



Legislation Details (With Text)

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Title: Groundwater Sustainability Plans

Sponsors: Sonoma County Water Agency, Permit and Resource Management

Indexes:

Attachments: 1. Summary Report, 2. Resolution -Petaluma Vly, 3. Resolution -Santa Rosa Plain, 4. Resolution - Sonoma Vly, 5. Exec Summary-Petaluma Vly, 6. Exec Summary-Santa Rosa Plain, 7. Exec Summary-Sonoma Vly, 8. PowerPoint

Date	Ver.	Action By	Action	Result
11/16/2021	1	Board of Supervisors	Approved as recommended	Pass

To: Board of Supervisors and Board of Directors of the Sonoma County Water Agency

Department or Agency Name(s): Sonoma County Water Agency, Permit and Resource Management

Staff Name and Phone Number: Jay Jasperse 547-1959 Ann DuBay 524-8378; Marcus Trotta 547-1978; Robert Pennington 565-1352; John Mack 565-1233

Vote Requirement: Majority

Supervisory District(s): Countywide

Title:

Groundwater Sustainability Plans

Recommended Action:

Resolutions supporting Groundwater Sustainability Plans

- A) Adopt a Resolution Supporting the adoption of the Petaluma Valley Groundwater Basin Groundwater Sustainability Plan.
- B) Adopt a Resolution Supporting the adoption of the Santa Rosa Plain Groundwater Subbasin Groundwater Sustainability Plan.
- C) Adopt a Resolution Supporting the adoption of the Sonoma Valley Groundwater Subbasin Groundwater Sustainability Plan.

Executive Summary:

In compliance with the Sustainable Groundwater Management Act (Act), three Groundwater Sustainability Agencies (Groundwater Sustainability Agencies) were created in June 2017 in Petaluma Valley, Santa Rosa Plain and Sonoma Valley. As signatories to the Joint Powers Authority agreements that created the Groundwater Sustainability Agencies, a representative from the Board of Supervisors (County) and a representative from the Sonoma County Water Agency (Sonoma Water) Board of Directors serve on each Groundwater Sustainability Agency (GSA) Board. The County and Sonoma Water have provided financial and staff resources to support the Groundwater Sustainability Agencies and the development of the state-mandated Groundwater Sustainability Plans (Plans).

The Plans are required by statute to be submitted to the California Department of Water Resources by January 31, 2022. The Draft Plans were developed over the past several years with significant input from and coordination with stakeholder advisory committees and boards for each of the GSAs. Draft Plans were available for public review and comment during October 2021. Staff is responding to and incorporating comments, where applicable, into the final Plans to be considered by the GSA Boards in early December.

This item seeks support of the County and Sonoma Water for the Groundwater Sustainability Plans for the Petaluma Valley Basin, the Santa Rosa Plain Subbasin and the Sonoma Valley Subbasin.

Discussion:

HISTORY OF ITEM/BACKGROUND

On April 25, 2017, the Sonoma County Board of Supervisors and Sonoma Water Board of Directors authorized Joint Powers Authority agreements for the formation of the Sonoma Valley, Petaluma Valley and Santa Rosa Plain Groundwater Sustainability Agencies. Staff from the eligible agencies, as defined by the Act, cooperated to develop a governance structure for these agencies. Each of the three basins have a separate Groundwater Sustainability Agency with a board made up of elected or appointed board members from the eligible agencies, including one representative of the County and one representative of Sonoma Water.

The GSAs are tasked with assessing the conditions in their basins and adopting locally-based Groundwater Sustainability Plans (Plans) by January 31, 2022. The Groundwater Sustainability Agencies began working on the Plans in 2018. The Act and subsequent regulations require the Plans to include specific information, as follows:

- Descriptions of the plan area and the basin's geology, hydrogeology, water sources, aquifers, aquitards;
- Locally defined sustainable management criteria, based on six sustainability indicators (chronic lowering of groundwater levels, reduction in groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletion of interconnected surface water);
- A monitoring plan;
- Projects and management actions needed to maintain or achieve groundwater sustainability by 2042; and
- An implementation plan.

