Department: Utilities
Cost Center: 6001
For Agenda of: 7/20/2021
Placement: Study Session
Estimated Time: 90 Minutes

FROM: Aaron Floyd, Utilities Director

Prepared By: Mychal Boerman, Utilities Deputy Director - Water

SUBJECT: STUDY SESSION: RECEIVE AN UPDATE ON THE SUSTAINABLE

GROUNDWATER MANAGEMENT ACT GROUNDWATER

SUSTAINABILITY PLAN

RECOMMENDATION

Acting as the City of San Luis Obispo Groundwater Sustainability Agency, receive an update on the Sustainable Groundwater Management Act (SGMA) required Groundwater Sustainability Plan (GSP) development, and provide input, as necessary.

REPORT-IN-BRIEF

The City and County of San Luis Obispo are working in collaboration to produce a Groundwater Sustainability Plan (GSP) to address the long-term and sustainable management of the San Luis Valley Groundwater Basin (SLO Basin). While not currently dependent on groundwater, the utilization and proper management of available groundwater resources is an important role in the further diversification and expansion of the City's water supply in the face of the coming impacts of climate change.

The ten-chapter draft GSP identifies the agencies responsible for sustainable groundwater management within the SLO Basin, as well as the users and beneficiaries of groundwater within the basin. The plan also describes the land-uses and hydrologic and geologic characteristics of the basin. The GSP identifies specific areas within the SLO Basin where there is an ongoing imbalance of groundwater pumping and groundwater recharge. Areas of the SLO Basin within City limits are shown to have stable groundwater levels while areas outside of City limits, within the Edna Valley, have continually declining groundwater levels, indicative of an imbalance of groundwater supply and demand due to the pumping and recharge imbalance.

In addition to discussing basin characteristics, the GSP also defines groundwater sustainability metrics for the SLO Basin and the actions that the City and County must take to ensure the basin is utilized in a sustainable manner. These measures include ongoing monitoring of groundwater wells and surface water flow, identification of water supply augmentation projects, and pumping reductions.

A final copy of the SLO Basin GSP is scheduled to be brought before the City Council for adoption on December 7, 2021. The purpose of this Study Session is to allow the City Council to provide input on the draft document so that comments and/or direction can be provided for the final GSP.

DISCUSSION

A quick reference guide of terms and definitions related to this report and the Sustainable Groundwater Management Act can be found in Attachment A – Terms and Definitions.

Background: SGMA Timelines & Governance Structure

1. State of California Required Management of High Priority Basins

The Sustainable Groundwater Management Act (SGMA) requires sustainable groundwater management in all high and medium priority groundwater basins. The San Luis Obispo Valley Groundwater Basin (SLO Basin) is a high priority basin. The SLO Basin, which underlays the City and unincorporated areas outside of the City, was designated as a high priority basin by the State of California due to the documented lowering of groundwater levels in the

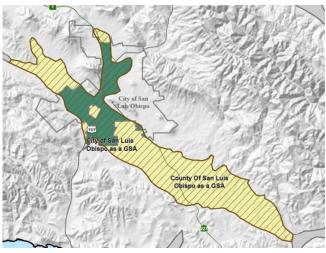


Figure 1 - Overview of the SLO Basin

eastern portion of the basin, near Edna Valley, and the population overlying the basin in the western (City of San Luis Obispo) portion of the basin.

<u>SGMA legislation</u> defines "Sustainable Groundwater Management" as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon (2022-2042) without causing undesirable results. The goal of the SGMA legislation is to ensure groundwater basins are managed sustainably and that groundwater extraction within a basin is not exceeded by pumping/withdraw over an extended period of time, causing undesirable results to the basin and significant and unreasonable impacts to its users.

2. City and County GSA Formation and GSP Timeline

SGMA grants local agencies the authority to sustainably manage groundwater supplies and allows for State intervention, when necessary, to protect groundwater resources. SGMA requires the creation of Groundwater Sustainability Agencies (GSAs) to develop and implement local plans, allowing 20 years to achieve sustainability. SGMA required the formation of GSAs by June 2017. The City of San Luis Obispo (City) and the County

of San Luis Obispo (County) completed the GSA formation process and entered into an agreement to produce one Groundwater Sustainability Plan (GSP) which would cover the entirety of the SLO Basin (Attachment E).

This GSP must be adopted by both GSAs by January 31, 2022.

Once adopted by both the City and County GSAs, and approved by California Department of Water Resources (DWR), implementation of the Groundwater Sustainability Plan will occur, and the **GSAs will have until 2042 to achieve sustainability of the SLO Basin**. Per SGMA, sustainability is defined as the management and use of groundwater that can be maintained without causing an Undesirable Result (defined below).

