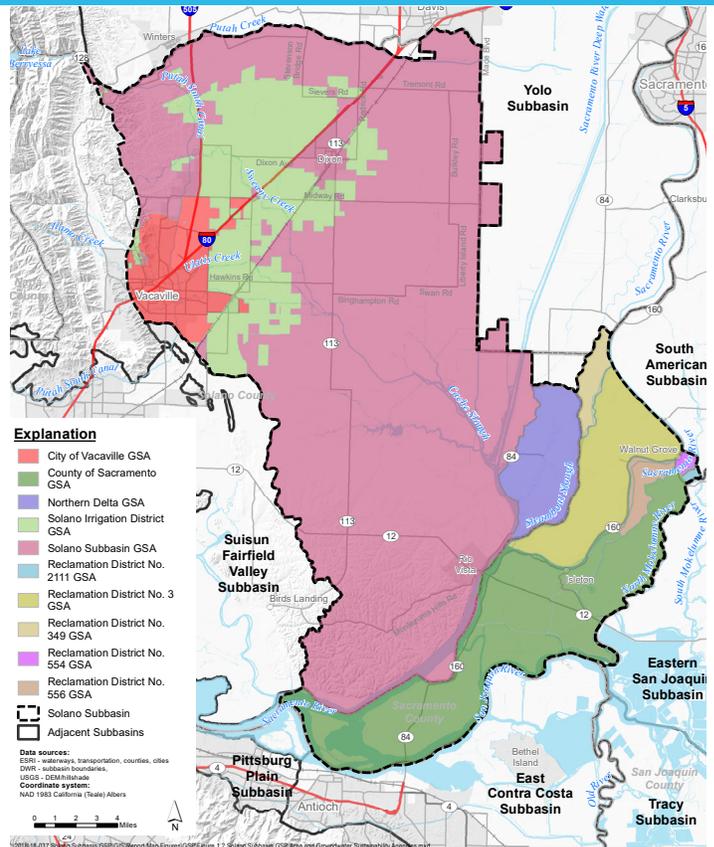
Long-Term Funding for GSP Implementation

GSP Implementation Funding for Years 2023-2027

Now that the Solano Subbasin Groundwater Sustainability Plan (GSP) has been submitted to the California Department of Water Resources (DWR), the Solano Groundwater Sustainability Agencies (GSAs) are working together to implement the GSP in a cost-effective manner. To fund GSP implementation activities, revenue requirements have been developed by the GSAs, which are proposed to be funded through Proposition 218 charges that will support the work to achieve groundwater sustainability. GSAs must implement groundwater sustainability monitoring and management actions to bring the entire Subbasin into compliance with Sustainable Groundwater Management Act (SGMA) requirements by 2042.

What Other Charge Options were Considered by the GSAs for Covering GSP Implementation Costs?

The GSAs considered Proposition 218 charges, Proposition 26 charges, and local cost sharing arrangements. Doing nothing on SGMA would lead to State intervention in Solano Subbasin groundwater management activities. The GSAs determined that local cost sharing arrangements would not be adequate to cover GSP implementation costs and concluded that the cost for State Water Resources Control Board intervention would be high and unacceptable compared to local control of watershed resources. The Proposition 218 charge process was determined to be the most transparent and equitable method for establishing charges to cover GSP implementation costs, based on broad application of this approach by many other GSAs across California. The Proposition 218 process allows for a landowner protest vote as part of the approval process.



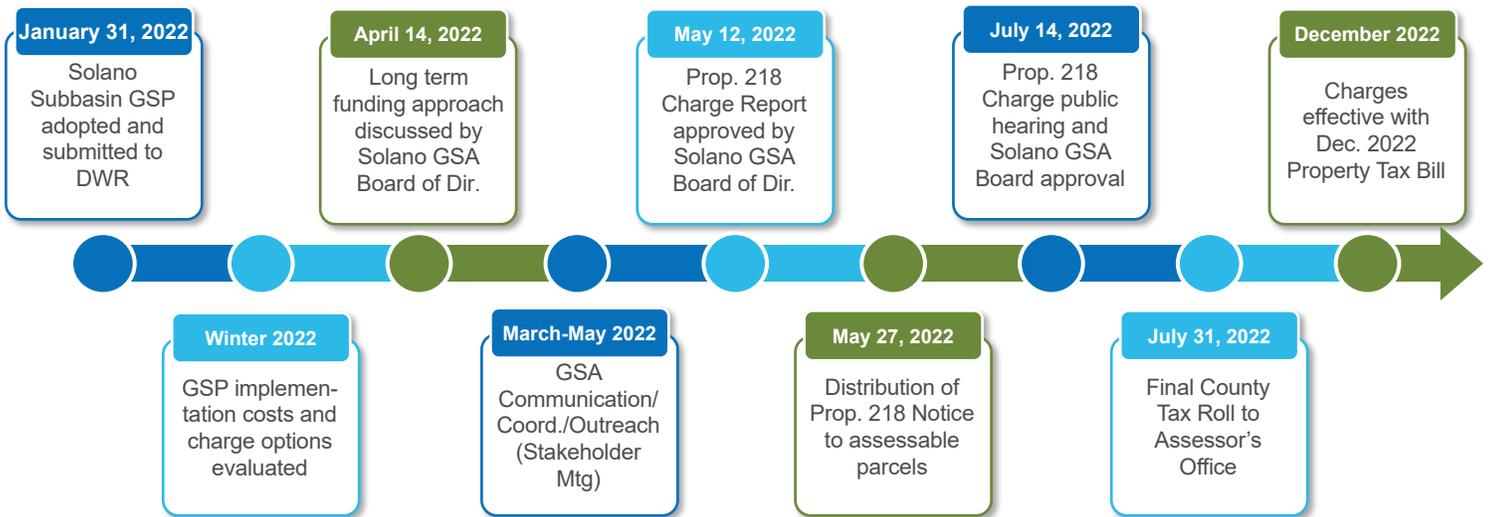
Solano Subbasin GSP Area and Groundwater Sustainability Agencies
 Groundwater Sustainability Plan
 Solano Subbasin

How were GSP Implementation Costs Developed for the Proposed Charges?

