

# Cuyama Valley Groundwater Basin

## Draft Groundwater Sustainability Plan: Implementation Plan

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## Acronyms

Basin	Cuyama Valley Groundwater Basin
SGMA	Sustainable Groundwater Management Act
DWR	California Department of Water Resources
GSP	<i>Groundwater Sustainability Plan</i>
CBGSA	Cuyama Basin Groundwater Sustainability Agency
AF	acre-feet (foot)
FY	fiscal year
CCSD	Cuyama Community Services District
VWSC	Ventucopa Water Supply Company
CASGEM	California Statewide Groundwater Elevation Monitoring Program



## Chapter 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 GSP updates

This chapter also describes the contents of both the annual and five-year reports 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.

Figure 8-1. GSP Implementation Schedule

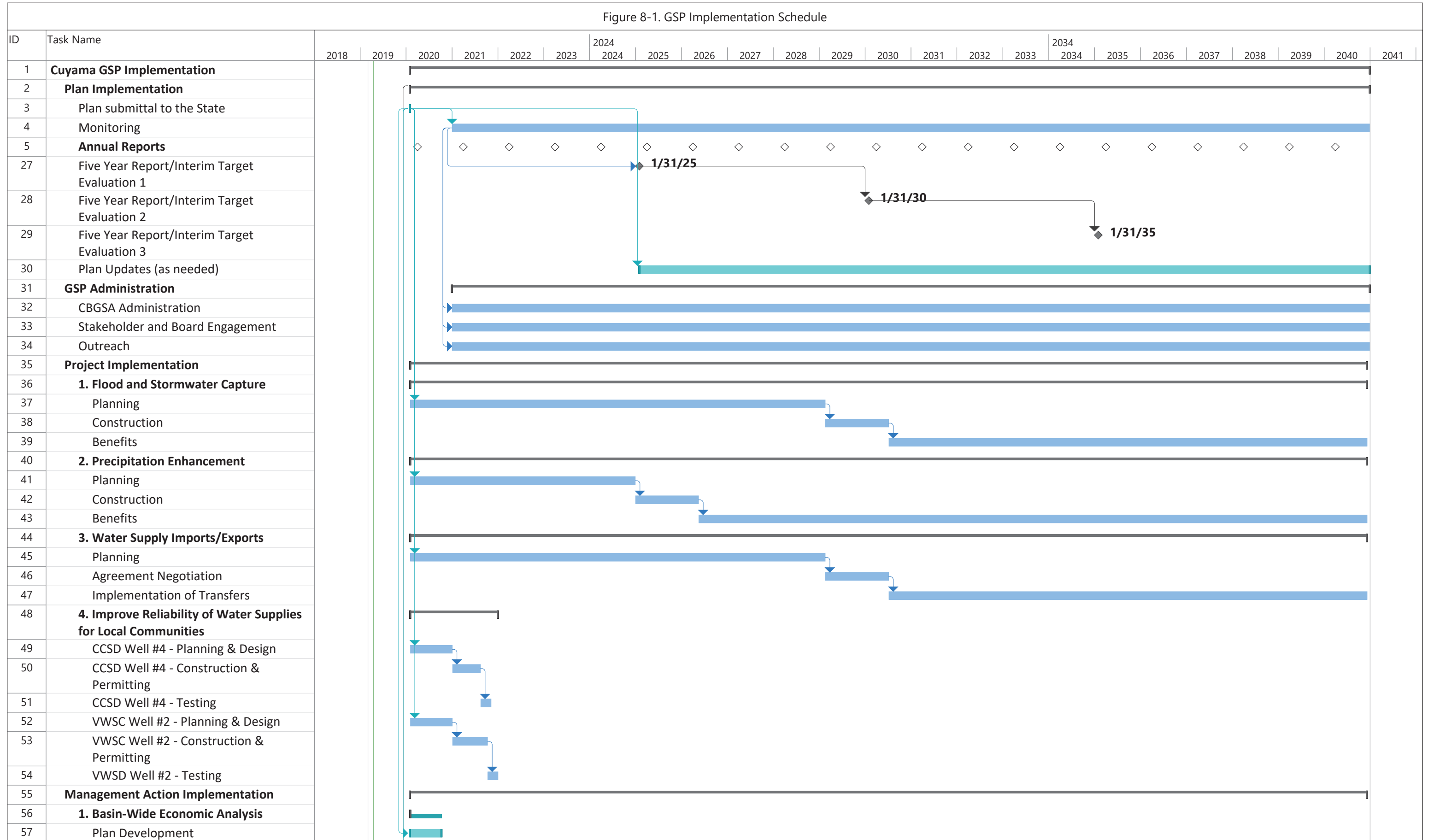
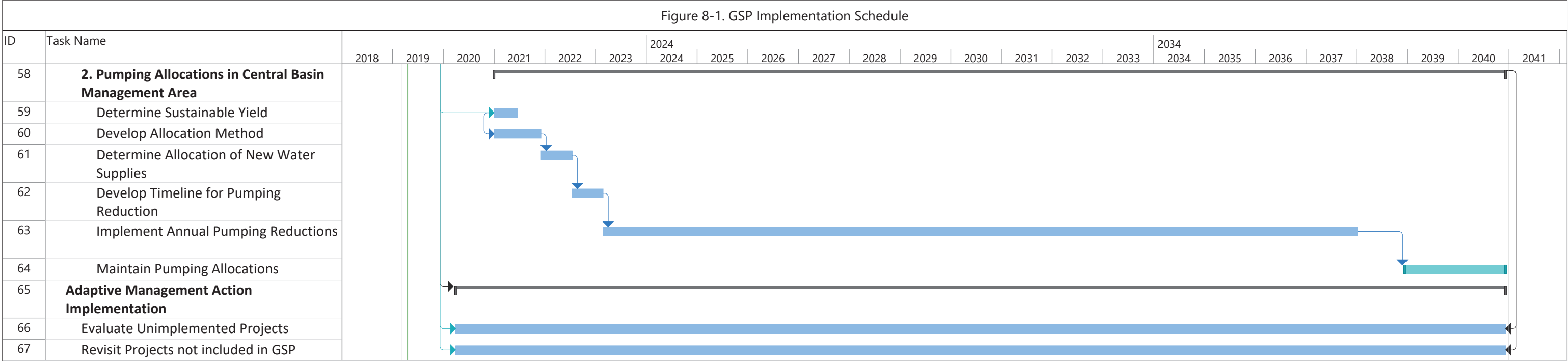