A Groundwater Sustainability Commission (GSC), comprised of significant users of groundwater in the SLO Basin, was formed as an advisory body to the City and County GSAs (Attachment E). Upon the recommendation of this GSC, this report is intended to inform the City GSA and the public of the progress made to date on the development of the Groundwater Sustainability Plan.



Figure 2 - SGMA Timeline

3. Sustainable Yield: Two Values in SLO Basin by Subarea, One in Surplus (San Luis Valley Subarea), the Other in Deficit (Edna Valley Subarea)

"Sustainable Yield," according to SGMA, means the maximum volume of water, calculated over a period of time that is representative of long-term conditions in the basin, that can be withdrawn each year from a groundwater supply without causing undesirable results (defined below and within Attachment A). For the SLO Basin the Sustainable Yield is estimated to be 5,800 acre-feet per year (AFY), as shown in Table 1.

The Subarea of the basin underlying the City (San Luis Valley Subarea) is estimated to have a 700 AFY year surplus of groundwater. However, the Edna Valley Subarea of the basin experiences an estimated 1,100 AFY deficit due to excessive groundwater use. The SLO Basin as whole is estimated to be overdrafted by 400 AFY on average. As a result of a large geographic bedrock divide between the two portions of the basin, actions taken on one side of the basin have minimal impact on water levels on the other side of the basin. Overdraft and surplus volumes for the SLO Basin and the two subareas can be seen in Table 2 below.

Table 1 – Preliminary Sustainable Yield Estimate (AFY)					
San Luis Valley Subarea	2,500				
Edna Valley Subarea	3,300				
Basin Total	5,800				

Table 2 – Estimated Overdraft (AFY)				
San Luis Valley Subarea	(700)*			
Edna Valley Subarea	1,100			
Basin Total	400			

*Surplus water available

Sustainability Indicators are the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, become Undesirable Results. As defined by SGMA, **Undesirable Results are one or more of the following effects:**

- 1. Chronic lowering of groundwater levels
- 2. Significant and unreasonable reductions in groundwater storage
- 3. Significant and unreasonable seawater intrusion (does not apply to the SLO Basin)
- 4. Significant and unreasonable degradation of water quality
- 5. Significant and unreasonable land subsidence; and
- 6. Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses

Previously Reviewed: Draft Chapters 1-6

The research and writing of the GSP is a complex multi-year process. Council previously reviewed and provided comment on the first six draft chapters of the GSP on December 8, 2020. While largely administrative in nature, these chapters established an understanding of the hydrology and geology of the groundwater basin, the characteristics of water use within the basin, and the nature and extent of the imbalance of water flowing into the basin versus water being pumped from the basin within the Edna Valley area. Chapters 1-6 are provided within Attachment B of this staff report as follows:

Chapter 1: Introduction to the SLO Basin GSP

Chapter 2: Agency Formation (§ 354.6)

Chapter 3: Description of Plan Area

Chapter 4: Basin Setting

Chapter 5: Groundwater Conditions

Chapter 6: Water Budget (§ 354.18)

The staff report from the December 8, 2020 Council meeting, which summarizes each of these chapters, can be found in Attachment C.

GSP Draft Chapters 7-10 and Groundwater Dependent Ecosystem Technical Memorandum

Since the December 8, 2020 Study Session, the final four chapters of the GSP and an associated technical memorandum have been drafted and released for public comment and Council input at this Study Session. A complete, "Administrative Draft" of the GSP containing all ten chapters is scheduled to be released for public review on October 18, 2021. The draft chapters attached to this report are subject to change as comments are

received from stakeholders, the City and County GSAs, and GSC members. Chapters 7-10 are provided in full within Attachment B and a technical memorandum regarding protection of Groundwater Dependent Ecosystems (GDEs) is provided within Attachment D. Each of these attachments were recommended by the GSC to be received and filed by the City and County GSAs. The attached chapters and technical memorandum are outlined

as follows:

Chapter 7: Monitoring Network

Chapter 8: Sustainable Management Criteria Chapter 9: Projects and Management Actions

Chapter 10: Implementation Plan

Technical Memorandum on Groundwater Dependent Ecosystems (GDEs)

Chapter 7: Monitoring Network

A groundwater basin that is subject to SGMA is required to establish a monitoring network in which various types of data are collected to ensure the basin is operated in a sustainable manner and to monitor progress toward meeting SGMA compliance and basin sustainability goals. As a part of the larger monitoring network, an individual network is established for groundwater levels, another for groundwater quality, and a final network for surface water flow. These networks help monitor data for each of the six Sustainability Indicators.