Solano GSAs worked together to develop the most efficient manner to implement the GSP through cost sharing and collaboration. The proposed GSP implementation costs reflect lower possible revenue requirements to comply with SGMA and meet Solano Subbasin sustainability objectives.

Contact: clee@scwa2.com | Website: www.solanogsp.com

PROJECT TIMELINE



What Happens if We Fail?

If the local GSAs are unable to implement a plan that meets state requirements, the State Water Resources Control Board may step in to manage the Subbasin with much higher charges. If this intervention occurs, the State could charge up to \$300/well/year for all groundwater extractors and up to \$55/acre-foot of water pumped.

The local GSAs are working hard to avoid State intervention and higher GSP implementation costs.

2023-2027 Solano Subbasin GSP Implementation Summary of State SGMA Requirements



Each GSA will be responsible for collecting their share of the total GSP implementation costs identified in the adopted GSP. The Solano GSA will serve as the fiscal agent on behalf of the GSAs through an MOU to manage the GSP implementation budget and report on the status of GSP implementation activities.

Proposition 218 Information

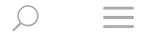
Some of the GSA Boards are considering imposition of a per acre charge in accordance with Water Code Section 10730(c) to cover the administrative and operational costs of GSP implementation and SGMA compliance, which requires compliance with the procedural requirements of Proposition 218. Valid protests received in a timely manner by the GSA from landowners for which the charge would be levied will be counted before adopting the proposed charge. If a majority protest is not received, the GSA may adopt the charge. A majority protest would prevent imposition of the charge. State intervention could occur if local GSAs are unable to implement a plan that meets the state requirements.

The charge will fund GSA administration and SGMA compliance activities related to

GSP implementation. Local and regional projects were included in the GSP to enhance groundwater sustainability and will be supported through other funding sources on an as-needed basis aimed at achieving State mandated sustainability. Funding this effort is critical for maintaining local control over the implementation of sustainable groundwater management actions in the Solano Subbasin. The Solano GSAs are committed to retaining local control over SGMA implementation, where landowner dollars are utilized most efficiently and beneficially.

The charges will be collected with the Solano County tax roll from all parcel owners subject to the charge within the Solano Subbasin boundaries, excluding federal/state/tribal lands. The charges will be based on total groundwater use in each GSA service area. All parcels subject to the charge will receive a Proposition 218 notice before the GSA Board considers approving the charges.

You can use the following Solano Subbasin link (<https://www.solanogsp.com/solano-subbasin/>) to determine where your property is located within the Solano Subbasin along with more information on GSP implementation and the Proposition 218 process.



Upcoming Events

Below is a list of all scheduled events related to the Solano Subbasin GSP.



Solano Subbasin GSP Virtual Town Hall on Implementation and Funding

Tuesday, May 3 from 5:30 pm – 7:00 pm Pacific Time: [CLICK HERE to REGISTER](#)

To view the agenda: [CLICK HERE](#)

Join us on May 3, 2022 from 5:30-7:00 p.m. for a discussion about the approach to implementation charges. We'll also share updates on implementation activities, the recently submitted Annual Report, and well permitting requirements related to the Governor's Executive Order on the California drought.

Join us to learn more and ask questions about groundwater sustainability!

This meeting will be held on Zoom; participants must register in advance. Simultaneous Spanish translation will be provided.

VIRTUAL TOWN HALL

Solano Subbasin Groundwater Sustainability Plan: Implementation and Funding

May 3, 2022

5:30 - 7:00 p.m.

RSVP here: SolanoGSP.com

What's next for the Solano Subbasin Groundwater Sustainability Plan?

Join us on May 3, 2022 from 5:30-7:00 p.m. for a discussion about the approach to implementation charges.

We'll also share updates on implementation activities, the recently submitted Annual Report, and well permitting requirements related to the Governor's Executive Order on the California drought.



APPENDIX G

Solano Subbasin GSA – GSA Long Term Revenue Needs (TM)

Technical Memorandum

Subject: GSP Finance Plan Overview
Prepared by: ERA Economics
Prepared for: Solano Collaborative
Date: March 18, 2022 (Updated April 29, 2022)

Overview

Luhdorff & Scalmanini Consulting Engineers (LSCE) and the Solano Subbasin Collaborative Groundwater Sustainability Agencies (GSAs) engaged ERA Economics (ERA) to review Groundwater Sustainability Plan (GSP) implementation costs, present and analyze alternative options for allocating costs to areas/entities, and develop a preliminary finance and funding plan (“finance plan”) for the Solano Subbasin. The finance plan is based on the information in the Solano Subbasin GSP and feedback provided the Solano Collaborative at a series of meetings held in January and February of 2022. A preliminary technical memorandum (TM) was provided to the Solano Collaborative on March 18, 2022, and this updated TM (dated April 29, 2022) reflects changes based on additional direction from the Collaborative. The study addressed the following:

1. **GSP Costs:** Using the Solano Subbasin GSP, ERA reviewed, categorized, and summarized costs to implement the GSP. ERA flagged data gaps and, in coordination with the Solano Collaborative, updated costs and assumptions.
2. **Revenue Needs:** In coordination with the Solano Collaborative, GSA revenue needs were defined based on the GSP costs. This task included identifying those costs which would be included or excluded from a fee study being developed concurrently by the Solano Collaborative.
3. **Cost Allocation Approach:** ERA developed alternative cost allocation methods to address considerations such as fairness, equity, reasonableness, and costs to implement.
4. **Recommendations:** Based on discussions and feedback with the Solano Collaborative, ERA developed GSP implementation revenue needs and applied a recommended cost allocation method to determine the costs assigned to each entity (GSA), and the example range of fees that would be needed to cover each GSA’s proportional revenue needs.

