8. IMPLEMENTATION PLAN

8.1 Plan Implementation

Implementation of this *Groundwater Sustainability Plan* (GSP) includes implementation of the projects and management actions included in Chapter 7, as well as the following:

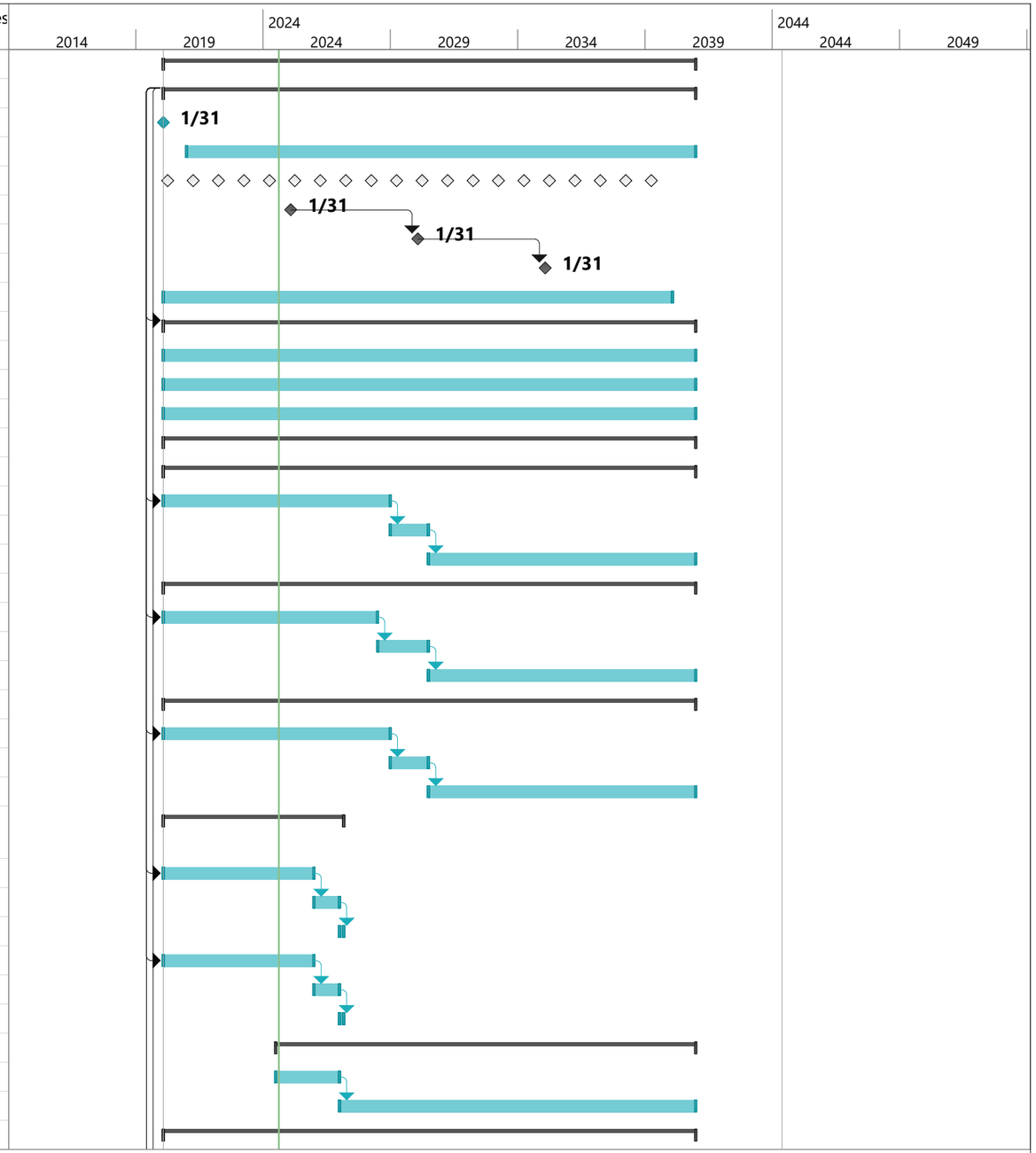
- Cuyama Basin Groundwater Sustainability Agency (CBGSA) administration and management
- Implementing the monitoring program
- Developing annual reports
- Developing required five-year periodic evaluations
- Developing GSP updates as needed

This chapter also describes the contents of both the Annual Report and five-year Periodic Evaluations that must be provided to the California Department of Water Resources (DWR) as required by Sustainable Groundwater Management Act (SGMA) regulations.