Figure 8-1. GSP Implementation Schedule





## 8.2 Implementation Costs 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 their estimated costs.

- Implementing the GSP
- Implementing GSP-related projects and management actions
- CBGSA operations
- Developing annual reports
- Developing five-year evaluation reports

<b>Activity</b>	<b>Estimated Cost<sup>a</sup></b>
<b>GSP Implementation and GSA Management</b>	
CBGSA Administration	\$390,000 annually
Stakeholder and Board Engagement	\$195,000 annually
Outreach	\$25,000 annually
GSP Implementation Program Management	\$75,000 annually for fiscal years (FYs) with no five-year reports; \$125,000 annually for FYs with five-year reports.
Monitoring Program, including Data Management	\$155,000 annually for FYs with no five-year reports; \$170,000 annually. Additional costs to establish monitoring program in FY 2020 (\$295,000) and FY 2021 (\$100,000)
Annual Reporting	\$40,000 annually (FY 2023 through FY 2040) Additional costs during initial years (\$50,000 to \$75,000 for FYs 2020 through 2022)
Five-Year GSP Updates	\$800,000 every five years (across two fiscal years)
<b>Projects and Management Actions</b>	
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 \$2,800 per acre-foot (AF) (total cost to be determined)
Project 4: Basin-Wide Economic Analysis	\$100,000
Management Action 1: Improve Reliability of Water Supplies for Local Communities	\$1.8 million





**Table 8-1. CBGSA and GSP Implementation Costs**

Activity	Estimated Cost <sup>a</sup>
Management Action 2: Pumping Allocations in Central Basin Management Area	Allocation development: \$300,000 Implementation/maintenance: \$150,000 annually
Adaptive Management	To be determined

<sup>a</sup> Estimates are rounded and based on full implementation years (FY 2021 through FY 2040). Different costs may be incurred in FY 2020 as GSP implementation begins.

### 8.2.1 GSP Implementation and Funding

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

- **CBGSA administration:** Overall program management and coordination activities
- **Stakeholder/Board engagement:** Quarterly 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:** manage satellite imagery 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 this GSP was funded through a Proposition 1 Sustainable Groundwater Planning Grant. CBGSA operations are partially funded through this grant, as well as contributions from CBGSA member agencies. Although ongoing operation of CBGSA is anticipated to require 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 will develop a financing plan that will include 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. In the absence of other sources of funding (i.e., grants, loans, or combined with assessments) fees would range between \$13 and \$60 per AF per year. 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, which would cost approximately \$5 to \$8 per acre per year. This option would not distinguish between land use types. The second option would be to assess a fee only on irrigated acres. Based on current irrigated acreage, the assessment would be \$20 to \$35 per acre per year. 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 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. 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.