The Solano Subbasin GSAs are concurrently developing a fee study to implement an assessment to fund GSP implementation. The results of this study will be used to support and inform the fee study process.

Solano Subbasin GSP Development and Implementation Funding

The Solano Subbasin GSP covers 11 GSAs in the Solano Subbasin (5-21.66): City of Vacaville, Sacramento County, Solano Irrigation District, Solano Subbasin, Northern Delta, Reclamation District (RD) 3, RD 317, RD 349, RD 554, RD 556, and RD 2111. The Solano Collaborative is a subset of GSAs, consisting of City of Vacaville, Sacramento County, Solano Irrigation District, Solano, and Northern Delta. The GSP was submitted to the Department of Water Resources (DWR) on January 27, 2022 and posted to the DWR SGMA portal on February 7, 2022.

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 Solano Collaborative.

It is anticipated that 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.

This technical memorandum (TM) describes the anticipated GSP costs, estimated total revenue needs, and how costs are equitably and fairly assigned to Solano Subbasin GSAs.

GSP Costs

GSP costs are split into three aggregate cost categories in the Solano Subbasin GSP. These include GSA-specific administration costs, joint costs to implement the GSP, and costs to develop Project and Management Actions (PMAs) in the GSP:

- **GSA Administration Costs.** Costs incurred by each GSA for administration related to the GSP.
- **GSP Joint Implementation Costs.** Costs incurred by the member GSAs related to the joint implementation of the GSP.
- **PMA Costs.** Costs that are specific to individual PMAs. It is not clear who would pay these costs at this time.

GSA Administration Costs

GSA Administration costs include costs that each individual GSA will incur for implementation of the GSP. GSA Administration costs in the Solano Subbasin were reviewed and inventoried. These costs were estimated by the Solano Collaborative GSAs and reported in Chapter 9 of the GSP.

GSA Administration costs include GSA Administration, GSP Implementation, GSP Updates, Monitoring and Implementation, and Contingency. GSA Administration budget covers day-to-day activities to implement the GSP, such as public outreach, enforcement, legal services, and other tasks. GSP Implementation covers collaboration meetings and internal coordination. GSP Updates covers the GSA-level review of any GSP reports, including the Five-Year GSP Update, GSP Annual Reporting, and interim reports or evaluations. Monitoring and Implementation covers GSA-level monitoring of wells and water use and updating the data management system. Finally, the Contingency adds 10 percent of the estimated budget to cover unexpected costs. These costs, aggregated up to the GSA level and as reported in the GSP, are shown in Table 1 below. Total GSA Administration costs are estimated in the GSP between \$341,430 to \$481,410 per year, or approximately \$1.9 million over the 5-year period. Note that the costs do not include an inflation adjustment.

It was noted that the Northern Delta GSA and a region of smaller GSAs in the southeastern portion of the Solano Subbasin did not report individual GSA Administration costs. These will be reviewed and added prior to fee study development, but are not addressed in this TM.

Table 1: GSA Administration Costs

Annual GSA Administration Costs by GSA	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027
City of Vacaville GSA	\$107,580	\$110,000	\$112,420	\$139,810	\$143,110
Northern Delta GSA	\$0	\$0	\$0	\$0	\$0
Sacramento County GSA	\$17,050	\$17,050	\$17,050	\$17,050	\$53,900
SID GSA	\$78,650	\$78,650	\$78,650	\$78,650	\$140,250
Solano Subbasin GSA	\$138,150	\$138,150	\$133,150	\$133,150	\$144,150
Total GSA Administration Costs	\$341,430	\$343,850	\$341,270	\$368,660	\$481,410

GSP Joint Implementation Costs

GSP Joint Implementation costs include the activities for joint implementation of the GSP by the member GSAs of the Solano Subbasin. Solano Subbasin GSP Joint Implementation costs were reviewed and inventoried based on the data reported in the GSP. These costs were estimated by the Solano Collaborative GSAs and reported in Chapter 9 of the GSP.

GSP Joint Implementation activities include:

- Community Outreach and Education: meetings of the Solano Collaborative and other coordination meetings, website maintenance, newsletters, and other community engagement efforts.
- GSP Reporting: annual reports and 5-year GSP updates, addressing comments from the Department of Water Resources (DWR), and other GSP studies.
- GSP Monitoring and Data Management: well monitoring and maintenance and the implementation and maintenance of a data management system.
- Grant Writing: identifying and applying for federal, state, and private grants to supplement GSP implementation activities.
- Contingency: 10 percent of the estimated budget to cover unexpected costs.

Note that while there appears to be overlap in several of the cost categories of the GSA Administration costs and GSP Implementation costs, the GSA Administration costs are to cover GSA-specific activities, in contrast with joint, subbasin-level GSP Implementation activities. Public Outreach activities, for example, will be different at the GSA-level than the subbasin-level. These are not in fact overlapping costs, but separate line items.