The three monitoring networks must be capable of capturing data on a sufficient temporal and spatial distribution to demonstrate short-term, seasonal, and long-term trends in groundwater and related surface water conditions, and to yield representative information about these conditions for GSP implementation, tracking, reporting, and groundwater model calibration.

Staff Recommendation: After in-depth review of Chapter 7, staff finds that it is consistent with City policies and sufficient to meet the legal requirements of SGMA.

Chapter 8: Sustainable Management Criteria

A significant effort in the creation of a Groundwater Sustainability Plan involves the development of a measurement system to determine the current health of the basin and measurable action points where intervention may be needed if goals are not being met.

SGMA regulations group this system together under the heading of "Sustainable Management Criteria". These criteria are defined in detail in Chapter 8 found in Attachment B and include:

- The Basin's Sustainability Goal
- Undesirable Results
- Minimum Thresholds, and
- Measurable Objectives

For each of the six Sustainability Indicators, Undesirable Results are defined, and Minimum Thresholds and Measurable Objectives are established. These metrics are an important part of the GSP as they identify metrics to determine if the Groundwater Sustainability Plan is meeting its intended goal of sustainability and identify the starting point at which corrective actions must begin if goals are not met.

1. Discussion of Chapter 8's SLO Basin's Sustainability Goal

The sustainability goal for the SLO Basin is a statement that describes the important factors to be considered during the SGMA planning horizon (2022-2042). The sustainability goal was developed over a series of public meetings and public workshops with input from the City, County, and affected stakeholders. The June 10, 2020 Stakeholder Workshop, Groundwater Management Vision, was dedicated to obtaining information to be used to develop a sustainability goal for the SLO Basin. In the workshop, stakeholders participated in an interactive visioning exercise where they helped populate a virtual white board to answer the question, "What is our shared vision of what a 'sustainable SLO Basin' means?"

Guiding principles of this goal are:

- Available groundwater supply supports diverse needs reliably and equitably
- Stored groundwater equitably supports supply resilience and evolving needs
- Groundwater levels support the sustained health of groundwater dependent ecosystems
- Cost of maintaining sustainable groundwater levels is equitably distributed
- Groundwater quality is maintained to a safe standard to meet diverse basin needs

After further coordination with the GSAs, GSC members, and other stakeholders, a sustainability goal was drafted. The sustainability goal for the Basin is to, "manage the Basin to ensure beneficial uses and basin users have access to a safe and reliable groundwater supply that meets current and future demand without causing undesirable results".

After in-depth review of Chapter 8, staff finds that it is consistent with City policies and sufficient to meet the legal requirements of SGMA.

Chapter 9: Projects and Management Actions

Chapter 9 describes the Projects and Management Actions that have been identified as providing feasible methods to achieve sustainable management goals in the SLO Basin. The projects and management actions were developed over a series of working sessions with GSA staff and in six public GSC meetings between December 9, 2020 and June 21, 2021.

Projects can generally be described as infrastructure-related improvements and water purchase agreements designed to increase the amount of water available within the Edna Valley subarea. Due to water levels being stable within the City's subarea, projects are not recommended within the City limits. Projects identified for the Edna Valley subarea could include imported water being directly utilized by agricultural operations and/or local residents for domestic and irrigation uses, or imported water being used to recharge the Edna Valley subarea to benefit all of the users of the subarea.

Management Actions can generally be described as actions needed in order to directly reduce the amount of groundwater pumping within the basin.

It is important to note that the projects and management actions listed in the draft GSA have been included based on their feasibility from an engineering/infrastructure perspective solely and in some instances are inconsistent with City polices and/or may have impacts to the City's overall water resources. Identification of a project within the GSP does not obligate the GSAs or project participants to implement the project and some of the projects identified are inconsistent with existing City policies and are not supported by staff as actionable given the policy conflict.

Figure 3 – Projects and Management Actions Strategies (GSP Table 9-3) provides a summary of the projects and management actions considered in the SLO Basin GSP. The table shows the status, timing for implementation (years), capital costs (\$), annual Operations and Maintenance (O&M) (\$/Year), quantity of water delivered in acre-feet per year (AFY), and the unit cost (\$/AFY) for each project and management action. Project costs outlined within the table do not include the cost of the water being purchased as this would have to be negotiated with the party who holds rights to the water. This table also does not assess the policy inconsistencies and likelihood that projects could or should occur given that conflict. It should be noted that the absence of the negotiated sales price of water and the legal and/or policy constraints make certain projects potentially unactionable and others infeasible.