GROUNDWATER SUSTAINABILITY

Groundwater sustainability is determined by specific metrics referred to as Sustainable Management Criteria for each of the following sustainability Indicators: chronic lowering of groundwater levels; decline of groundwater storage, water quality degradation, land subsidence, seawater intrusion, and depletion of interconnected surface water. Each GSA defines sustainability for these indicators and must achieve sustainability within 20 years (by 2042) and maintain sustainability to at least 2072. Compared to the critically over-drafted groundwater basins in the Central and San Joaquin valleys, the three Sonoma County basins are in relatively good shape - but still face challenges. There are gaps in data in all three basins, particularly regarding the relationship between groundwater pumping and the depletion of connected creeks and streams. In Petaluma Valley and Sonoma Valley data is poor at the southern ends of the basins, where pumping of groundwater could lead to seawater intrusion. More complete information is available on groundwater levels, although gaps exist in specific areas in all basins, particularly near the basin borders.

Based on the existing information, the Plans find that groundwater conditions in Petaluma Valley are generally sustainable and will continue to be sustainable; in Santa Rosa are currently sustainable, but will become

unsustainable in the future without projects and management actions; and in Sonoma Valley are unsustainable now and into the future in the deep aquifer unless projects and management actions are implemented.

Conditions are summarized below and described in greater detail in the attached executive summaries.

Petaluma Valley Basin: The Plan finds that the Petaluma Valley groundwater basin is generally sustainable, although relative to the other basins, this basin has the least robust dataset regarding groundwater conditions. Consequently, the initial five-year implementation plan focuses on filling data gaps and adding necessary monitoring programs. While data is limited, groundwater levels and groundwater storage appear to be stable. The data on seawater intrusion and depletion of interconnected surface water is very limited, but there is currently no evidence of problems. There is also no evidence that land subsidence due to groundwater pumping is occurring and, while some areas have experienced groundwater quality issues, overall groundwater quality is acceptable.

Santa Rosa Plain Subbasin: The Plan finds that the Santa Rosa Plain groundwater subbasin is generally sustainable, but will need projects and management actions to maintain sustainability through 2070. Groundwater levels in both the shallow and deep aquifers and groundwater storage are currently generally stable but groundwater levels in the deep aquifer are projected to decline in the future during extended periods of dry conditions, and would reach undesirable results unless action is taken. Groundwater storage is also declining by about 2,100 acre feet annually. The Plan states that projects and management actions such as groundwater banking and increased water use efficiency and conservation measures will be necessary to avoid undesirable results in the future. The data on depletion of interconnected surface water is very limited. There is no evidence that land subsidence due to groundwater pumping is occurring and, while some areas have experienced groundwater quality issues, overall groundwater quality is acceptable. Because the subbasin is landlocked, seawater intrusion is not a sustainability indicator in the Santa Rosa Plain.

Sonoma Valley Subbasin: The Plan finds that groundwater levels are stable in the majority of wells in the shallow aquifer of the Sonoma Valley groundwater subbasin. There are two persistent groundwater pumping depressions in the deep aquifer system in southern Sonoma Valley, southeast of the City of Sonoma and southwest of El Verano. Declining groundwater levels have persisted and expanded over several years in some portions of these areas. Groundwater storage is declining by about 900 acre feet annually. Without projects and management actions, groundwater levels will continue to decline as will storage losses and undesirable results would occur. Consequently, projects and management actions (e.g., groundwater banking, recycled water, water use efficiency) will be necessary to ensure sustainable groundwater conditions and compliance with the Act. The data on seawater intrusion and the depletion of interconnected surface water is very limited. Land subsidence due to groundwater pumping is not occurring and, while some areas have experienced groundwater quality issues, overall groundwater quality is acceptable.

IMPLEMENTATION OF THE PLANS

All three Plans focus on filling data gaps so better information will be available on basin conditions moving forward, particularly regarding the relationship between groundwater pumping and interconnected surface water. In addition, the Plans include regular monitoring, annual reporting, and a five-year Plan update, as required by the Act.

In addition, each of the Plans propose that the GSAs provide well owners with the tools and education needed

to voluntarily reduce groundwater use through indoor and outdoor water conservation programs and education on grey water use and rainwater capture. In addition, all three Plans recommend working with the County and the other Groundwater Sustainability Agencies on policy options, including possible changes to well permitting and requirements for new wells.