GSP Joint Implementation costs as reported in the GSP are shown in Table 2 below. These costs are between \$405,500 and \$553,000 per year, or approximately \$2.6 million over the 5-year period. Note that the costs do not include an inflation adjustment.

Table 2: GSP Joint Implementation Costs

Annual GSP Joint Implementation Costs	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027
Community Outreach and Education	\$99,500	\$37,500	\$38,000	\$39,000	\$40,000
GSP Reporting and Updates	\$135,500	\$316,000	\$304,500	\$308,000	\$311,000
Monitoring and Well Maintenance	\$101,500	\$80,000	\$82,500	\$85,000	\$87,500
Data Management	\$7,000	\$33,000	\$34,000	\$35,000	\$36,000
Grant Writing	\$25,000	\$26,000	\$26,500	\$27,500	\$28,000
Contingency	\$37,000	\$49,000	\$48,500	\$49,500	\$50,500
Total GSP Joint Implementation Costs	\$405,500	\$541,500	\$534,000	\$544,000	\$553,000

PMA Costs

PMA costs refer to the development and implementation of PMAs that achieve the sustainability goals for the Subbasin. Depending on the PMA, these may include a combination of capital, operations, maintenance, and repair costs for each PMA.

Solano Subbasin GSP identified a range of PMAs to achieve its sustainability goals. Solano Subbasin PMAs were reviewed and inventoried. These costs were estimated by the Solano Collaborative GSAs and reported in Chapter 8 of the GSP. Costs for PMAs were not fully defined at the time of GSP development. Information available in the GSPs is summarized here and data gaps are identified.

The GSP identified three types of Projects and Management Actions (PMAs):

- Ongoing PMAs.
- PMAs Developed for Implementation.
- Potential PMAs.

Table 3 summarizes the PMAs by type and description, as reported in the GSP. Cost estimates were provided for the PMAs Developed for Implementation only.

Table 3: Summary of Projects and Management Actions

PMA Type	Name	Description
Ongoing PMAs	Municipal & Industrial Water Use Efficiency Outreach & Implementation	Develop outreach materials and incentives for municipal and industrial water users to increase water use efficiency.
PMAs Developed for Implementation	City of Vacaville Recycled Water	Develop City’s Recycled Water Program as recommended in the 2020 Recycled Water Master Plan Feasibility Study, including construction and installation of recycled water treatment, storage and conveyance facilities; development of a recycled water use ordinance; updating permits; and identifying customers and executing supply contracts.
	Westside Streams Stormwater Capture Project	Develop an implementation schedule for potential projects in the Northwest Focus Area to enhance groundwater recharge and support local groundwater sustainability.
	Rainfall Managed Aquifer Recharge Demonstration Project	Evaluate the use of specific managed aquifer recharge activities on local farms to generate multiple benefits for groundwater sustainability and stormwater management.
Potential PMAs	Other Groundwater Recharge Opportunities	Several conceptual recharge projects have been identified along Ulatis Creek to support ongoing groundwater sustainability in the Solano Subbasin. The Nature Conservancy has provided GSAs with guidelines to implement on-farm, multi-benefit groundwater recharge efforts that would also be applicable in the Solano Subbasin.
	Grower Education Related to On-Farm Practices for Sustainable Groundwater Management	Use of Solano Agricultural Scenario Planning System (SASPS), a web-based application that GSAs and other local agencies can use to design voluntary programs to engage agricultural producers in on-farm sustainable groundwater management projects.
	Demand Management	Develop a program that would incentivize voluntary participants to reduce water consumption.
	Groundwater Trading Institution	Monitor Solano Subbasin Conditions and consider a groundwater trading market to increase flexibility (options) to respond to potential demand management programs.
	Education and Collaboration	The Solano Resource Conservation District (SRCD), TFT, Local Government Commission (LGC), and RD 2068 all provide groundwater and water conservation education to classrooms and growers within the Solano Subbasin.

The Municipal and Industrial Water Use Efficiency Outreach and Implementation Project by Solano County Water Agency develops outreach materials and incentives for municipal and

industrial water users to increase water use efficiency. This Ongoing PMA will continue to be funded through its current source and is excluded from the GSP finance plan.

The City of Vacaville Recycled Water Project, as conceived of and recommended in its 2020 Recycled Water Master Plan Feasibility Study, includes the construction and installation of recycled water treatment and storage and conveyance facilities. It further includes developing a recycled water use ordinance, updating permits, identifying customers, and executing supply contracts. The capital costs for this project are approximately \$40 million, with annual operations and maintenance costs of approximately \$396,000. Funding for this PMA is identified in the City of Vacaville's master plan and is excluded from the GSP finance plan.

The Westside Streams Stormwater Capture Project would enhance groundwater recharge and support local groundwater sustainability by diverting winter and spring storm flows onto agriculture fields. The GSP described that this project may be implemented using existing or new infrastructure. Should new infrastructure be required, such as diversion and conveyance infrastructure, it would require \$6.7 million in capital and indirect costs. Costs for operation and maintenance of the project, however, are not clear at this time. The GSP describes costs per new and established site, but there is no indication of how many sites per year would be included, and what proportion of those sites would be established and new. This PMA does not have an identified funding source. At the direction of the Solano Collaborative, it is excluded from the GSP finance plan.

The RainMAR Demonstration Project would develop an on-farm managed aquifer recharge project that would both maximize retention of precipitation and reduce flood and storm water management concerns. The GSP assumes \$100,000 annually for direct costs. The GSP also projects an additional 20 percent would be needed for indirect costs such as outreach, recruitment, and monitoring. This PMA does not have an identified funding source. At the direction of the Solano Collaborative, it is excluded from the GSP finance plan.