City of San Luis Obispo Water Sales Projects

The City is not proposed as a recipient of any projects identified within the GSP due to the surplus of groundwater currently available within the San Luis Valley Subarea.

However, two projects are identified within the plan that would involve the *sale of potable and/or recycled water from the City to parties within the Edna Valley subarea.* One project considers the sale of 500-800 AFY of recycled water to the Edna Valley Growers for agricultural irrigation. Another considers the sale of 200 AFY of potable water from the City to Golden State Water Company's Edna Valley service area. City policy allows for the sale of recycled water and raw water outside of City limits under specific conditions and does not permit the sale of potable water outside of City limits. Thus, for the potable water sales project to be approved, the Council would need to significantly modify its existing General Plan policies related to outside-City water sales.

SLO Basin Groundwater Sustainability Plan County of SLO and City of SLO Projects and Management Actions (§ 354.44)

Table 9-3 Projects and Management Actions Strategies

Table 9-3 Projects and Management Actions Strategies										
Projects and Management Actions	Status	Implementation Timing	Capital Cost	Annual Capital Payment	Annual O&M	Total Annual Payment	Quantity of Water (AF)	Unit Cost (\$/AF)¹		
SWP to Ag Irrigation	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 5 years	\$ 890,000	\$ 58,000	\$ 5,000	\$ 63,000	1,000	\$ 60		
City of SLO Recycled Water to Ag Irrigation	City of SLO	Feasibility study: 0 to 1 years Design/Construction: 1 to 3 years	\$ 1,004,000	\$ 65,000	\$ 88,000	\$153,000	600	\$ 260		
SWP Recharge	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 5 years	\$ 3,624,000	\$ 236,000	\$ 101,000	\$ 337,000	500	\$ 670		
SWP to GSWC	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 5 years	\$ 2,685,000	\$ 175,000	\$ 17,000	\$ 192,000	200	\$ 960		
City of SLO Potable Water to GSWC	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 3 years	\$ 1,739,000	\$ 127,000	\$ 14,000	\$ 127,000	200	\$ 640		
Varian Ranch MWC AG Subbasin Wells	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 3 years	\$ 2,701,000	\$ 176,000	\$ 34,000	\$ 210,000	50	\$ 4,200		
SWP to Mutual Water Companies	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 5 years	\$ 835,000	\$ 54,000	\$ 5,000	\$ 59,000	50	\$ 1,180		
Price Canyon Discharge Relocation	Mitigated Negative Dec Completed in 2015	Feasibility study: 0 to 1 years Design/Construction: 1 to 3 years	\$ 4,909,000	\$ 319,000	\$ 56,000	\$ 375,000	500²	\$ 750		
East Corral de Piedra Stormwater Capture and Recharge	Not begun yet	Feasibility study: 0 to 1 years Design/Construction: 1 to 3 years	\$ 3,169,000	\$ 206,000	\$ 101,000	\$ 307,000	50	\$ 6,140		
Groundwater Extraction Metering Plan	Not begun yet	1 year								
Demand Management Strategies	Not begun yet	As needed								

Strategies , ...

Does not include the cost of the water.

Figure 3- Projects and Management Actions Strategies

^{2.} Quantity of water at the discharge point.

City of SLO Recycled Water Sales to Edna Valley Growers

The City's Water Resource Recovery Facility (WRRF) treats municipal wastewater from the City, Cal Poly, and the San Luis Obispo County Airport and in return produces recycled water. Once produced, recycled water is distributed within the City for landscape irrigation and construction uses, and dechlorinated and discharged to San Luis Obispo Creek for environmental benefit. The WRRF is required to maintain a minimum daily average year-round discharge of 2.5 cubic feet per second (cfs) of treated effluent to San Luis Obispo Creek, which equals approximately 1.6 million gallons per day (MGD) or 1,800 AFY, for protection of downstream biological resources as required by the National Oceanic Atmospheric Association, National Marine Fisheries Service. With current in-City recycled water demands increasing and influent into the WRRF decreasing due to high levels of water conservation, it may be feasible for the City to provide the Edna Valley growers with 500-800 acre-feet of recycled water annually with quantities decreasing as new in-City users come online. In-City groundwater basin augmentation efforts, new regulations, drought, and additional in-City recycled water irrigation customers could further reduce the quantity of recycled water available to outside users by several hundred acre-feet in the foreseeable future.