In Petaluma Valley, a high-level budget for the first five years of Plan implementation (including operations, outreach, monitoring, reporting, filling data gaps and planning and implementing projects) is estimated to cost about \$1.1 million annually. These costs do not include capital projects such as recycled water projects that the City of Petaluma is considering as part of its system expansion.

In Santa Rosa Plain, additional projects and management actions include stormwater capture and recharge near streams, and aquifer storage and recovery. Aquifer storage and recovery (also known as groundwater banking) entails using dedicated groundwater wells in reverse during the rainy season to store treated Russian River water when it is plentiful. A feasibility study found that even during drought years, there are periods when Russian River flows are high enough to store water in aquifers for use during the summer, in droughts, or during emergencies. The current Santa Rosa Plain Drought Resiliency Project, partially funded by the County, includes developing aquifer storage and recovery for at least one existing Sonoma Water production well. A high-level budget estimates that the first five years of Plan implementation (including operations, outreach, monitoring, reporting, filling data gaps and planning and implementing non-capital water use efficiency projects) will cost about \$1.1 million annually. This estimated cost does not include capital projects such as recycled water or groundwater banking.

In Sonoma Valley, additional projects and management actions include expansion of the Sonoma Valley County Sanitation District's recycled water program to offset groundwater pumping used for agricultural irrigation; stormwater capture and recharge near streams; and aquifer storage and recovery at five locations in the subbasin. A high-level budget estimates that the first five years of Plan implementation will cost about \$1.2 million annually. Additionally, Plan implementation includes about \$8.6 million in capital costs in the first five years.

FUNDING

Petaluma Valley and Sonoma Valley Groundwater Sustainability Agencies are currently funded through contributions by member agencies, including the County and Sonoma Water. The funding agreements end on June 30, 2022. Sonoma Water's annual contribution to each Groundwater Sustainability Agency is currently up to \$125,000. In fiscal years 2017-18 and 2018-19, Sonoma Water contributed \$143,333 to Petaluma Valley Groundwater Sustainability Agency. The County's contribution varies, but ranges between \$25,000 and \$65,000 annually.

Santa Rosa Plain Groundwater Sustainability Agency is funded by a groundwater user fee based on the actual or estimated amount of groundwater pumped. The fee is paid by the cities of Santa Rosa, Rohnert Park, Cotati, Sebastopol, the Town of Windsor and Sonoma Water. While the fee is applicable to all other groundwater users in the basin, in May 2019, the County and Sonoma Water Boards approved annual contributions to the Santa Rosa Plain Groundwater Sustainability Agency of \$200,000 from the County and up to \$40,000 from Sonoma Water to offset the fees that would be paid by all non-municipal groundwater users in the basin. The County and Sonoma Water funding contributions to Santa Rosa Plain Groundwater Sustainability Agency end on June 30, 2022.

The Groundwater Sustainability Agencies have each received approximately \$2.2 million in grant funds and technical support from California Department of Water Resources (DWR) to offset the costs of Plan development and the installation of shallow and multi-level monitoring wells. It is anticipated that the Groundwater Sustainability Agencies will apply for grant funding for Plan implementation, particularly to cover the costs of projects and management actions. In addition, in October 2021, the Groundwater Sustainability Agencies engaged a fee consultant to conduct studies of and to make recommendations for funding options moving forward.

PLAN OUTREACH AND FEEDBACK

Stakeholder input was a key component of the development of the Plans. Advisory Committee volunteers spent nearly 1,000 hours in each basin considering, discussing and reviewing Plan components and drafts. All sections of the Plans were released at least one time for comment by the Groundwater Sustainability Agency Boards, Advisory Committees and member agencies. Many of the sections were reviewed and revised multiple times. During the Plan development period, multiple community meetings and workshops were held in each basin to educate and receive feedback from stakeholders. In addition, all Board and Advisory Committee meetings and fieldtrips were open to the public and held in compliance with the Ralph E. Brown Act.

On October 1, 2021, the full Draft Plans were released for public review. During the 30-day review period, a community meeting was held in each groundwater basin and the Groundwater Sustainability Agency Boards met and received public comments.