Finally, the Potential PMAs will be studied in more detail if and when they are needed; they are therefore also excluded from the finance plan. Based on discussions with the Solano Collaborative, it was further decided that any PMAs in need of financing or a funding source would be covered under a separate fee study and therefore have been excluded from this GSP finance plan.

Solano Subbasin GSP Revenue Needs

The Solano Subbasin GSP implementation revenue needs are based on the estimated GSP costs. As described earlier, the ERA and LSCE consultant team held a series of meetings with the Solano Collaborative GSAs to present and receive feedback on the estimated GSA costs.

Outcomes included:

- GSA administration and legal costs reflect the GSA's best estimates of implementation costs.
- The Solano Subbasin GSA administration budget includes approximately \$75,000 in costs that the Solano Subbasin GSA would incur because of its role as the lead for GSP development. These are viewed as GSP Joint Implementation costs.
- Northern Delta GSA costs may be added to the estimated implementation costs in the future.
- PMA costs will be excluded from the initial revenue needs assessment because these may be developed and funded by individual GSAs under separate funding processes.

The finance plan described in this TM includes GSA Administration and GSP Joint Implementation costs. Revenue needs are developed to account for expected general cost inflation and presented over a 5-year planning horizon, the statutory limit for projected fees under Proposition 218. It is anticipated that the GSAs will review and revise revenue needs as the GSAs move forward with GSP implementation.

Table 4 summarizes revenue needs for fiscal year ending (FYE) 2023, showing additional detail for cost categories within the GSA Administration and GSP Joint Implementation costs. Actual costs for particular sub-categories may be more or less than projected, but these reflect the best current estimates available from the Collaborative. The respective GSAs continue to have the authority to shift funding between sub-categories as needed, and as described earlier, to offset additional costs within the major categories with grants or other funding that may become available to the GSAs. Initial revenue needs are approximately \$341,430 in administration costs and \$405,500 in joint implementation costs (totaling \$746,930).

Table 4: Itemized GSP Revenue Needs for FYE 2023

GSA Administration Costs	
GSA Administration	\$75,900
GSP Implementation	\$84,600
GSP Updates	\$25,300
Monitoring and Implementation	\$125,500
Contingency	\$30,130
GSA Administration Subtotal	\$341,430
GSP Joint Implementation Costs	
Community Outreach and Education	\$99,500
GSP Reporting and Updates	\$135,500
Monitoring and Well Maintenance	\$101,500
Data Management	\$7,000
Grant Writing	\$25,000
Contingency	\$37,000
GSP Joint Implementation Subtotal	\$405,500

Adjusting for Inflation

GSP Implementation costs in the GSP were presented in nominal dollars. Since 2017, the annual average inflation based on the CPI has ranged between 1 and 2.5 percent. The values from the GSP (which were developed in 2020) were input as nominal values, and an inflation adjustment was applied for all future years. A March 2022 forecast of inflation by the Federal Reserve Board of Cleveland indicated an average annual rate of about 1.9 percent over the next 10 years. Its short-term (1-year-ahead) estimate is around 3.0 percent with recent inflationary pressure.¹ The most recent CPI data indicate higher inflation in the last few months, though it is unclear how much is long-term versus transitory.² An inflation rate of 4 percent was applied to all cost categories estimate revenue needs over the 5-year planning period.

Revenue needs are shown for fiscal years ending (FYE) 2023 through 2027 (5-year period). GSP Joint Implementation costs range from approximately \$406,000 to \$647,000 over the next 5-year period. GSA Administration costs range from approximately \$341,000 to \$563,000 over the next 5-year period. With inflation, these total approximately \$747,000 and \$1.210 million. Figure 1 illustrates annual total revenue needs (excluding any additional costs for Northern Delta GSA).

1 <https://www.clevelandfed.org/our-research/indicators-and-data/inflation-expectations.aspx>. As of end of 2021.

2 Federal Reserve Board of St. Louis. 2021. Consumer Price Index for All Urban Consumers: All Items in U.S. City Average (CPIAUCSL). From: <https://fred.stlouisfed.org/series/CPIAUCSL>