The Council budgeted \$50,0000 to develop a comprehensive understanding of the future availability of recycled water, the cost to deliver recycled water to outside City users, pricing and equity parameters with existing City ratepayers given past investments or sunk costs, and water rights implications. This funding will ensure that the City's water rights are protected, volumes of recycled water available for sale are understood and maximized, and that sales pricing and price structures are designed to ensure equity to the City's water rate payers. Lastly, it will help inform the City about ways to maximize its recycled water supplies when needed to meet needs within the City.

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Existing General Plan policy allows for the sale of recycled water outside of City limits when certain findings are made, as follows:

Provision of non-potable or recycled water outside of City limits may only be considered in compliance with Water and Wastewater Element Policy A 7.3.4 and the following findings:

A. Non-potable/recycled water is necessary to support continued agricultural operations.

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- B. Provision of non-potable/recycled water will not be used to increase development potential of property being served.
- C. Non-potable/recycled water will not be further treated to make it potable.
- D. Prior to provision of non-potable/recycled water, the property to be served will record a conservation, open space, Williamson Act, or other easement instrument to maintain the area being served in agriculture and open space while non-potable/recycled water is being provided.

E. Provision of non-potable and recycled water will not impair the City's ability to maintain an adequate water supply that meets projected water demand at buildout under the General Plan including the required reliability reserve.

Water and Wastewater Management Element, Program A 7.3.4 allows for the sale of recycled water outside of City limits as follows:

Consider the potential to deliver available non-potable or recycled water supplies to customers outside the city limits, including analysis of policy issues, technical concerns, and cost recovery, provided it is found to be consistent with the General Plan.

Staff Recommendation: Staff is supportive of this project being included in the GSP based on existing policy that allows for the sale of <u>recycled water</u> outside of City limits. However, staff recommends completion of the recycled water maximization study prior to entering into negotiations with the Edna Valley Growers to ensure protection of the City's water rights and to provide the City's rate payers with maximum benefit from recycled water sales.

City of SLO Potable Water Sale to Golden State Water Company (GSWC)

This project involves the concept of GSWC purchasing treated drinking water from the City on an interruptible basis to augment their current supply from wells within their service area. The City has longstanding policy that does not allow for *potable water* to be sold outside of City limits.

General Plan Chapter 1.13.1 Water and Sewer Service states:

The City shall not provide nor permit delivery of City potable water or sewer services to the following areas. However, the City will serve those parties having valid previous connections or contracts with the City.

- A. Outside the City limits;
- B. Outside the urban reserve line;

Analysis of this project was included in the draft GSP so that a basic analysis of cost and technical feasibility is documented in the event that there was a significant departure from existing City policy regarding the sale of potable water supplies outside of its service area.

Staff Recommendation: Staff does not support this project due to existing policy that prohibits the sale of potable water outside of City limits. Staff recommends removal of this project from the GSP as there is no policy basis for its inclusion.

Non-City Water Supply Projects

A variety of water supply projects exist within the region that allow for both potable and non-potable water to be imported to the Edna Valley subarea. Below is a brief summary of these projects and staff's analysis related to the benefit of each of the projects. A full list of projects and detailed project descriptions can be found within Chapter 9.4 of the GSP. This report provides a highlight of many of the major projects contained within the GSP but does not detail all of the identified projects.

1. Highest Ranked GSP Project: Obtain State Water Project (SWP) for Agricultural Irrigation in the Edna Valley Subarea

The Coastal Branch of the SWP conveys water from Northern California to San Luis Obispo County. As part of a ranking/scoring exercise that examined volumes of water available, water supply reliability, costs, implementation timelines, and various other factors, the delivery of SWP water to the Edna Valley subarea for use for agricultural irrigation was the highest ranked project.

This water supply project is the only project identified within the GSP that can provide the total volume of water needed to eliminate overdrafted conditions within the Edna Valley subarea. It is anticipated that the Edna Valley growers could purchase over 1,000 acrefeet of water annually and directly apply this water to crops in order to reduce groundwater pumping by an equivalent volume. Without the use of SWP for agricultural use, the Edna Valley area would need to implement a combination of several other projects and/or management actions, such as pumping reductions, in order to achieve sustainability.

Staff Recommendation: Staff is supportive of this project being included in the GSP as it is the only project identified within the GSP that can by itself provide an adequate volume of water to return the Edna Valley subarea to sustainability. This project also provides opportunities to share project implementation costs with others within the Edna Valley subarea who could also benefit from the use of SWP water. The purchase of SWP water is one of the only projects identified that does not have limitations on how long the water may be available, thus providing a permanent solution to overdrafted conditions within the Edna Valley subarea.