NEXT STEPS

The comments received during the public review period are being considered in November, and the Plans will be revised to reflect these comments as appropriate. The Groundwater Sustainability Agency Boards will consider adoption of the Final Plans in early December. If approved by the Boards, the Plans will be submitted to DWR in December and January (the submission process is detailed and takes several days). Within 20 days of Plan submission, DWR will open a 75-day review and public comment period.

Both the County, through its well permitting program and the General Plan, and Sonoma Water, through its involvement in voluntary groundwater management, have actively supported sustainable groundwater resources. Members of the County Board and the Sonoma Water Board have served on and chaired the Groundwater Sustainability Agency boards. In addition, the County and Sonoma Water have been actively engaged in the development of the Plans through funding and staff resources.

For these reasons, staff recommends that the County Board and Sonoma Water Board of Directors support the Plans through adoption of the attached resolutions.

Strategic Plan:

County Strategic Plan:

The Groundwater Sustainability Plans will benefit the community by increasing water supply reliability, minimizing adverse impacts to groundwater and enhancing local management of groundwater resources, in the face of climate change. The Plans include action items to align County groundwater policies contained in the General Plan with the Groundwater Sustainability Plans.

This item directly supports the County's Five-year Strategic Plan and is aligned with the following pillar, goal,

and objective.

Pillar: Climate Action and Resiliency

Goal: Goal 5: Support, fund, and expand flood protection.

Objective: Objective 1: By 2025, update the County General Plan and other county/special district planning documents to incorporate policy language and identify areas within the County that have the potential to maximize carbon sequestration and provide opportunities

Sonoma Water Strategic Plan Alignment: Water Supply and Transmission System, Goal 1: Protect drinking water supply and promote water-use efficiency.

Strategy 3: Support science-based management of groundwater and surface water resources.

By supporting the Groundwater Sustainability Plans, this item helps ensure a more resilient drinking water supply.

Prior Board Actions:

04/06/2021: Authorized the General Manager of Sonoma Water to amend agreements Sustainability Agencies to provide technical, outreach, and grant-writing services, and to negotiate, execute and amend agreements with subconsultants for hydrogeologic support services. Authorized the General Manager of Sonoma Water and County of Sonoma Permit and Resource Management Department's Director to execute an agreement for management of groundwater information.

05/21/2019: Authorized the County to contribute funding of up to \$200,000 annually and Sonoma Water to contribute funding up to \$40,000 annually to Santa Rosa Plain Groundwater Sustainability Agency through fiscal year 2021-22.

12/04/2018: Authorized the General Manager of Sonoma Water to enter into agreements with Sustainability Agencies to provide technical, outreach, and grant-writing services, and to negotiate and execute agreements with subconsultants for hydrogeologic support services.

04/25/2017: Approved the formation of Groundwater Sustainability Agencies and authorized the General Manager of Sonoma Water to enter into agreements with each Sustainability Agency to provide technical, outreach, and grant-writing services.

FISCAL SUMMARY

Expenditures	FY 21-22 Adopted	FY22-23 Projected	FY 23-24 Projected
Budgeted Expenses			
Additional Appropriation Requested			
Total Expenditures			
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other			
Use of Fund Balance			
Contingencies			
Total Sources			

Narrative Explanation of Fiscal Impacts:

None

Staffing Impacts:			
Position Title (Payroll Classification)	Monthly Salary Range (A-I Step)	Additions (Number)	Deletions (Number)

Narrative Explanation of Staffing Impacts (If Required):

N/A

Attachments:

Attachment 1: Resolution of Support for Petaluma Valley Groundwater Sustainability Plan

Attachment 2: Resolution of Support for Santa Rosa Plain Groundwater Sustainability Plan

Attachment 3: Resolution of Support for Sonoma Valley Groundwater Sustainability Plan

Attachment 4: Petaluma Valley Groundwater Sustainability Plan Executive Summary

Attachment 5: Santa Rosa Plain Groundwater Sustainability Plan Executive Summary

Attachment 6: Sonoma Valley Groundwater Sustainability Plan Executive Summary

Related Items “On File” with the Clerk of the Board:

N/A