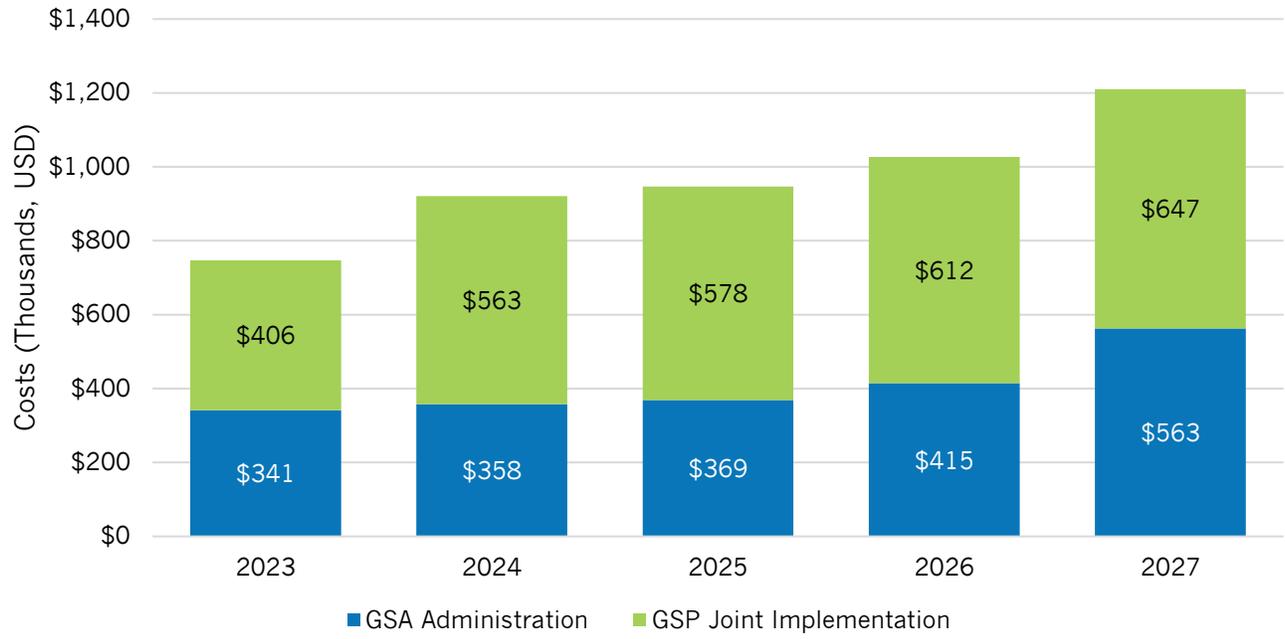


Figure 1: Total GSP Implementation Costs, Adjusted for Inflation, FYE 2023-2027

Cost Allocation Approaches

The Collaborative was presented with, evaluated, and discussed a range of cost allocation approaches. These included simpler options, such as combining GSA-level administration and its share of GSP Joint Implementation costs and uniformly distributing costs per acre in each GSA, and more complex options, such as distributing costs on the basis of annual groundwater pumping. The Collaborative expressed preferences for cost allocation approaches that were fair and equitable, as well as reasonable and straightforward (not costly) to implement. All of the options considered were cost-based for consistency with standard Proposition 218 requirements.

The Collaborative originally decided that legal costs for GSP implementation are specific to each GSA, and are therefore allocated to the respective GSA. The other administration costs, including other GSA administration and GSP implementation, are joint costs that will be incurred to meet the requirement of SGMA and implement the GSP. This approach was later revised (as reflected in the April 29, 2022 update to this TM), in which the Collaborative proposed that GSAs would be responsible for the sum total of their own GSA administration costs, and their proportional share of the GSP Joint Implementation costs. One exception to this approach was that \$75,000 of the Solano Subbasin GSA Administration budget would be allocated to the Joint GSP Implementation cost category, because those are costs borne by the Solano Subbasin GSA for the benefit of the other Subbasin GSAs.

The following options were presented and discussed to allocate the joint GSP Implementation costs:

- Uniform. A uniform cost allocation would combine all costs and evenly distribute them across the subbasin on all irrigated and non-irrigated acres on a per-acre basis. In a uniform approach, a flat fee per acre would be charged across all GSAs in the subbasin.
- Uniform on groundwater-irrigated lands. This approach is slightly modified from the uniform option, only assessing parcels that pump groundwater, but otherwise evenly allocating costs across groundwater-irrigated acres. This method would require parcel-level knowledge about whether it used groundwater. It was excluded as an option because this information is not currently available, and would be expensive to quickly develop.
- Proportional based on gross groundwater pumping. A gross groundwater pumping fee would charge per unit (acre-foot) of groundwater pumped. In this approach, a flat fee per acre-foot of pumping would be charged across all GSAs in the subbasin. This method would require well metering or other acceptable estimation of groundwater pumped. It was excluded as an option because this information is not currently available and would be expensive to quickly develop by installing meters or implementing a water use remote sensing system.
- Proportional based on net groundwater pumping. A net groundwater pumping fee would be charged per unit (acre-foot) of groundwater consumptively used: i.e., the groundwater

pumped less losses for return flow or percolation. In this approach, a flat fee per acre-foot of consumptive use would be charged across all GSAs in the subbasin. This method would require remote sensing or other methods to track water use. It was excluded as an option because this information is not currently available and would be expensive to quickly develop.

- Proportional based on GSA-level gross groundwater use. This approach would split costs by the share of GSA-level pumping in the subbasin, and then evenly distribute those costs per acre in each GSA. Under this approach, a flat fee per acre would be charged in each GSA, though the per-acre fee would vary by GSA.

The Collaborative further discussed a variety of options to assess rates, such as through a uniform per-acre fee in the subbasin versus fees that would charge per amount of groundwater pumped. The Collaborative recognized that several cost allocation methods, and revenue recovery methods, would require additional costs for monitoring and enforcement, such as remote sensing or metering, and technical support.

Based on it being fair and equitable, the Collaborative proposed that GSP Joint Implementation costs should be allocated in proportion to the amount of groundwater pumped in each GSA. The Solano Subbasin GSA pumps the largest share of groundwater, at approximately 86 percent, and as a result, the Solano Subbasin GSA would pay the largest share of the GSP Joint Implementation costs. The Collaborative also discussed options for generating revenues. In general, a flat per-acre fee in each GSA was considered straightforward and cost-effective to implement. However, each GSA has its own authorities and may decide to contribute its allocated share of GSP costs using its own revenue recovery method. Therefore, the cost allocation approach assigns responsibility for GSP costs to each GSA, but each GSA may not elect to impose a per-acre charge to recover revenues. For illustrative purposes in this study, an even per-acre charge is assumed in each GSA.

Cost Allocation Application

As described above, the Collaborative agreed that the fairest and most equitable way to allocate GSP Joint Implementation costs to the various GSAs would be in proportion to aggregate groundwater pumping. The Collaborative further proposed that each GSA would be responsible for its own GSA Administration budget, with one exception: the Collaborative reallocated \$75,000 of the Solano Subbasin GSA’s GSA Administration costs (in the subcategories GSA Administration and GSP Implementation) to GSP Joint Implementation costs, recognizing the shared benefit that Solano Subbasin GSA’s staff provide to the subbasin as a whole.