2. State Water Project to Golden State Water Company (GSWC)

Golden State Water Company currently provides water to a small service area of County administered land in the central part of the SLO Basin, near the bedrock divide that separates the Edna Valley subarea and San Luis Valley subarea. GSWC obtains its water supply from groundwater wells within its service area. The recent drought resulted in significant constraints on GSWC's groundwater supplies. Because their service area is relatively small, their ability to site new wells to expand their source locations is limited. For this reason, the conceptual project of obtaining SWP water to augment GSWC's current supplies was evaluated within the GSP.

This project assumes a SWP delivery of 200 AFY to GSWC, representing about 50% of GSWC's long-term water demand. This project would result in a 200 AFY reduction in groundwater pumping within the Edna valley subarea and is the one of only two water supply projects identified that would provide GSWC with a secondary source of potable water. All other projects either benefit GSWC indirectly through reducing demand on the groundwater basin or supplementing the basin with water that could later be extracted through groundwater pumping. While not required by SGMA, this project provides water supply diversification and resiliency to GSWC's customers.

Staff Recommendation: Staff is supportive of inclusion of this project within the GSP. Aside from the sale of the City's potable water resources, SWP water is the only project identified within the GSP that can provide an alternative supply of potable water for domestic use.

3. State Water Project to the Mutual Water Companies

The Varian Ranch Mutual Water Company and Edna Ranch Mutual Water Company, located in the southeastern extent of the Edna Valley subarea, currently provide water to their service areas from wells within the SLO Basin. The recent drought resulted in significant constraints on their water supplies and groundwater levels within this area are steadily declining.

Like the above section involving SWP delivery to GSWC, delivery of SWP water to the two mutual water companies would allow for reduced groundwater pumping (50 AFY), the introduction of an alternative source of potable water for supply resiliency and diversification, and a water supply that is available through the entire SGMA planning horizon (2022-2041).

Staff Recommendation: Staff is supportive of this project as it, would provide a secondary source of potable water to the mutual water companies' service areas, resulting in greater regional resiliency. This project could benefit from a cost share with the Edna Vallely Growers and GSWC to alleviate some of the infrastructure-related costs of connection to the SWP.

4. State Water Project Recharge Basin

To enhance groundwater recharge in the Edna Valley, a recharge basin could be constructed to percolate imported SWP water into the basin. A groundwater recharge basin is a bermed basin structure designed for the purpose of efficiently allowing water collected in the basin to infiltrate through the ground surface, and ultimately recharge the underlying aquifer. The concept of this project is to construct a recharge basin in the Edna Valley and supply it with water obtained from the SWP to recharge the aquifer. This project could recharge 500 acre-feet or more State Water Project water into the basin each year, representing roughly half of the estimated need of the Edna Valley area.

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The SWP experiences inconsistent availability year-to-year, with an average of 60% delivery since its inception. The storage of SWP within the basin allows for storing water within the basin during periods when substantial volumes of water are available from the SWP and relying upon stored water during years when SWP volumes may be reduced due to drought. This storage project should be used in conjunction with the SWP projects mentioned above to make best use of SWP when it is available in the highest volumes.

Staff Recommendation: Staff is supportive of this project as it would allow for the storage of SWP within the groundwater basin, helping to alleviate inconsistent delivery of SWP during abnormally dry periods and allowing recharged water to be stored without loss to evaporation from above ground storage.

5. Price Canyon Discharge Relocation (Sentinel Peak)

Sentinel Peak Resources LLC is an energy company that operates a well field that extracts petroleum hydrocarbons from an area approximately 1-2 miles southwest of Edna Valley in Price Canyon. Sentinel Peak owns and operates a process water reclamation facility that has a permit to discharge into Pismo Creek about 1 mile southwest of Highway 227 near Price Canyon Road. The discharge permit is primarily provided for increased flow in Pismo Creek and wildlife propagation with a secondary benefit to agriculture.

The proposed project would change the current point of discharge by about 3.5 miles by moving it to the upper portion of West Corral de Piedras Creek in the Edna Valley. The new discharge point would be approximately 1 mile east of Orcutt Road. The project would provide increased benefit to fisheries from increased streamflow, and also benefit Edna Valley agriculture by increasing streamflow percolation to the underlying aquifer. For the purpose of the GSP, it was assumed that 500 AFY of water would be available to deliver to the new discharge location, resulting in approximately 350 acre-feet of recharge to the SLO Basin. Due to the migration towards clean energy alternatives, some uncertainly exists around the long-term availability of water from Sentinel Peak.