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.

## 8.2.2 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	<ul style="list-style-type: none"> <li>• CBGSA Operating Funds</li> <li>• CBGSA Member Agencies</li> </ul>
	Project Implementation	CBGSA or Member Agencies	<ul style="list-style-type: none"> <li>• Grants</li> <li>• Loans</li> <li>• CBGSA Operating Funds</li> <li>• CBGSA Member Agencies</li> </ul>
Project 2: Precipitation Enhancement	Feasibility Study	CBGSA	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> <li>• CBGSA Member Agencies</li> </ul>
	Project Implementation	CBGSA or Member Agencies	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> <li>• CBGSA Member Agencies</li> </ul>
Project 3: Water Supply Transfers/Exchanges	Feasibility Study	CBGSA	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> </ul>
	Project Implementation	CBGSA	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> </ul>
Project 4: Improve Reliability of Water Supplies for Local Communities	CCSD Well 4	Cuyama Community Services District (CCSD)	<ul style="list-style-type: none"> <li>• Grants</li> <li>• Loans</li> <li>• CCSD Operating Costs</li> </ul>
	VWSC Well 2	Ventucopa Water Supply Company (VWSC)	<ul style="list-style-type: none"> <li>• Grants</li> <li>• Loans</li> <li>• VWSC Operating Costs</li> </ul>
Management Action 1: Basin-Wide Economic Analysis	Economic Study	CBGSA	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> </ul>
Management Action 2: Pumping Allocations in Central Basin Management Area	Allocation Plan	CBGSA	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> </ul>
	Enforcement	CBGSA or Member Agencies	<ul style="list-style-type: none"> <li>• CBGSA Operating Costs</li> <li>• Member Agency Operating Costs</li> </ul>
Adaptive Management	-	CBGSA	<ul style="list-style-type: none"> <li>• Grants</li> <li>• Loans</li> <li>• CBGSA Operating Costs</li> </ul>



## 8.3 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.

### 8.3.1 General Information

General information will include an executive summary that highlights the key content of the annual report. As part of the executive summary, this section will include a description of the sustainability goals, provide 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

### 8.3.2 Basin Conditions

Basin conditions will describe the current groundwater conditions and monitoring results. This section will include an evaluation of how conditions have changed in the Basin over the previous year and compare groundwater data for the year 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 will be 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



### 8.3.3 Plan Implementation Progress

Progress toward successful plan implementation would be included in the annual report. This section of the annual report would describe 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

## 8.4 Five-Year Evaluation Report

SGMA requires evaluation GSPs regarding their progress toward meeting approved sustainability goals at least every five years. SGMA also requires developing a written assessment and submitting this assessment to DWR. An evaluation must also be made whenever the GSP is amended. A description of the information that will be included in the five-year report is provided below, and would be prepared in a manner consistent with Section 356.4 of the SGMA regulations.

### 8.4.1 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 adaptive management triggers are found to be met during this evaluation, a plan for implementing adaptive management described in the GSP would be included.

### 8.4.2 Plan Implementation Progress

This section will describe the current status of project and management action implementation, and report on whether any adaptive management action triggers had been activated since the previous five-year report. An updated project implementation schedules 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 five-year report will be reported.

### 8.4.3 Reconsideration of GSP Elements

Part of the five-year report 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 five-year report will reconsider the Basin setting, management areas, undesirable results,



minimum thresholds, and measurable objectives. If appropriate, the five-year report 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.

#### **8.4.4 Monitoring Network Description**

A description of the monitoring network will be provided in the five-year report. 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 GSP will be revised to include a program for addressing these data gaps, along with an implemented schedule for addressing gaps and how the CBGSA will incorporate updated data into the GSP.

#### **8.4.5 New Information**

New information that becomes available after the last five-year evaluation or GSP amendment 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 8.4.3.

#### **8.4.6 Regulations or Ordinances**

The five-year report 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.

#### **8.4.7 Legal or Enforcement Actions**

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.

#### **8.4.8 Plan Amendments**

A description of amendments to the GSP will be provided in the five-year report, including adopted amendments, recommended amendments for future updates, and amendments that are underway during development of the five-year report.

#### **8.4.9 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 five-year report 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.