8.1.1 Implementation Schedule

Figure 8-1 illustrates the GSP's implementation schedule. Included in the chart are activities necessary for ongoing GSP monitoring and updates, as well as tentative schedules for projects and management actions. Additional details about the activities included in the schedule are provided in these activities' respective sections of this GSP. Adaptive management would only be implemented if triggering events are reached, as described in Chapter 7, and are shown as ongoing in the schedule.

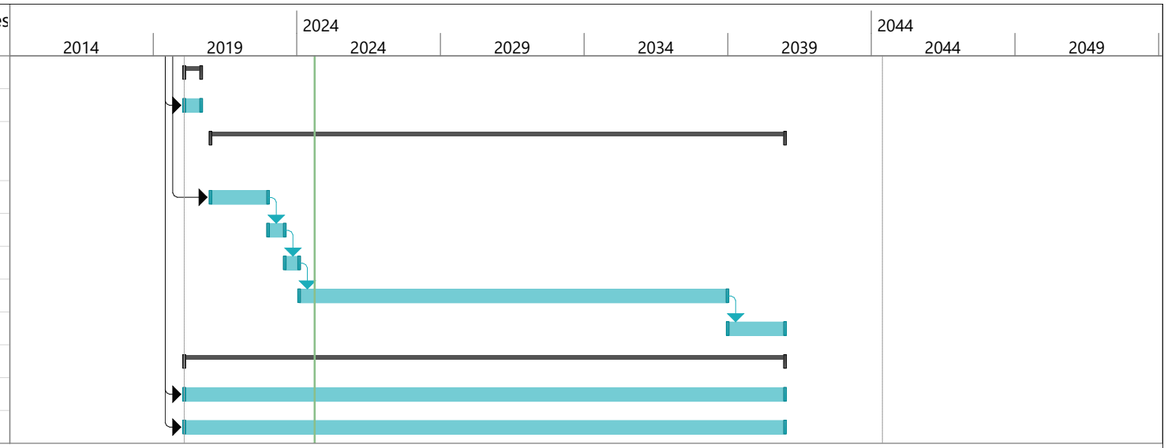
ID	Task Name	Duration	Start	Finish	Predeces
1	**Cuyama GSP Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
2	**Plan Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
3	Plan submittal to the State	0 days	Fri 1/31/20	Fri 1/31/20	
4	Monitoring	5218 days?	Fri 1/1/21	Mon 12/31/40	
5	**Annual Reports**	**4958 days**	**Wed 4/1/20**	**Fri 4/1/39**	
26	Five Year Report/Intern Target Evaluation 1	0 days	Fri 1/31/25	Fri 1/31/25	
27	Five Year Report/Intern Target Evaluation 2	0 days	Thu 1/31/30	Thu 1/31/30	26
28	Five Year Report/Intern Target Evaluation 3	0 days	Wed 1/31/35	Wed 1/31/35	27
29	Plan Updates (as needed)	5219 days	Fri 1/31/20	Tue 1/31/40	
30	**GSP Administration**	**5458 days**	**Fri 1/31/20**	**Mon 12/31/40**	**2SS**
31	CBGSA Administration	5458 days	Fri 1/31/20	Mon 12/31/40	
32	Stakeholder and Board Engagement	5458 days	Fri 1/31/20	Mon 12/31/40	
33	Outreach	5458 days	Fri 1/31/20	Mon 12/31/40	
34	**Project Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
35	**1. Flood and Stormwater Capture**	**5458 days**	**Fri 1/31/20**	**Mon 12/31/40**	
36	Planning	2328 days	Fri 1/31/20	Sun 12/31/28	2SS
37	Construction	391 days	Mon 1/1/29	Mon 7/1/30	36
38	Benefits	2740 days	Tue 7/2/30	Mon 12/31/40	37
39	**2. Precipitation Enhancement**	**5458 days**	**Fri 1/31/20**	**Mon 12/31/40**	
40	Planning	2197 days	Fri 1/31/20	Fri 6/30/28	2SS
41	Construction	522 days	Mon 7/3/28	Tue 7/2/30	40
42	Benefits	2739 days	Wed 7/3/30	Mon 12/31/40	41
43	**3. Water Supply Transfers/Exchanges**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
44	Planning	2328 days?	Fri 1/31/20	Sun 12/31/28	2SS
45	Agreement Negotiation	391 days?	Mon 1/1/29	Mon 7/1/30	44
46	Implementation of Transfers	2740 days?	Tue 7/2/30	Mon 12/31/40	45
47	**4. Improve Reliability of Water Supplies for Local Communities**	**1850 days**	**Fri 1/31/20**	**Thu 3/4/27**	
48	CCSD Replacement Well - Planning & Design	1544 days	Fri 1/31/20	Wed 12/31/25	2SS
49	CCSD Replacement Well - Construction & Permitting	261 days	Thu 1/1/26	Thu 12/31/26	48
50	CCSD Replacement Well - Testing	45 days	Fri 1/1/27	Thu 3/4/27	49
51	VWSC Well Improvements - Planning & Design	1544 days	Fri 1/31/20	Wed 12/31/25	2SS
52	VWSC Well Improvements - Construction & Permitting	261 days	Thu 1/1/26	Thu 12/31/26	51
53	VWSC Well Improvements - Testing	45 days	Fri 1/1/27	Thu 3/4/27	52
54	**5. Flow Meter Calibration Program**	**4307 days**	**Mon 7/1/24**	**Mon 12/31/40**	
55	Planning	654 days	Mon 7/1/24	Thu 12/31/26	
56	Program Implementation	3653 days	Fri 1/1/27	Mon 12/31/40	55
57	**Management Action Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	