Staff Recommendation: Staff is supportive of this project, with the understanding that water imported as part of this project is dependent on the continued operation of the Sentinel Peak facility.

Management Actions

Management actions are taken by basin users to mitigate or avoid Undesirable Results. The management actions in the GSP include the expansion of the monitoring network (wells and stream gauges), development and implementation of a groundwater extraction metering and reporting plan, and the development of a demand management plan that includes pumping reductions. While direct pumping reductions would not be anticipated within the City due to stable water levels within the area of the basin underlaying the City, management actions such as expansion of the monitoring network and implementation of a groundwater extraction and reporting plan could involve the City.

Adaptive Management

The GSP implementation process requires annual reporting and updates to the GSP at minimum every five years. These reporting requirements provide opportunities for the GSAs to evaluate progress towards meeting its sustainability goals and avoiding undesirable results.

Adaptive management triggers are thresholds that, if reached, initiate the process for considering implementation of adaptive management actions or projects. For SLO Basin, the trigger for adaptive management is the following:

- If analytical or modeled projections anticipate that future conditions will exceed the undesirable result thresholds, then the preparation for implementation of additional projects and management actions would begin.
- If actual conditions exceed the undesirable result thresholds, then additional projects and management actions will be implemented.

Chapter 10: Implementation Plan

Chapter 10 is intended to serve as a conceptual roadmap and schedule for the GSAs to start implementing the GSP during the first five years following GSP adoption.

The implementation plan provided in this chapter is based on current understanding of SLO Basin conditions and includes consideration of the projects and management actions included in Chapter 9, as well as other actions that are needed to successfully implement the GSP, including:

- 1. GSP implementation, administration, and management
- 2. Fee Studies and Funding
- 3. Reporting, including annual reports and five-year evaluations and updates

1. Future Governance Structure

The GSAs and the GSC will continue to operate under the existing City/County Memorandum of Agreement (MOA) (Attachment E), including the existing governance structure, until actions are taken amending/revising the existing MOA or developing new agreements. The existing MOA will automatically terminate upon DWR's approval of the SLO Basin GSP (generally 18-24 months after GSP adoption). During the GSP review period, the GSAs will need to update the governance structure to better serve the implementation of the GSP. The existing governance structure consists of the two GSAs and an advisory body, known as the Groundwater Sustainability Commission with representatives from the Edna Valley Growers, Golden State Water Company, Edna and Varian Ranch Mutual Water Companies, City of San Luis Obispo, and County of San Luis Obispo. The structure of having an advisory body to the two GSAs has been effective throughout the creation of the GSP.

Staff Recommendation: Staff recommends continuation with the existing governance structure during the GSP implementation phase.

Staff Recommendation: Staff recommends continuation with the existing governance structure which designates the GSC as an advisory body to the GSAs during the GSP implementation phase.

2. Implementation Schedule and Costs

The GSP implementation schedule shown in Figure 10-1 of Chapter 10 of the GSP illustrates activities necessary for ongoing GSP monitoring and updates, as well as tentative schedules for the development of projects and management actions.

GSP-related costs can be broken into two categories, one category for project-related costs, and another for implementation related costs. As defined in the GSP, project costs are not yet fully developed and are anticipated to be borne in full by project beneficiaries. Since the City is not a project beneficiary, staff do not anticipate any project-related costs for the City.

Implementation-related costs are those required to implement the GSP and include annual and five-year reporting costs, monitoring network expansion costs, and administrative and finance costs. These costs are anticipated to be borne by the City in proportions directly related to the benefit received or cost incurred by the City. A fee study is scheduled to be conducted in 2022 in order to establish funding mechanisms and cost distribution associated with GSP funding. The implementation portion of the GSP is estimated to cost approximately \$965,000 per year for the first five years of implementation and should be split proportionately across the SLO Basin. Annual implementation costs in years 6 through 20 should be reduced and will be developed during future updates of the GSP.

Staff Recommendation: Staff recommends that the City only pay its proportional share of GPS implementation related costs and the City not contribute financially to projects that do not provide direct benefit to its water rate payers.