Each GSA could allocate costs per acre or use some other basis to allocate and recover costs within its area. However, for illustration purposes as an example exercise, the costs within each GSA are expressed both in total and per acre within the GSA. This would avoid high monitoring and enforcement costs that would be required to meter or otherwise track net or gross groundwater use.

Using the data available in the GSP, the GSA-level groundwater pumping share and its total acreage are reported in Table 5. Note that Sacramento/Delta GSAs include Northern Delta, Sacramento County, RD 3, RD 349, RD 554, RD 556, and RD 2111. The groundwater budget is the result of a model developed for the GSP, which projects water and land use over the 51-year period spanning 2022-2072. The acreage is the total, as opposed to the irrigated, acres in each GSA.

Table 5: GSA-Level Pumping and Acreage

GSA	Groundwater Pumping (AF)	Share of Subbasin Groundwater Pumping	Acreage (ac)	Share of Subbasin Acreage
Solano Subbasin GSA	140,000	86%	211,000	60%
Solano Irrigation District GSA	7,400	4.5%	44,000	12%
City of Vacaville GSA	10,000	6.1%	14,000	4%
Sacramento/Delta GSAs	5,300	3.2%	84,000	24%

Source: Solano Subbasin GSP Current Water Budget Summaries (pgs: 5-78, 5-86, 5-94, and 5-103 of the Main Body GSP)

The total revenue needs, which include GSP Joint Implementation costs and GSA Administration costs, are broken down by GSA and summarized in Figure 2 and Table 6 below. Note that: 1) costs are not indexed for inflation; 2) the revenue needs do not include costs for Northern Delta GSA, as none were provided in the GSA or during the finance plan study; and 3) that the results are for illustrative purposes only and that the budget levels, acreage, and groundwater budget will need to be determined in detail as part of the fee study.