Project: Figure 8-1
Date: Fri 8/16/24

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

ID	Task Name	Duration	Start	Finish	Predeces
58	**1. Basin-Wide Economic Analysis**	**153 days**	**Fri 1/31/20**	**Tue 9/1/20**	
59	Plan Development	153 days	Fri 1/31/20	Tue 9/1/20	2SS
60	**2. Pumping Allocations in Central Management Area**	**5218 days?**	**Fri 1/1/21**	**Mon 12/31/40**	
61	Develop Allocation Method	522 days	Fri 1/1/21	Sat 12/31/22	2SS
62	Determine Allocatio nof New Water Supplies	151 days	Mon 1/2/23	Mon 7/31/23	61
63	Develop Timeline for Pumping Reduction	132 days	Tue 8/1/23	Wed 1/31/24	62
64	Implement Annual Puming Reductions	3892 days	Thu 2/1/24	Thu 12/30/38	63
65	Maintain Pumping Allocations	522 days?	Sat 1/1/39	Mon 12/31/40	64
66	**Adaptive managemetn Action Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
67	Evaluate Unimplemented Projects	5458 days?	Fri 1/31/20	Mon 12/31/40	2SS
68	Revist Projects not included in GSP	5458 days?	Fri 1/31/20	Mon 12/31/40	2SS



Project: Figure 8-1
Date: Fri 8/16/24

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

8.2 Implementation Completed

The CBGSA adopted the Cuyama GSP in 2020 and adopted the amended GSP in 2022. Since the adoption of the first GPS, the CBGSA has successfully implemented and continues to implement many components of the plan. Since January 2020, the CBGSA has:

- Submitted the original version of the GSP and resubmitted an amended GSP in 2022 that was approved by DWR
- Submitted Annual Reports for water years 2020, 2021, 2022, and 2023
- Implemented schedule pumping allocations to move the Basin towards sustainability
- Conducted a water rights analysis of potential water supplies has been initiated to support potential flood and stormwater capture
- Performed a study of potential precipitation enhancement in the Basin
- Installed six new multi-completion wells and three shallow groundwater monitoring wells (piezometers)
- The CCSD secured grant funding for a new well
- Completed a Basin-wide Economic Analysis
- Prepared a 2025 GSP update
- Prepared the Periodic Evaluation

8.3 Implementation Budgets and Funding Sources

CBGSA operations and GSP implementation will incur costs, which will require funding by the CBGSA. The five primary activities that will incur costs are listed here. Table 8-1 summarizes these activities and estimated budgets. These estimates will be refined during GSP implementation as more information becomes available.