Draft Technical Memorandum on Groundwater Dependent Ecosystem (GDEs)

In addition to recommending that the City GSA receive and file Chapters 7-10 of the GSP, the GSC also recommended that the GSAs receive and file a Draft Technical Memorandum on Groundwater Dependent Ecosystems (Attachment D). This technical memorandum will be included with the final GSP as an appendix and provides supporting documentation for several GSP chapters. GDEs are defined in SGMA as "ecological communities of species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface." The purpose of the GDE Technical Memorandum is to:

- Summarize known information about surface water hydrology relevant to GDEs in the SLO Basin
- 2. Identify GDEs overlying and dependent upon the SLO Basin
- 3. Identify sustainable GDE indicators for the SLO Valley Groundwater Basin
- 4. Propose a hydrologic monitoring network to track these indicators over time

The full technical memorandum regarding protection of Groundwater Dependent Ecosystems (GDEs) is provided within Attachment D.

Next Steps

To-date all ten chapters of the GSP have been drafted and released individually for public comment. Staff is compiling an Administrative Draft of the GSP which will be released for public comment from August 18, 2021 through September 18, 2021. During this public comment period, staff will return to the City Council on September 7, 2021 to report on the GSP Administrative Draft and an outline of any significant changes made to the GSP draft chapters. After the GSP Administrative Draft public comment period closes, staff will review any received comments and implement changes as necessary. On October 6, 2021 the Groundwater Sustainability Commission will vote on recommending GSP adoption to the City and County GSAs. Following final adoption of the GSP by the GSAs on December 7, 2021, the GSP will be submitted to the Department of Water Resources.



To-date all ten chapters of the GSP have been drafted and released individually for public comment. Staff is compiling an Administrative Draft of the GSP which will be released for public comment from August 18, 2021 through September 18, 2021.

FOCUS AREAS FOR COUNCIL DISCUSSION AT THIS STUDY SESSION

Question #1. Does the City Council wish to continue with the existing governance

structure, which includes a Groundwater Sustainability Commission that acts as an advisory body to the City and County GSAs, during

the GSP implementation period (2022-2042)?

Question #2. Does the City Council support staff's recommendation that GSP

implementation costs, including the costs to construct projects, should be borne by those benefitting from the project(s) or action(s) and that the City should only be responsible for its proportional share

of GSP implementation costs?

Question #3. Does the City Council support the inclusion of a project to sell City

Recycled Water to the Edna Valley Growers within the GSP, in

alignment with existing General Plan policies?

Question #4. Does the City Council support staff's request for the removal of the

Potable Water Sales to Golden State Water Company project from the GSP due to direct conflict with existing General Plan policies

regarding outside-city potable water sales?

Question #5. Does the City Council support staff's recommendation to include all

State Water-related Projects to the Enda Valley subarea and the

Sentinel Peak Discharge Relocation Project within the GSP?

Question #6 What other comments does the Council want to provide on the GSP?

CONCURRENCE

The Community Development Department concurs with this report.

ENVIRONMENTAL REVIEW

This study session does not constitute a "Project" under State CEQA Guidelines Sec. 15378. No discretionary action will be taken by the City Council until the Groundwater Sustainability Plan is brought forward for consideration and adoption, tentatively scheduled for December , 2021. In addition, preparation and adoption of a Groundwater Sustainability Plan is statutorily exempt from CEQA, pursuant to Water Code Division 6, Part 2.74, Chapter 6, Section 10728.6. ¹ Adoption of the Groundwater Sustainability Plan would not authorize implementation of specific projects, and any project that would implement actions taken pursuant to an adopted Groundwater Sustainability Plan will be subject to CEQA review at the time the project is considered for approval and implementation.

FISCAL IMPACT

As proposed within the GSP, the City is not proposed to bear financial responsibility for the projects and management actions needed within the Edna Valley subarea. Costs related to the implementation of the GSP are proposed to be proportionally shared between the City and other groundwater users within the entirety of the SLO Basin, and are estimated to be \$965,000/year for 2022-2026. Costs and cost distribution are projected to be further defined in the fee study scheduled for the first quarter of 2022.

Budgeted: NA Budget Year: NA

Funding Identified: NA

¹ California Water Code Section 10728.6 states: "Division 13 (commencing with Section 21000) of the Public Resources Code [CEQA] does not apply to the preparation and adoption of plans pursuant to this chapter. Nothing in this part shall be interpreted as exempting from Division 13 (commencing with Section 21000) of the Public Resources Code [CEQA] a project that would implement actions taken pursuant to a plan adopted pursuant to this chapter."

Item 3a

ALTERNATIVES

Request staff return to the City Council, acting as the GSA, with additional information regarding GSP development.

ATTACHMENTS

- A Terms and Definitions
- B Draft GSP Chapters 1-10
- C December 8, 2020 SGMA Council Agenda Report
- D Draft Technical Memorandum on Groundwater Dependent Ecosystems (GDEs)
- E Memorandum of Agreement