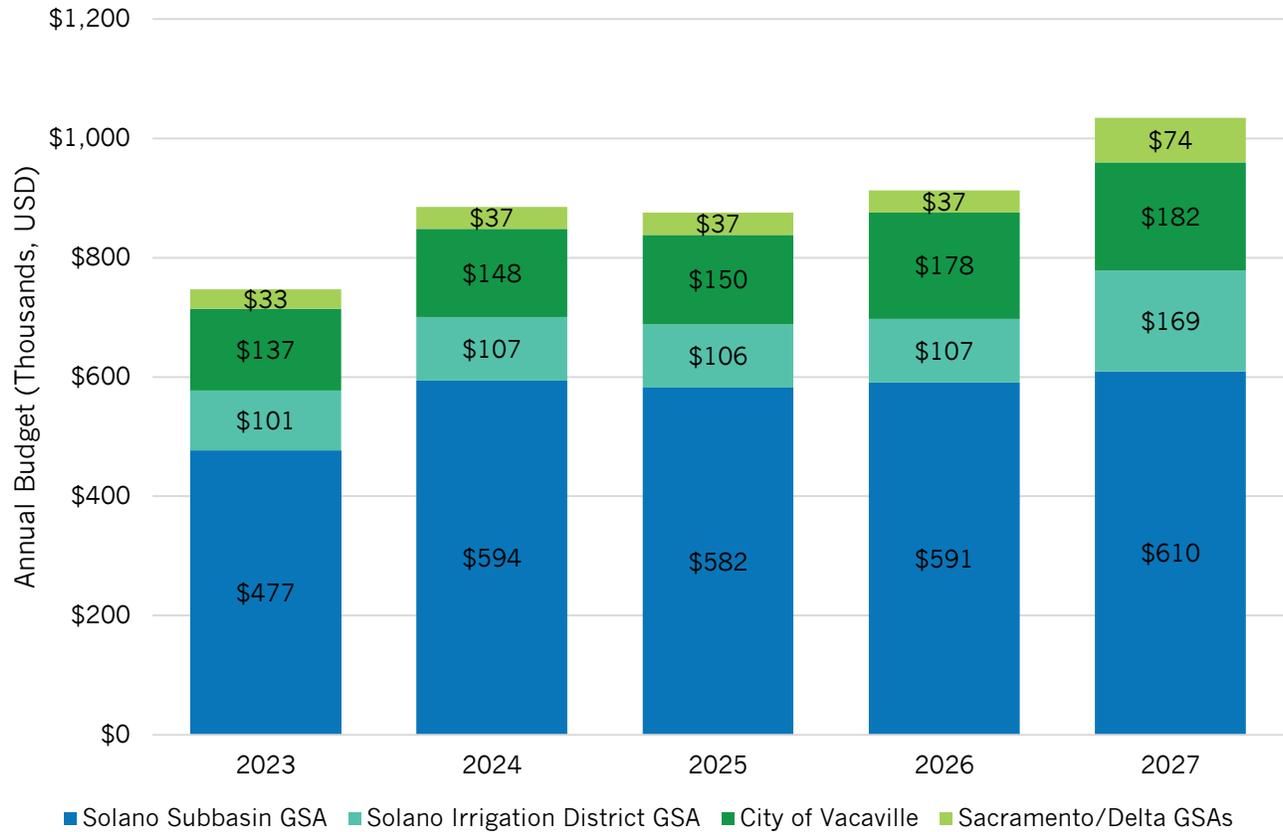


Figure 2: Total Revenue Needs, FYE 2023-2027

Table 6: Total Allocated Costs by GSA

GSA	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027
Solano Subbasin GSA	\$476,610	\$593,636	\$582,182	\$590,787	\$609,531
GSA Administration	\$63,150	\$63,150	\$58,150	\$58,150	\$69,150
GSP Joint Implementation (86%)	\$413,460	\$530,486	\$524,032	\$532,637	\$540,381
Solano Irrigation District GSA	\$100,504	\$106,690	\$106,349	\$106,804	\$168,813
GSA Administration	\$78,650	\$78,650	\$78,650	\$78,650	\$140,250
GSP Joint Implementation (4.5%)	\$21,854	\$28,040	\$27,699	\$28,154	\$28,563
City of Vacaville GSA	\$137,113	\$147,892	\$149,851	\$177,855	\$181,709
GSA Administration	\$107,580	\$110,000	\$112,420	\$139,810	\$143,110
GSP Joint Implementation (6.1%)	\$29,533	\$37,892	\$37,431	\$38,045	\$38,599
Sacramento/Delta GSAs	\$32,702	\$37,133	\$36,888	\$37,214	\$74,357
GSA Administration	\$17,050	\$17,050	\$17,050	\$17,050	\$53,900
GSP Joint Implementation (3.2%)	\$15,652	\$20,083	\$19,838	\$20,164	\$20,457

The example below in Table 7 uses the cost allocation approach based on aggregate groundwater pumping proportion as described above, allocating GSA Administration costs fully to each respective GSA and sharing GSP Joint Implementation costs in proportion to GSA-level groundwater pumping. The assessments are then divided by the reported acres in the GSP. Note that these numbers are draft and preliminary using aggregate GSP data, and would need to be refined as part of the fee study.

Table 7: Example Per-Acre Assessments Based on Proposed Cost Allocation Approach

GSA	FYE 2023	FYE 2024	FYE 2025	FYE 2026	FYE 2027
Solano Subbasin GSA	\$2.26	\$2.81	\$2.76	\$2.80	\$2.89
Solano Irrigation District GSA	\$2.28	\$2.42	\$2.42	\$2.43	\$3.84
City of Vacaville GSA	\$9.79	\$10.56	\$10.70	\$12.70	\$12.98
Sacramento/Delta GSAs	\$0.39	\$0.44	\$0.44	\$0.44	\$0.89

Summary

The Solano Subbasin GSAs are developing a fee study that will generate funds to cover administration and implementation costs for its GSP. This finance plan supports and informs that process. It was informed by feedback from the Solano Collaborative over a period of four months.

The initial finance plan approach and overview was presented at the Solano Collaborative Roundtable Meeting on January 4, 2022, which included a description of the tasks, a general description of the cost summary, conceptual cost allocation approaches, and the integration with the fee study consultant (LSCE).

An update of the finance plan was presented at the Solano Collaborative Roundtable Meeting on February 4, 2022. This provided the Collaborative with the opportunity to review GSP-related costs and flag data gaps, such as missing GSA Administration costs for Northern Delta GSA. The Collaborative also provided feedback on responsibility for different cost categories, and it was decided that Projects and Management Actions would be excluded from this finance plan. The Collaborative discussed different cost allocation approaches and decided that the data requirements to charge per-acre-foot assessments were not cost-effective, and instead favored per-acre assessments. Examples from other GSAs were presented, as well as preliminary numbers for different cost allocation approaches. Following that meeting, the Collaborative reviewed estimated GSP costs and provided feedback and refinements to ERA on those costs.

Between February and April of 2022, the Collaborative had the opportunity to review GSP-related costs and revenue needs, further discuss responsibility for costs and allocation methods, and see example per-acre assessments. It was agreed that costs should be indexed for inflation, to be set at 4 percent per annum. The Collaborative further agreed that the most fair, equitable, and cost-based way to allocate GSP Implementation costs to the various GSAs would be in proportion to aggregate groundwater pumping in the Subbasin as reported in the GSP. Each GSA may adopt its own approach to recover revenues, but a flat per-acre charge was generally viewed as fair and equitable. Such an approach avoids high monitoring and enforcement costs that would result in greater fees for landowners, and it is easily implemented, which reduces GSA enforcement costs.

Legal and administration costs were adjusted per the direction of each GSA. It was noted that the Northern Delta GSA did not report individual GSA Administration costs. These will be reviewed and added prior to fee study implementation.

An update of the finance plan was presented at the Solano Collaborative Roundtable Meeting on March 1, 2022, which was presented along with the fee study consultant (LSCE). The update reflected the decisions and recommendations made in the February 17th meeting and most updated numbers for the cost summary, revenue needs, and per-acre assessments by GSA. Recommendations included the agreed upon cost allocation approach and updated costs and revenue needs, which were then applied to illustrate the draft range of expected assessments by

GSA. An initial TM dated March 18, 2022 was prepared to reflect the direction and feedback from the Collaborative.

After the initial finance plan TM was prepared, the Collaborative met and proposed that each GSA should fund its own GSA Administration costs, with the exception of reallocating \$75,000 of Solano Subbasin GSA's GSA Administration costs to the GSP Implementation costs, which would be jointly funded by the GSAs. The finance plan TM was updated on April 29, 2022 to reflect the new direction of the cost allocation approach.

In summary, using the agreed cost allocation approach and GSP revenue needs, over the 5-year period spanning FYE 2023 to 2027, per-acre assessments range from \$0.39 to \$12.98 per acre per year, depending on GSA and year. This would raise approximately \$747,000 to \$1.03 million per year (without adjusting for inflation). The fee study may consider options to smooth costs over the GSP implementation period.