- Implementing the GSP
- Implementing GSP-related projects and management actions
- CBGSA operations
- Developing annual reports
- Developing five-year periodic evaluations and potential GSP updates

Table 8-1: CBGSA and GSP Implementation Budgets

Activity	Estimated Budget[a]
GSP Implementation and GSA Management	
CBGSA Administration and Legal Support	$390,000 annually
Stakeholder and Board Engagement	$140,000 annually
Outreach	$25,000 annually
GSP Implementation Program Management	$75,000 annually for fiscal years (FYs)
Monitoring Program, including Data Management	$160,000 annually. Additional costs to establish monitoring program in FY 2021 ($150,000) and FY 2021 ($50,000)
Annual Reporting	$50,000 annually
Periodic Evaluations	$40,000 every five years
Five-Year GSP Updates	$1,000,000 every five years (across two fiscal years)
Projects and Management Actions	
Project 1: Flood and Stormwater Capture	Construction: $46 million Operations and Maintenance: $500,000
Project 2: Precipitation Enhancement	$150,000 annually
Project 3: Water Supply Transfers/Exchanges	$600 to $2,800 per acre-foot (AF) (total cost to be determined)
Project 4: Improve Reliability of Water Supplies for Local Communities	$1.8 million
Project 5: Flow Meter Calibration Program	$50,000 for program setup $2,500 per meter per year (100 meters) = $250,000
Management Action 1: Basin-Wide Economic Analysis	$50,000 - $100,000 one-time (completed)
Management Action 2: Pumping Allocations in Central Management Area	Allocation development: $300,000 Implementation/maintenance: $150,000 annually
Adaptive Management	As needed

[a] Estimates are rounded and based on full implementation years (FY 2021 through FY 2040).

8.3.1 GSP Implementation and Funding

Costs associated with GSP implementation and CBGSA operations include the following:

- **CBGSA administration and legal support:** Overall program management, coordination activities, and legal services
- **Stakeholder/Board engagement:** Bi-monthly Stakeholder Advisory Committee (SAC) meetings, bi-monthly CBGSA Board meetings, bi-monthly calls with the CBGSA Board ad-hoc committees, and semi-annual public workshops
- **Outreach:** Email communications, newsletters, and website management
- **GSP implementation program management:** Program management and oversight of project and management action implementation, including coordination among GSA Board, staff and stakeholders, coordination of GSA implementation technical activities, oversight and management of CBGSA consultants and subconsultants, budget tracking, schedule management, and quality assurance/quality control of project implementation activities
- **Monitoring:** pump flow meter monitoring and satellite imagery analysis to track water usage, conduct groundwater level and quality monitoring, and manage data

Implementation of this GSP is projected to run between $800,000 and $1.3 million per year, and projects and management actions an additional $650,000 to $3.7 million per year. Development of the 2020 GSP was funded through a Proposition 1 Sustainable Groundwater Planning Grant. This GSP Update and CBGSA operations are funded through the Sustainable Groundwater Implementation Grant and CBGSA collected fees. Although ongoing operation of CBGSA could include contributions from its member agencies, which are ultimately funded through customer fees or other public funds, additional funding would be required to implement the GSP. Of the implementation activities in the GSP, only project implementation is likely to be eligible for grant or loan funding; funding through grants or loans have varying levels of certainty. As such, the CBGSA has developed and will refine, as needed, a financing plan that includes one or more of the following financing approaches:

- **Pumping Fees**: Pumping fees would implement a charge for pumping that would be used to fund GSP implementation activities. To meet the funding needs of the GSP, fees would be lower when pumping is higher, such as current pumping levels, and higher when pumping is lower, such as when sustainable pumping levels are achieved. Although this funding approach would meet the financial needs of the GSP and CBGSA, it may discourage pumping reductions due to cost. The financing plan developed by the CBGSA would evaluate how to balance the need for funding with encouraging pumpers to commit to compliance with desired groundwater pumping reduction goals.

- **Assessments:** Assessments would charge a fee based on land areas. There are two methods for implementing an assessment based on acreage. The first option would assess a fee for all acres in the Basin outside of those in federal lands. This option would not distinguish between land use types. The second option would be to assess a fee only on irrigated acres. Similar to the pumping fee approach, assessment based on irrigated acreage could affect agricultural operations and contribute to land use conversions, which could affect the assessment amount or ability to fully fund GSP implementation.
- **Combination of fees and assessments:** This approach would combine pumping fees and assessments to moderate the effects of either approach on the economy in the Basin. This approach would likely include an assessment that would apply to all acres in the Basin, rather than just to irrigated acreage. It would be coupled with a pumping fee to account for those properties that use more water than others.

During development or refinement of a financing plan, the CBGSA would also determine whether to apply fees across the Basin as a whole or just within the management areas. The CBGSA may choose to apply an assessment across the Basin and a pumping fee within the management areas, or choose to set different levels of assessments or fees based on location within a management area or not, or they may choose another combination of the above approaches based on location. On July 10, 2019, the CBGSA Board voted to use a groundwater extraction fee to provide funding for CBGSA activities during the first year of GSP implementation and, on November 6, 2019, the Board established a groundwater extraction fee for the 2020 calendar year. The CBGSA has continued to apply groundwater extraction fees annually in the years since then. This strategy may be modified in the future by changing to land assessments, modifying fees/assessments based on location or usage, or some other methodology as deemed appropriate to the CBGSA. Prior to implementing any fee or assessment program, the CBGSA would complete a rate assessment study and other analysis consistent with the requirements of Proposition 218.

The CBGSA will pursue grants and loans to help pay for project costs to the extent possible. If grants or loans are secured for project implementation, potential pumping fees and assessments may be adjusted to align with operating costs of the CBGSA and ongoing GSP implementation activities. A potential hurdle to the utilization of state grant funding is that delays in payment by the state can cause hardships for disadvantaged communities such as the Cuyama Basin. Therefore, it would be appropriate to expedite payments associated with grant funding by DWR.

8.3.2 Projects and Management Actions

Costs for the Projects and Management Actions are described in Chapter 7 of this GSP. Financing of the projects and management actions would vary depending on the activity. Potential financing for projects and management actions are provided in Table 8-2, though other financing may be pursued as opportunities arise or as appropriate.

Table 8-2: Financing Options for Proposed Projects, Management Actions, and Adaptive Management Strategies

Project/Activity		Responsible Entity	Potential Financing Options
Project 1: Flood and Stormwater Capture	Feasibility Study	CBGSA	• CBGSA Operating Funds • CBGSA Member Agencies
	Project Implementation	CBGSA or Member Agencies	• Grants • Loans • CBGSA Operating Funds • CBGSA Member Agencies
Project 2: Precipitation Enhancement	Feasibility Study	CBGSA	• CBGSA Operating Costs • CBGSA Member Agencies
	Project Implementation	CBGSA or Member Agencies	• CBGSA Operating Costs • CBGSA Member Agencies
Project 3: Water Supply Transfers/Exchanges	Feasibility Study	CBGSA	• CBGSA Operating Costs
	Project Implementation	CBGSA	• CBGSA Operating Costs
Project 4: Improve Reliability of Water Supplies for Local Communities	CCSD Well 4	Cuyama Community Services District (CCSD)	• Grants • Loans • CCSD Operating Costs
	VWSC Well 2	Ventucopa Water Supply Company (VWSC)	• Grants • Loans • VWSC Operating Costs
Project 5: Flow Meter Calibration Program	Project implementation	CBGSA	• Grants • CBGSA Operating Costs
Management Action 1: Basin-Wide Economic Analysis	Economic Study*	CBGSA	• CBGSA Operating Costs
Management Action 2: Pumping Allocations in Central Management Area	Allocation Plan	CBGSA	• CBGSA Operating Costs
	Enforcement	CBGSA or Member Agencies	• CBGSA Operating Costs • Member Agency Operating Costs
Adaptive Management	-	CBGSA	• Grants • Loans • CBGSA Operating Costs

** Project/Management Action Completed*

8.4 Annual Reports

Annual reports must be submitted by April 1 of each year following GSP adoption per California Code of Regulations. Annual reports must include three key sections as follows

- General Information
- Basin Conditions
- Plan Implementation Progress

An outline of what information will be provided in each of these sections in the annual report is included below. Annual reporting would be completed in a manner and format consistent with Section 356.2 of the SGMA regulations. As annual reporting continues, it is possible that this outline will change to reflect Basin conditions, CBGSA priorities, and applicable requirements.

8.4.1 General Information

General information included in the executive summary highlights the key content of the annual report. As part of the executive summary, this section includes a description of the sustainability goals, provides a description of GSP projects and their progress as well as an annually-updated implementation schedule and map of the Basin. Key components as required by SGMA regulations include:

- Executive Summary
- Map of the Basin

8.4.2 Basin Conditions

Basin conditions section describes the groundwater conditions and monitoring results from the applicable water year. This section includes an evaluation of how conditions changed in the Basin since the previous water year and compare conditions to historical groundwater data. Pumping data, effects of project implementation (e.g., recharge data, conservation, if applicable), surface water flows, total water use, and groundwater storage are included. Key components as required by SGMA regulations include:

- Groundwater elevation data from the monitoring network
- Hydrographs of elevation data
- Groundwater extraction data
- Surface water supply data
- Total water use data
- Change in groundwater storage, including maps

8.4.3 Plan Implementation Progress

Progress toward successful plan implementation is included in the annual report. This section of the annual report describes the progress made toward achieving interim milestones as well as implementation of projects and management actions. Key components as required by SGMA regulations include:

- Plan implementation progress
- Sustainability progress

8.5 Five-Year Periodic Evaluation

SGMA requires GSAs to evaluate their GSPs to assess progress toward meeting approved sustainability goals at least every five years or whenever a plan is amended, which must be done through a written assessment submitted to DWR. A description of the information that will be included in the Periodic Evaluation is provided below and will be prepared in a manner consistent with Section 356.4 of the SGMA regulations. The CBGSA will submit its first Periodic Evaluation in 2025 along with this 2025 GSP.

8.5.1 Sustainability Evaluation

This section will contain a description of current groundwater conditions for each applicable sustainability indicator and will include a discussion of overall Basin sustainability. Progress toward achieving interim milestones and measurable objectives will be included, along with an evaluation of groundwater elevations (i.e., those being used as direct or proxy measures for the sustainability indicators) in relation to minimum thresholds. If any of the adaptative management triggers are found to be met during this evaluation, a plan for implementing adaptive management described in the GSP would be included.

8.5.2 Plan Implementation Progress

This section will describe an updated status of project and management action implementation, and report on whether any adaptive management action triggers had been activated since the previous periodic evaluation. An updated project implementation schedule will be included, along with any new projects that were developed to support the goals of the GSP and a description of any projects that are no longer included in the GSP. The benefits of projects that have been implemented will be included, and updates on projects and management actions that are underway at the time of the periodic evaluation will be reported.

8.5.3 Reconsideration of GSP Elements

Part of the periodic evaluation will include a reconsideration of GSP elements. As additional monitoring data are collected during GSP implementation, land uses and community characteristics change over time, and GSP projects and management actions are implemented, it may become necessary to revise the GSP. This section of the periodic evaluation will reconsider the Basin setting, management areas, undesirable results, minimum thresholds, and measurable objectives. If appropriate, the periodic evaluation will recommend revisions to the GSP. Revisions would be informed by the outcomes of the monitoring network, and changes in the Basin, including changes to groundwater uses or supplies and outcomes of project implementation.

8.5.4 Monitoring Network Description

A description of the monitoring network will be provided in the periodic evaluation. Data gaps, or areas of the Basin that are not monitored in a manner commensurate with the requirements of Sections 352.4 and 354.34(c) of the SGMA regulations will be identified. An assessment of the monitoring network's function will also be provided, along with an analysis of data collected to date. If data gaps are identified, the periodic evaluation may include information or steps for addressing these data gaps, along with an implemented schedule for addressing gaps and how the CBGSA will incorporate updated data into the GSP.

8.5.5 New Information

New information that becomes available after the last GSP adoption, GSP amendment, or periodic evaluation would be described and evaluated. If the new information would warrant a change to the GSP, this would also be included, as described in Section 8.5.3.

8.5.6 Regulations or Ordinances

The Periodic Evaluation will include a summary of the regulations or ordinances related to the GSP that have been implemented by DWR since the previous report, and address how these may require updates to the GSP.

8.5.7 Legal or Enforcement Actions

The Periodic Evaluation will include enforcement or legal actions taken by the CBGSA or its member agencies in relation to the GSP will be summarized in this section along with how such actions support sustainability in the Basin.

8.5.8 Plan Amendments

A description of amendments to the GSP will be provided in the Periodic Evaluation, including adopted amendments, recommended amendments for future updates, and amendments that are underway.

8.5.9 Coordination

The CBGSA is the only GSA in the Cuyama Basin. It is adjacent to the Carrizo Basin, the Mil Potrero Area Basin, and Lockwood Valley Basin, which are very low priority basins per the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and not yet required to comply with SGMA. Downstream from the Basin is the Santa Maria River Valley Basin, which is currently undergoing prioritization evaluation under the CASGEM Program. A GSA has formed for the Santa Maria Basin Fringe Areas, which are located downstream from Twitchell Reservoir, and could be affected by stormwater capture activities by the CBGSA. The CBGSA may need to coordinate with this GSA, and will need to coordinate with various land use agencies and other entities to implement projects. This section of the Periodic Evaluation will describe coordination activities between these entities, such as meetings, joint projects, or data collection efforts. If additional neighboring GSAs have been formed since the previous report, or changes in neighboring basins occurred, that result in a need for new or additional coordination within or outside the Basin, such coordination activities would be included as well.